

Pertanika Journal of
**SOCIAL SCIENCES
& HUMANITIES**

JSSH

VOL. 29 (3) SEP. 2021



PERTANIKA
JOURNALS

A scientific journal published by Universiti Putra Malaysia Press

PERTANIKA JOURNAL OF SOCIAL SCIENCES & HUMANITIES

About the Journal

Overview

Pertanika Journal of Social Sciences & Humanities is the official journal of Universiti Putra Malaysia. It is an open-access online scientific journal. It publishes original scientific outputs. It neither accepts nor commissions third party content.

Recognised internationally as the leading peer-reviewed interdisciplinary journal devoted to the publication of original papers, it serves as a forum for practical approaches to improve quality in issues pertaining to social and behavioural sciences as well as the humanities.

Pertanika Journal of Social Science & Humanities is a **quarterly** (*March, June, September, and December*) periodical that considers for publication original articles as per its scope. The journal publishes in **English** as well as in **Bahasa Malaysia** and it is open for submission by authors from all over the world.

The journal is available world-wide.

Aims and scope

Pertanika Journal of Social Sciences & Humanities aims to develop as a pioneer journal for the social sciences with a focus on emerging issues pertaining to the social and behavioural sciences as well as the humanities. Areas relevant to the scope of the journal include Social Sciences—accounting, anthropology, archaeology and history, architecture and habitat, consumer and family economics, economics, education, finance, geography, law, management studies, media and communication studies, political sciences and public policy, population studies, psychology, sociology, technology management, and tourism; Humanities—arts and culture, dance, historical and civilisation studies, language and linguistics, literature, music, philosophy, religious studies, and sports.

History

Pertanika Journal of Social Sciences & Humanities was founded in 1993 and focuses on research in social and behavioural sciences as well as the humanities and its related fields.

Vision

To publish journal of international repute.

Mission

Our goal is to bring the highest quality research to the widest possible audience.

Quality

We aim for excellence, sustained by a responsible and professional approach to journal publishing. Submissions can expect to receive a decision within 120 days. The elapsed time from submission to publication for the articles averages 180 days. We are working towards decreasing the processing time with the help of our editors and the reviewers.

Abstracting and indexing of Pertanika

Pertanika Journal of Social Sciences & Humanities is now over 27 years old; this accumulated knowledge and experience has resulted the journal being abstracted and indexed in SCOPUS (Elsevier), Clarivate Web of Science (ESCI), EBSCO, DOAJ, Agricola, ASEAN CITATION INDEX, ISC, Microsoft Academic, Google Scholar, and MyCite.

Citing journal articles

The abbreviation for Pertanika Journal of Social Sciences & Humanities is *Pertanika J. Soc. Sci. & Hum.*

Publication policy

Pertanika policy prohibits an author from submitting the same manuscript for concurrent consideration by two or more publications. It prohibits as well publication of any manuscript that has already been published either in whole or substantial part elsewhere. It also does not permit publication of manuscript that has been published in full in proceedings.

Code of Ethics

The *Pertanika* journals and Universiti Putra Malaysia take seriously the responsibility of all of its journal publications to reflect the highest publication ethics. Thus, all journals and journal editors are expected to abide by the journal's codes of ethics. Refer to *Pertanika's Code of Ethics* for full details, or visit the journal's web link at: http://www.pertanika.upm.edu.my/code_of_ethics.php

Originality

The author must ensure that when a manuscript is submitted to *Pertanika*, the manuscript must be an original work. The author should check the manuscript for any possible plagiarism using any program such as Turn-It-In or any other software before submitting the manuscripts to the *Pertanika* Editorial Office, Journal Division.

All submitted manuscripts must be in the journal's acceptable **similarity index range**:
≤ 20% – PASS; > 20% – REJECT.

International Standard Serial Number (ISSN)

An ISSN is an 8-digit code used to identify periodicals such as journals of all kinds and on all media—print and electronic.

Pertanika Journal of Social Sciences and Humanities: e-ISSN 2231-8534 (Online).

Lag time

A decision on acceptance or rejection of a manuscript is reached in 120 days (average). The elapsed time from submission to publication for the articles averages 180 days.

Authorship

Authors are not permitted to add or remove any names from the authorship provided at the time of initial submission without the consent of the journal's Chief Executive Editor.

Manuscript preparation

Most scientific papers are prepared according to a format called IMRAD. The term represents the first letters of the words *Introduction, Materials and Methods, Results, And Discussion*. IMRAD is simply a more 'defined' version of the "IBC" (*Introduction, Body, Conclusion*) format used for all academic writing. IMRAD indicates a pattern or format rather than a complete list of headings or components of research papers; the missing parts of a paper are: *Title, Authors, Keywords, Abstract, Conclusions, References, and Acknowledgement*. Additionally, some papers include *Appendices*. For manuscripts in **Bahasa Malaysia**, the title, abstract and keywords should be written in both **English** and **Bahasa Malaysia**.

The *Introduction* explains the scope and objective of the study in the light of current knowledge on the subject; the *Materials and Methods* describes how the study was conducted; the *Results* section reports what was found in the study; and the *Discussion* section explains meaning and significance of the results and provides suggestions for future directions of research. The manuscript must be prepared according to the journal's **Instruction to Authors** (http://www.pertanika.upm.edu.my/Resources/regular_issues/Regular_Issues_Instructions_to_Authors.pdf).

Editorial process

Authors who complete any submission are notified with an acknowledgement containing a manuscript ID on receipt of a manuscript, and upon the editorial decision regarding publication.

Pertanika follows a **double-blind peer -review process**. Manuscripts deemed suitable for publication are sent to reviewers. Authors are encouraged to suggest names of at least 3 potential reviewers at the time of submission of their manuscripts to *Pertanika*, but the editors will make the final selection and are not, however, bound by these suggestions.

Notification of the editorial decision is usually provided within 120 days from the receipt of manuscript. Publication of solicited manuscripts is not guaranteed. In most cases, manuscripts are accepted conditionally, pending an author's revision of the material.

As articles are double-blind reviewed, material that may identify authorship of the paper should be placed only on page 2 as described in the first-4-page format in *Pertanika*'s Instruction to Authors (http://www.pertanika.upm.edu.my/Resources/regular_issues/Regular_Issues_Instructions_to_Authors.pdf).

The journal's peer review

In the peer review process, 2 or 3 referees independently evaluate the scientific quality of the submitted manuscripts. At least 2 referee reports are required to help make a decision.

Peer reviewers are experts chosen by journal editors to provide written assessment of the **strengths** and **weaknesses** of written research, with the aim of improving the reporting of research and identifying the most appropriate and highest quality material for the journal.

Operating and review process

What happens to a manuscript once it is submitted to *Pertanika*? Typically, there are 7 steps to the editorial review process:

1. The journal's Chief Executive Editor and the Editor-in-Chief examine the paper to determine whether it is relevance to journal needs in terms of novelty, impact, design, procedure, language as well as presentation and allow it to proceed to the reviewing process. If not appropriate, the manuscript is rejected outright and the author is informed.
2. The Chief Executive Editor sends the article-identifying information having been removed, to 2 to 3 reviewers. They are specialists in the subject matter of the article. The Chief Executive Editor requests that they complete the review within 3 weeks.

Comments to authors are about the appropriateness and adequacy of the theoretical or conceptual framework, literature review, method, results and discussion, and conclusions. Reviewers often include suggestions for strengthening of the manuscript. Comments to the editor are in the nature of the significance of the work and its potential contribution to the research field.

3. The Editor-in-Chief examines the review reports and decides whether to accept or reject the manuscript, invite the authors to revise and resubmit the manuscript, or seek additional review reports. In rare instances, the manuscript is accepted with almost no revision. Almost

without exception, reviewers' comments (to the authors) are forwarded to the authors. If a revision is indicated, the editor provides guidelines to the authors for attending to the reviewers' suggestions and perhaps additional advice about revising the manuscript.

4. The authors decide whether and how to address the reviewers' comments and criticisms and the editor's concerns. The authors return a revised version of the paper to the Chief Executive Editor along with specific information describing how they have addressed the concerns of the reviewers and the editor, usually in a tabular form. The authors may also submit a rebuttal if there is a need especially when the authors disagree with certain comments provided by reviewers.
5. The Chief Executive Editor sends the revised manuscript out for re-review. Typically, at least 1 of the original reviewers will be asked to examine the article.
6. When the reviewers have completed their work, the Editor-in-Chief examines their comments and decides whether the manuscript is ready to be published, needs another round of revisions, or should be rejected. If the decision is to accept, the Chief Executive Editor is notified.
7. The Chief Executive Editor reserves the final right to accept or reject any material for publication, if the processing of a particular manuscript is deemed not to be in compliance with the S.O.P. of *Pertanika*. An acceptance notification is sent to all the authors.
9. The editorial office ensures that the manuscript adheres to the correct style (in-text citations, the reference list, and tables are typical areas of concern, clarity, and grammar). The authors are asked to respond to any minor queries by the editorial office. Following these corrections, page proofs are mailed to the corresponding authors for their final approval. At this point, **only essential changes are accepted**. Finally, the manuscript appears in the pages of the journal and is posted on-line.



Pertanika Journal of
**SOCIAL SCIENCES
& HUMANITIES**

Vol. 29 (3) Sep. 2021



A scientific journal published by Universiti Putra Malaysia Press



EDITOR-IN-CHIEF

- To be appointed

CHIEF EXECUTIVE EDITOR

Mohammad Jawaid

Polymer Composites

UNIVERSITY PUBLICATIONS COMMITTEE

Zulkifli Idrus, *Chair*

EDITORIAL STAFF

Journal Officers:

Kanagamalar Silvarajoo, *ScholarOne*

Siti Zuhaila Abd Wahid, *ScholarOne*

Tee Syn-Ying, *ScholarOne*

Ummi Fairuz Hanapi, *ScholarOne*

Editorial Assistants:

Ku Ida Mastura Ku Baharom

Siti Juridah Mat Arip

Zulinaardawati Kamarudin

English Editor:

Norhanizah Ismail

PRODUCTION STAFF

Pre-press Officers:

Nur Farrah Dila Ismail

Wong Lih Jiun

WEBMASTER

IT Officer:

Munir Hayat Md Bahrain

EDITORIAL OFFICE

JOURNAL DIVISION

Office of the Deputy Vice Chancellor (R&I)

1st Floor, IDEA Tower II

UPM-MTDC Technology Centre

Universiti Putra Malaysia

43400 Serdang, Selangor Malaysia.

General Enquiry

Tel: +603 9769 1622 | 1616

E-mail:

executive_editor.pertanika@upm.edu.my

URL: www.journals-jd.upm.edu.my

PUBLISHER

UPM PRESS

Universiti Putra Malaysia

43400 UPM, Serdang, Selangor, Malaysia.

Tel: +603 9769 8855 | 8854

Fax: +603 9679 6172

E-mail: penerbit@upm.edu.my

URL: <http://penerbit.upm.edu.my>



ASSOCIATE EDITORS

2021-2023

Mohd Izani Mohd Zain

Politics and Government
Universiti Putra Malaysia, Malaysia.

Vijayaethcumy Subramaniam

Language Acquisition and Learning
Universiti Putra Malaysia, Malaysia.

EDITORIAL BOARD

2020-2023

Ahasanul Haque

Marketing, International Business
International Islamic University Malaysia,
Malaysia.

James R. Stock

*Management Studies, Marketing,
Logistics and Supply Chain Management,
Quantitative Method*
University of South Florida, USA.

Romeo B. Lee

Demography, Global Health
De la Salle University, Philippines.

Ahmad Fauzi Mohd Ayob

*Information Technology, Multimedia in
Education*
Universiti Putra Malaysia, Malaysia

Jusang Bolong

*Human Communication, Computer-
Mediated Communication*
Universiti Putra Malaysia, Malaysia.

**Steven Eric Krauss @ Abd.
Lateef**

*Youth Development, Youth Participation,
Qualitative Research Methods, Human
Resource Development*
Universiti Putra Malaysia, Malaysia.

Ainin Sulaiman

*Technology Adoption, Technology
Management, Digital Divide, Information,
Computer and Communication
Technology (ICT), Social Network Sites*
University of Malaya, Malaysia.

Mansor H. Ibrahim

Monetary Economics
International Centre for Education in
Islamic Finance (INCEIF), Malaysia.

Tey Nai Peng

*Social Sciences, Population and
Demographic Studies*
University of Malaya, Malaysia.

Azlinda Azman

*Social Work Education and Practice,
Psychosocial Assessment, HIV and AIDS,
Clinical Social Work*
Universiti Sains Malaysia, Malaysia.

Mohamad Fazi Sabri

Consumer Finance, Consumer Behavior
Universiti Putra Malaysia, Malaysia.

Timothy Teo

ICT in Education, Educational Psychology
Murdoch University, Australia.

Haslinda Abdullah

Social and Developmental Psychology
Universiti Putra Malaysia, Malaysia.

Mohd Roslan Mohd Nor

*Inter-Religious Relation, Islamic Coping
Strategies, Islamic History and Civilisation*
University of Malaya, Malaysia.

Ting Su Hie

*Sociolinguistics, Academic writing,
Strategic competence, Applied Linguistics*
Universiti Malaysia Sarawak, Malaysia.

Hazita Azman

Applied Linguistics and Literacy
Universiti Kebangsaan Malaysia,
Malaysia.

Muhammad Shahbaz

*Applied Economics, Environmental
economics*
Beijing Institute of Technology, China.

Victor T. King

Anthropology / Southeast Asian Studies
White Rose East Asia Centre,
University of Leeds, UK.

James Chin

*Southeast Asian Politics, Electoral
Systems and Competitions*
University of Tasmania, Australia.

Muzafar Shah Habibullah

*Economics, Monetary Economics,
Banking, Macroeconomics*
Universiti Putra Malaysia, Malaysia.

INTERNATIONAL ADVISORY BOARD

2021-2024

Barbara Wejnert

*Political Sociologist: Gender Studies,
Macro Political and Social Changes*
University at Buffalo, USA.

Handoyo Puji Widodo

*English for Specific Purposes (ESP):
English for Academic Purposes (EAP)
and English for Vocational Purposes
(EVP), Systemic Functional Linguistics
(SFL) in Language Education*
King Abdulaziz University, Saudi Arabia.

Royal D. Colle

Communication
Cornell University, USA.

Graham Thurgood

*English Language Studies, General
Linguistics, Discourse and Syntax*
California State University, Chico, USA.

Shonda Buchanan

American Literature
Loyola Marymount University, USA.

Hassan Riaz

Sociology
National University of Singapore,
Singapore.

Pal Ahluwalia

*African Studies, Social and Cultural
Theory, Post-colonial Theory*
University of Portsmouth, UK.

ABSTRACTING AND INDEXING OF PERTANIKA JOURNALS

The journal is indexed in SCOPUS (Elsevier), Clarivate-Emerging Sources Citation Index (ESCI), BIOSIS, National Agricultural Science (NAL), Google Scholar, MyCite, ISC. In addition, Pertanika JSSH is recipient of "CREAM" Award conferred by Ministry of Higher Education (MoHE), Malaysia.

The publisher of Pertanika will not be responsible for the statements made by the authors in any articles published in the journal. Under no circumstances will the publisher of this publication be liable for any loss or damage caused by your reliance on the advice, opinion or information obtained either explicitly or implied through the contents of this publication. All rights of reproduction are reserved in respect of all papers, articles, illustrations, etc., published in Pertanika. Pertanika provides free access to the full text of research articles for anyone, web-wide. It does not charge either its authors or author-institution for refereeing/publishing outgoing articles or user-institution for accessing incoming articles.

No material published in Pertanika may be reproduced or stored on microfilm or in electronic, optical or magnetic form without the written authorization of the Publisher.

Copyright © 2018-19 Universiti Putra Malaysia Press. All Rights Reserved.



Pertanika Journal of Social Sciences & Humanities
Vol. 29 (3) Sep. 2021

Contents

Foreword <i>Mohammad Jawaid</i>	i
Determinants of Bioenergy Consumption in the European Continental Countries: Evidence from GMM Estimation <i>Mohd Alsaleh and Abdul Samad Abdul-Rahim</i>	1467
Sustaining Successful ICT Integration in Remote Rural Schools <i>Elenita Natalio Que</i>	1487
Evaluating the Performance of e-government: Does Citizens' Access to ICT Matter? <i>Abdulrazaq Kayode Abdulkareem and Razlini Mohd Ramli</i>	1507
Malaysian State Sports Schools Football Coaching Process Key Themes Development: Constant Comparison Method in Data Analysis <i>Ramesh Ram Ramalu, Zulakbal Abd Karim and Gunathevan Elumalai</i>	1535
<i>Review article</i>	
The Impact of Government Efficiency, Corruption, and Inflation on Public Debt: Empirical Evidence from Advanced and Emerging Economies <i>Wei Ni Soh, Haslinah Muhamad and Ong Tze San</i>	1551
Online Learning during COVID-19 Pandemic. Are Malaysian High School Students Ready? <i>Nagaletchimee Annamalai</i>	1571
Characteristics and Success Factors of Rural Community Leadership in Malaysia: A Focus Group Analysis <i>Ahmad Aizuddin Md Rami, Mohd Faiq Abd Aziz, Nurfaizreen Aina Muhamad Nasharudin and Roziah Mohd Rasdi</i>	1591
Newspaper Exposure, Efficacy Feeling and Political Apathy among Youths in South-East Nigeria <i>Joshua Aghogho Erubami, Paul Bebenimibo and Edith Ugochi Ohaja</i>	1611

Driving Factors of Continuity for Kano Emir Palace towards Safeguarding its Cultural Heritage <i>Bashir Umar Salim, Ismail Said, Lee Yoke Lai and Raja Nafida Raja Shahminan</i>	1631
Women in Leadership: Insights from Female Principals of Rural Secondary Schools in Vhembe District of South Africa <i>Livhalani Bridget Sinyosi and Onoriode Collins Potokri</i>	1651
Spiritual Well-being and Work Performance among Ground-level Employees: Unravelling the Connection <i>Jeffrey Khong Loong Yee, Jonathan Smith and Simon Robinson</i>	1671
Legal Literacy for Muslim Converts in Malaysia <i>Mohd Al Adib Samuri and Azlan Shah Nabees Khan</i>	1693
<i>Case study</i> Building Social Resilience after the 2014 Flood Disaster <i>Sarina Yusoff and Nur Hafizah Yusoff</i>	1709
<i>Review article</i> “Please Stay, Don’t Leave!”: A Systematic Literature Review of Safeguarding Intangible Cultural Heritage in the Fourth Industrial Revolution <i>Wan Juliana Emeih Wahed, Noorhayati Saad, Saiful Bahari Mohd Yusoff and Patricia Pawa Pital</i>	1723
Perceived Competence as a Mediator in Parental Engagement in Speech Therapy <i>Nurfariha Mdshah, Zainal Madon and Nellie Ismail</i>	1745
Unpaid Domestic Work and Gender Inequality in the Time of COVID-19 in Malaysia <i>Harn Shian Boo</i>	1765
Dimensions of National Ethos among Educated Youths in Malaysia <i>Mohd Mahadee Ismail, Nor Azlili Hassan, Azlina Abdullah, Hairol Anuar Mak Din, Marzudi Md Yunus and Mansor Mohd Noor</i>	1783
<i>Case study</i> Strengthening Marine Ecotourism Management’s Institutional Performance in Raja Ampat, Indonesia <i>Nuraini, Arif Satria, Ekawati Sri Wahyuni and Dietriech Geoffrey Bengen</i>	1809

<i>Case study</i>	
Ideological Manipulation of Translation through Translator's Comments: A Case Study of Barks' Translation of Rumi's Poetry <i>Bitu Naghmeh-Abbaspour, Tengku Sepora Tengku Mahadi and Iqbal Zulkali</i>	1831
<i>Review article</i>	
Socioeconomic Status and Mental Health among Low-income Employees: A Systematic Literature Review <i>Errna Nadhirah Kamalulil and Siti Aisyah Panatik</i>	1853
"Assessment for Learning" Practices Amongst the Primary School English Language Teachers: A Mixed Methods Approach <i>Mazidah Mohamed, Mohd Sallehudin Abd Aziz and Kemboja Ismail</i>	1875
Leadership Attitude and Clan-Structure: Lessons for Leadership Practices in Contemporary Post-Conflict Nation Building in Somalia <i>Abdisamad Hassan</i>	1901
Mapping the Use of Boosters in Academic Writing by Malaysian First- Year Doctoral Students <i>Yueh Yea Lo, Juliana Othman and Jia Wei Lim</i>	1917
Effects of Resistance Training and Whole-Body Electromyostimulation on Muscular Strength in Female Collegiate Softball Players <i>Raja Nurul Jannat Raja Hussain and Maisarah Shari</i>	1939
<i>Review article</i>	
Bibliometric Analysis of Research on Peer Feedback in Teaching and Learning <i>Catherine Nguoi Chui Lam and Hadina Habil</i>	1957
<i>Review article</i>	
A Systematic Analysis on the Admissibility of Digital Documents as Evidence in Malaysian Syariah Courts <i>Wan Abdul Fattah Wan Ismail, Ahmad Syukran Baharuddin, Lukman Abdul Mutalib and Mohamad Aniq Aiman Alias</i>	1981
Understanding COVID-19 Pandemic through Science, Technology and Society (STS) Education: A Textual Analysis of Student Reflection Papers <i>Jerome V. Cleofas</i>	1997
Using Online Platforms for Political Communication in Bahrain Election Campaigns <i>Mokhtar Elareshi, Mohammed Habes, Sana Ali and Abdulkrim Ziani</i>	2013

Review article

Exploring The Impact of Pandemic on Global Economy: Perspective
from Literature Review 2033

*Van Ky Long Nguyen, Thi My Hanh Le, Thi Minh Chau Tran, Thi
Thu Hien Le, Thi Ngoc Mai Duong, Thi Hien Le, Tien Son Nguyen
and Nhu Hoa Vo*

Exploring Ideologies of Function Words in George Orwell's Animal Farm 2089
Ayman Farid Khafaga

Foreword

Welcome to the third issue of 2021 for the *Pertanika Journal of Social Sciences and Humanities (PJSSH)*!

PJSSH is an open-access journal for studies in Social Sciences and Humanities published by Universiti Putra Malaysia Press. It is independently owned and managed by the university for the benefit of the world-wide science community.

This issue contains 30 articles; three case studies, six review articles, and the rest are regular articles. The authors of these articles come from different countries namely Indonesia, Malaysia, Nigeria, Philippines, Saudi Arabia, South Africa, United Arab Emirates, and Vietnam.

Jeffrey Khong Loong Yee and colleagues researched the connection of spiritual well-being and work performance, in their article, entitled “Spiritual Well-being and Work Performance among Ground-level Employees: Unravelling the Connection”. The results uncover the diverse ways in which spiritual well-being and work outcomes are connected, including ones that diminish or are inconsequential to work performance. Further details of the study can be found on page 1671.

A selected case study article from the scope of tourism, entitled “Strengthening Marine Ecotourism Management’s Institutional Performance in Raja Ampat, Indonesia” identified the importance of institutional performance as a critical element that stakeholders must collectively strengthen to better respond to marine tourism development challenges, specifically at Raja Ampat Tourism Villages. The research shed light on important factors to be considered in the strengthening of ecotourism efforts in the Raja Ampat area of Indonesia and has the potential to make a contribution to the literature on ecotourism. Details of this study are available on page 1809.

A regular article entitled “Assessment for Learning” Practices Amongst the Primary School English Language Teachers: A Mixed Methods Approach” sought to investigate the practices of the Assessment for Learning (AfL) strategies and the stages of assessment in pedagogy by English language teachers in primary schools. This research concluded that regardless of the changes in education or assessment system, these assessment practices could always be improvised and are not limited to the English language subject per se but are applicable across disciplines and in online lessons. The detailed information of this article is presented on page 1875.

We anticipate that you will find the evidence presented in this issue to be intriguing, thought-provoking and useful in reaching new milestones in your own research. Please recommend the journal to your colleagues and students to make this endeavour meaningful.

All the papers published in this edition underwent Pertanika's stringent peer-review process involving a minimum of two reviewers comprising internal as well as external referees. This was to ensure that the quality of the papers justified the high ranking of the journal, which is renowned as a heavily-cited journal not only by authors and researchers in Malaysia but by those in other countries around the world as well.

We would also like to express our gratitude to all the contributors, namely the authors, reviewers, Editor-in-Chief and Editorial Board Members of PJSSH, who have made this issue possible. PJSSH is currently accepting manuscripts for upcoming issues based on original qualitative or quantitative research that opens new areas of inquiry and investigation.

Chief Executive Editor

Dr. Mohammad Jawaid

executive_editor.pertanika@upm.edu.my

Determinants of Bioenergy Consumption in the European Continental Countries: Evidence from GMM Estimation

Mohd Alsaleh* and Abdul Samad Abdul-Rahim

School of Business and Economics, Universiti Putra Malaysia, 43400 UPM Serdang, Selangor, Malaysia

ABSTRACT

This study contributes to the existing literature by examining bioenergy consumption and related factors in continental European countries (ECC). This study extends the current research through its focus on the ECC, which mainly consists of nationwide studies. This study analyses the determinants of bioenergy consumption in the ECC from 2005-2013, estimates its economic variables and evaluates the influence of each variable on bioenergy consumption and related significance level. A generalised method of moments estimator (GMM) was designed for ECC. The estimated models show that bioenergy capital input (CI) positively impacts bioenergy consumption. The most influential factor on use was the price of bioenergy (PR) followed by investment (INV), then gross domestic product (GDP). These results should be considered and used as a tool to develop legislation and policies that could benefit the bioenergy sector in ECC. The evidence shows that CI, INV, and PR have been the primary keys in improving bioenergy consumption in recent years in ECC countries. Thus, they have advanced the efficiency of bioenergy consumption.

Keywords: Bioenergy consumption, bioenergy price, capital input, gross domestic product, investment

INTRODUCTION

The World Bioenergy Association (WBA, 2014) identified Europe as a region with a high potential for growth in the bio-energy sector. The derived bio-energy from bio-waste and bio-mass sources could provide around 20% of the total energy in European countries by 2020, with 85% of the energy supplied by European countries and 15% imported from overseas. It is thought that green and sustainable energy sources could

ARTICLE INFO

Article history:

Received: 30 July 2019

Accepted: 14 February 2020

Published: 25 August 2021

DOI: <https://doi.org/10.47836/pjssh.29.3.01>

E-mail addresses:

moe_saleh222@hotmail.com (Mohd Alsaleh)

abrahimabsamad@gmail.com (Abdul Samad Abdul-Rahim)

* Corresponding author

supply up to 45% of the EU's total energy by the end of 2030.

The consumption of bioenergy is one of the primary drivers of the European initiative to meet the aims of the National Renewable Energy Action Plan (NREAP) by the end of 2020 and to establish an accessible local renewable and sustainable energy framework (Burck et al., 2012; Geheeb, 2007; Jossart & Calderon, 2013). The bioenergy consumption in Europe can mitigate the need to import energy, regulate a dynamic trade balance, decrease fossil fuel prices, aid the development of urban areas, generate new jobs, develop knowledge and exploration, and reduce carbon output.

In 2014, the European Commission (EC) announced the new NREAP targets to be achieved by the end of 2030. The 2030 NREAP goals can play a significant role in developing European economies and increasing competition in the energy sector. If the goals are achieved, it will lower greenhouse gas (GHG) emissions by 40% compared to 1990 levels. The aims require an increase in renewable energy consumption of 27%, a reduction of fossil energy of 27%, and a 27% improvement in energy efficiency (Calderon et al., 2015; Scowcroft & Nies, 2011). This study aims to investigate the economic determinants of the bioenergy industry in continental European countries (developed and underdeveloped) during the period between 2005 and 2013.

An evaluation of the bioenergy consumption rates in European countries is essential for achieving the National Renewable Energy Action Plan (NREAP)

goals by the end of 2020 (Snieskiene & Cibinskiene, 2015). Evidence shows that local demand for bioenergy output will increase from 59 Mtoe in 2005 to 135 Mtoe in 2020 due to domestic consumption (Susaeta et al., 2012). The major sectors with a high demand for bioenergy are the electricity sector which demands between 10000-kilo tonnes of oil equivalent (Ktoe) and 20000 Ktoe, and the transport sector, which requires between 14000 Ktoe and 28000 Ktoe (Clerici & Assayag, 2013). The growth in demand in the electricity sector between 2005 and 2020 was exceptionally high in Belgium, France, Germany, Italy, the Netherlands, Poland, and the UK, with predicted outgrowths of 900 Ktoe, 1500 Ktoe, 4200 Ktoe, 1700 Ktoe, 1400 Ktoe, 1200 Ktoe, and 2200 Ktoe, respectively (Junginger et al., 2011).

In Figure 1, the bio-energy output forecast supply of 0.435 Million GWh and import of 0.731 Million GWh for the EU-28 countries and by the end of 2006 was evaluated to provide approximately 1.167 Million GWh overall (Alsaleh et al., 2017). The bio-energy utilising forecast demand of 0.669 Million GWh and export but 0.628 Million GWh by the end of 2006 was estimated to be about 1.298 Million GWh in the EU-28 countries. The finding presents a shortfall in the bio-energy market by (-0.131) Million GWh in 2006.

The bio-energy output forecast supply of 0.660 Million GWh and import of 0.912 Million GWh in the EU-28 countries by the end of 2020 was foreseen to provide approximately 1.572 Million GWh overall

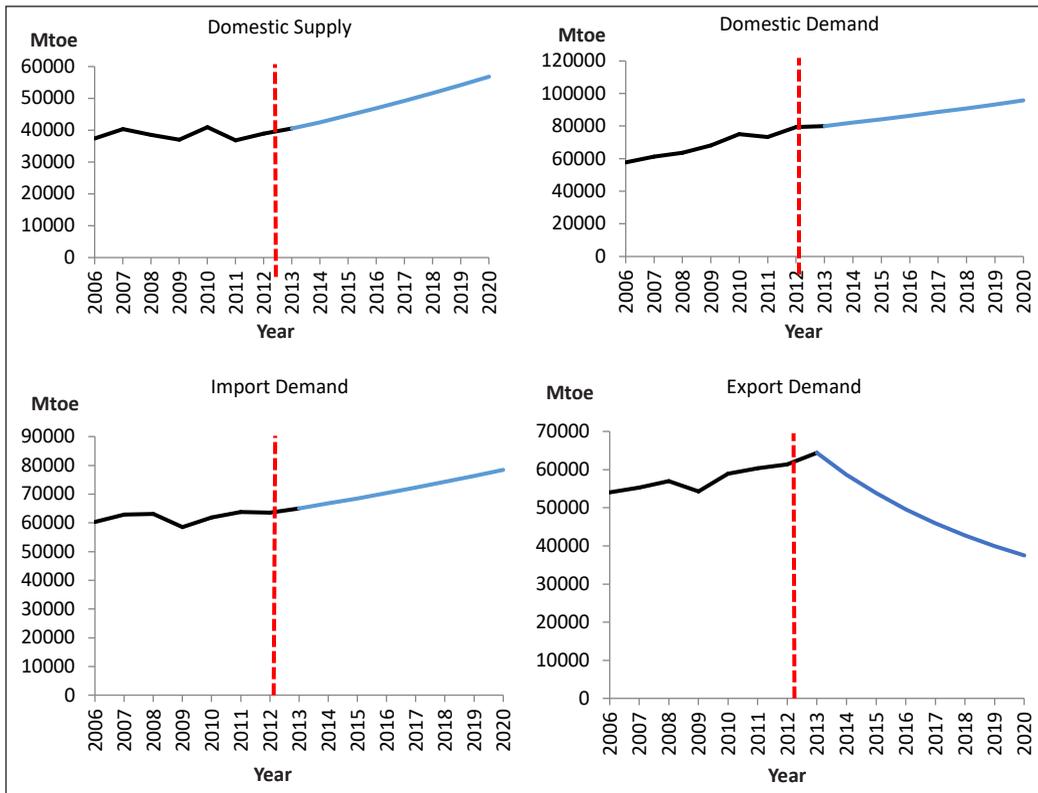


Figure 1. Forecasting results of domestic and international bioenergy markets in the EU28 region from 2014-2020

Notes. The black line referred to available data. The vertical line referred to the threshold between historical data and forecasted data.

(Figure 1). On the other hand, the bio-energy use forecast demand of 1.114 Million GWh and export of 0.436 Million GWh. By the end of 2020, demand is expected to be about 1.551 Million GWh overall. The finding presents that there will be a surplus of 0.021 Million GWh in the bio-energy market in the EU-28 region. The findings show that the bio-energy market in the EU-28 has developed from having a lack of (-0.131) Million GWh to attaining a surplus scale of 0.021 Million GWh by the end of 2020 (Alsaleh & Abdul-Rahim, 2019).

Figure 2 shows different comparisons related to the bio-energy industry

development in developing members in comparison to developed members in the European region. The development level in developed members has improved sharply, unlike the development level in developing members, which has shortly increased in the European region from 2000 to 2013 (Alsaleh & Abdul-Rahim, 2019).

The significance of bioenergy consumption in European countries has been visible through reduced GHG emissions, reduced energy dependency on traditional sources, increased green GDP, and increased employment rates. Research by Calderon et al. (2015) shows that the number of

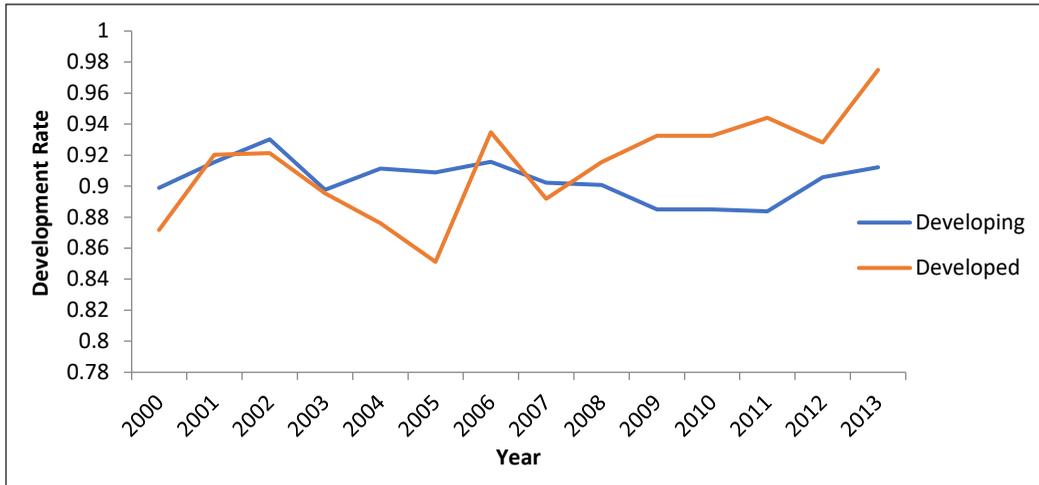


Figure 2. Comparisons of bioenergy industry development in developing and developed countries in European countries

Source: Alsaleh and Abdul-Rahim (2019)

vacancies in the European bioelectricity industry is three to six times higher than traditional energy production.

Based on the European biomass association statistical report, the number of people employed in the biomass industry in 2013 was 494.550 (64% solid biomass, 20% biofuels, 13% biogas, and 3% waste). The economic added value was 56 billion euros. The significance of this research is to define the consumption of bioenergy and pertaining factors that may influence the bio-energy sector growth and development in ECC. Moreover, to assess the economic variables and find the drivers, which could improve consumption rates of bioenergy and help meet the 2020 and 2030 NREAP objectives.

The bioenergy industry faces these problems: a shortage of industrialised fuel supply chains; a continued scepticism over whether bioenergy is a sustainable energy source in the long term; and the development and growth of the bioenergy

industry have been low compared to the high rate of demand and consumption. However, so far, bioenergy consumption has not become a hugely significant part of the European energy combination. Moreover, it does not compete economically with other renewable energy outputs.

In this paper, there is an implicit assumption that economic determinants significantly influence bioenergy consumption in ECC. The price of bioenergy is assumed to be a significant factor in people’s willingness to consume it. In addition, the researchers believe that capital input and investment significantly affect the consumption of bioenergy. Therefore, the primary questions of the research are the following: Do the ECC countries have adequate consumption of bioenergy output to achieve the 2020 and 2030 aims? What are the economic factors of the consumption of bioenergy output in ECC? This research analyses the macroeconomic

and microeconomic drivers of bioenergy consumption in ECC.

The motivation of the current paper is that the bioenergy industry shows one of the most capital-efficient transitions from a conventional energy source like coal to green energy sources. In 2011, European countries consumed more than 850 thousand gigawatt-hours of electricity from solid fossil fuels such as coal and lignite, which accounted for about 25% of total energy consumption (Albani et al., 2014). Therefore, minimising the share of coal-fired output production is an essential part of any decarbonisation plan. Biomass co-firing and coal-to-biomass are two powerful strategies that show the capability to utilise current coal factories to produce bioenergy products. These strategies could help European countries save billions of euros and produce competitive output in the energy markets. Unlike other renewable and sustainable energy sources.

This research contributes to the empirical bio-energy research in the following ways: (1) applying various panel data analysis estimations with different validation tests to evaluate the data, (2) check the rate of the bio-energy consumption during the period between 2005 through 2013, (3) investigate the macroeconomic and microeconomic determinants of the bio-energy output consumption in the ECC members. The authors' outcomes elaborate on the correlation among economic drivers and the bio-energy consumption in ECC between 2005 and 2013. Furthermore, the authors' empirical proof shows different

analysis outcomes according to the country's development status, developing or developed (Appendix A).

Renewable energy is one of the main factors that significantly impact economic development and growth in the world. Previous work by Lin et al. (2014) examined the relationship between renewable energy consumption and economic growth in China between 1977 and 2011. The study affirmed a statistical, positive, and vital correlation between renewable energy consumption and economic growth in China (Lin et al., 2014). Another study by Bhattacharya et al. (2015) analysed the relationship between renewable energy consumption and economic growth in 38 countries between 1991 and 2012. The study found a significant positive correlation between sustainable energy use and economic output for 57% of the selected 38 members.

Bioenergy is one of the primary sources of the renewable energy industry, according to earlier researches (Dam et al., 2009; Khishtandar et al., 2016; Meyer et al., 2013; Mehrara et al., 2015; Nybakk & Lunnan, 2013; Raitano et al., 2017; Tye et al., 2011). Moreover, Chang et al. (2003) and Hu and Wang (2005) reviewed the consumption level of biomass energy in China over the past three decades. They found an enormous growth potential for biomass energy in China. Also, Arodudu et al. (2016) and Meyer and Priess (2014) studied the influence of the bio-energy sector with different criteria. The study found that improvements in decision-making and the administrative aspects of the bio-energy

sector may boost economic growth and satisfy the public demand for more green energy.

Bio-wood fuel extracted from forests is one of the essential sources of biomass in European countries. A previous study by Andersen (2016) primarily refers to bio-wood fuels traded worldwide. The European Union market is the largest global producer and consumer of biomass output. In 2013, European Union members consumed 85% of all biomass production from the forestry industry.

The European Union's use of biomass is rising quicker than the rate of manufacturing. Also, the European Union biomass imports rose from below 0.0018 billion tonnes in 2009 (BT) to over 0.0045 BT in 2012, and then over 0.006 BT in 2013, respectively. As a result, the EU bio-energy sector consumed around 0.0019 BT of biomass outputs in 2013. The traded volume of biomass outputs worldwide is forecasted to increase significantly. Presently, the European Union imports most of the consumed bio-wood fuels from countries like the United States, Canada, and Russia (Andersen, 2016).

The shortage of production in bioenergy retail can harm the trade equilibrium of bio-energy. For example, Tromborg et al. (2013) stated that the local bioenergy production from the biomass forestry natural sources in Sweden was about 0.0014 BT, while domestic demand for bioenergy from the biomass sources was evaluated at 0.0017 BT. Therefore, around 400,000 tons of biomass from natural forestry sources were imported to fill the gap between domestic consumption and bioenergy output.

Furthermore, in 2007, Tromborg et al. (2013) found that biomass production from natural forestry sources was about 330 thousand tonnes in Finland. On the other hand, that demand was about 117 thousand tonnes. This difference shows that their output rate is significantly higher than the level of demand. In contrast to Sweden, allows for the exportation of biomass rather than importation.

Numerous studies, Hara et al. (2015), Levy and Belaid (2017), Mahalik et al. (2016), Salim et al. (2017), and Samuel et al. (2013), analysed the main determinants of energy consumption in the residential sectors around the world. On the other hand, the aim of the studies by Azam et al. (2015), Bamiro and Ogunjobi (2015), Brien and Torugsa (2011), Johnson (2016), and Tewathia (2014) is to identify the significant factors of energy consumption by taking into consideration various hypothetical obstacles related to energy consumption. Also, to analyse and compare energy consumption patterns in different countries like Japan, Nigeria, India, Greece, and China. Furthermore, to identify the significant factors that influence energy consumption and energy-saving initiatives.

Renewable and sustainable energy is a central part of the transition to a low carbon economic approach. Zhang et al. (2014) investigated the factors influencing renewable consumption. Specifically, in earlier studies, Lin et al. (2015) and Mehrara et al. (2015), the factors that influence the total renewable consumption were investigated using different data terms and econometric techniques.

The findings indicate a long-term correlation between the consumption of renewable energy and gross domestic product (GDP) per capita, a low trade openness ratio, the rate of foreign direct investment, financial development, and fossil energy consumption. Economic growth and business improvement encourage the use of renewable energy. At the same time, foreign direct investment, a low trade openness ratio, and fossil fuel lobbying activities are detrimental to renewable energy consumption.

Based on the research of Omri and Nguyen (2014), the impact of shock economic factors seems to dissipate with time. In contrast, the impact of lobbying is continuous and volatile. The finds also state a unidirectional short-term direct causality from a share of financial development to renewable energy consumption and from the use of renewable energy to the openness of trade.

According to previous work by Omri and Nguyen (2014), high economic development leads to a high rate of renewable energy consumption. People in those countries are more concerned with combating the effects of climate change and environmental degradation. Therefore, governments should implement policies that encourage renewable energy production and promote more comprehensive economic development to increase renewable energy use.

Unlike previous studies, this research examines the bioenergy consumption level in European Continental Countries

(ECC). Furthermore, a regression estimation was used to analyse the influences of different economic factors on the consumption of bioenergy output in ECC. The present research concentrates on the European Continental Countries, taking into consideration varying levels of development, to investigate the rate of bioenergy consumption in the selected samples. Two different estimators were applied, GMM different and GMM system, with varying levels of robustness to check the validity of the used econometric method for the period between 2005 and 2013. No previous research used the same approach, countries, or themes as in the current study. Thus, this research is related to the development of the bio-energy sector, particularly the green energy sector. It also correlates to and expands upon previous studies.

MATERIALS AND METHOD

Regarding the panel nature of the study data, this section reviews different panel regression approaches to evaluate various econometric models. There are numerous approaches to panel regression that have been applied in these studies. However, this study has to justify the most appropriate and applicable approach. For example, the wood fuel consumption of Sub-Saharan African countries was measure in an early study by Sulaiman et al. (2017). The study applied the generalised method of moment (GMM) different and system approaches. The same author, Sulaiman et al. (2016), explored another study on the relation between wood

fuel consumption and growth economies in Sub-Saharan African countries. The used the generalized method of moments system approach (GMM) and Arellano Bond Dynamic Panel GMM estimators (Mileva, 2007; Yuxiang & Chen, 2009).

Numerous studies investigated the determinants of consumption in different renewable energy industries such as bioenergy by using various econometric methods. For instance, Zhang et al. (2013, 2014) investigated the determinants of bioenergy consumption in rural China by applying different econometric regression techniques like OLS regression, Logit, and Tobit. Other studies (Bamiro & Ogunjobi, 2015); Johnson, 2016) follow the same econometric approach OLS and Multinomial Logit Regression to analyse structural determinants of energy consumption in Togo and Nigeria, respectively. Previous studies (Azam et al., 2015; Lin et al., 2015) estimated the determinants of energy and renewable energy consumption in Greece and China, respectively. The studies applied the vector error correction model (VECM) approach to carry out the regression.

Previous studies have shown that autoregressive distributed lag (ARDL) is one of the most applied econometric methods to estimate energy consumption in China and Saudi Arabia. It was used by Mahalik et al. (2016) and Salim et al. (2017). Otherwise, different econometric approaches like the Bayesian model averaging and weighted-average least-square were applied by Mehrara et al. (2015) to investigate the determinants of renewable energy

consumption among Economic Cooperation Organization (ECO) countries. Also, a study by Salim et al. (2017) estimated the impacts of human capital on energy consumption in three provinces in China by applying different econometric estimators; fully modified oriented least square (FMOLS), dummy oriented least square (DOLS), mean group (MG), dynamic fixed effect (DFE) and pooled mean group (PMG).

The dependent variable is bioenergy consumption (CON), defined as the available energy output for final per capita consumption. The experiential formation for the current research is based on past research by Omri and Nguyen (2014), where bioenergy consumption is assumed to be determined by economic variables. The correlation among these factors and bioenergy consumption is elaborated as:

$$\text{CON} = f(\text{GDP}, \text{INV}, \text{PR}, \text{CI}) \quad (1)$$

CON is bioenergy consumption presented in a tonne of oil equivalent (toe). It is an equation of four factors: GDP, representing the gross domestic product level and shows annual economic growth, INV represents the investment which reflects the capital formation (constant 2010 \$), PR points to the domestic price of the available bioenergy output in USD Dollar, and CI refers to other factors related to capital inputs that influence bioenergy consumption (See Appendix B). For example, access to the financial development of the bioenergy industry.

Based on an earlier paper, the economic model of Omri and Nguyen (2014) was

adapted by replacing renewable energy consumption as a dependent variable with bioenergy consumption. Converting the dynamic correlation in Equation 1 into panel framework and framing it in an econometric model, Equation 2 is presented as:

$$\begin{aligned} \text{CON}_{it} = & \alpha_{it} + \delta_{it} \ln \text{GDP}_{it} + \beta_{it} \ln \text{INV}_{it} \\ & + \theta_{it} \ln \text{PR}_{it} + \vartheta_{it} \ln \text{CI}_{it} + \epsilon_{it} \end{aligned} \quad (2)$$

Where α is the constant of the model, ϵ is the error term, and i refers to every individual county in the study, t points to the running period in the econometric model, \ln indicates the natural logarithm. We estimate these relationships based on a dynamic panel data model using the generalised system method of moments. This approach allows one to solve three main problems in panel data estimations: the endogeneity problem, the time-invariant country characteristics or fixed effects, and the presence of the lagged dependent variable.

Consequently, our econometric model can be framed, as shown in Equation (3). Where CON_{it} stands for the country's i bioenergy consumption at time t . α_0 is the parameter to be estimated. X is a vector of core explanatory variables used to model bioenergy consumption. They include the GDP, INV, PR, and CI. μ is the country-specific effects. ϵ is the error term.

$$\begin{aligned} \text{CON}_{it} = & \alpha_0 \text{CON}_{it-1} + \sum_{j=1}^4 \beta_j X_{it} + \mu_{it} + \epsilon_{it} \end{aligned} \quad (3)$$

$i = 1, \dots, 50; \quad t = 2005, \dots, 2013$

According to the essence of the data panel of the current research, the study selects a panel regression technique to estimate this study model. There are numerous econometric panel estimators available. First, however, a solid justification must be given regarding the most appropriate applied econometrics technique. Various panel regression models such as random effect, fixed effects, and pooled oriented least-square would not provide proper results in the existence of dummy variables and lagged dependent variables.

Moreover, in the presence of possible endogeneity in the independent determinants, these econometric techniques are invalid. In this case, the endogeneity comes from an uncontrolled confounding variable. This variable correlates with both the independent variable in the model and with the error term.

The estimated coefficients from these techniques will be biased with the hypothesis of sequent unlinked disruption period (Ibrahim & Law, 2014). In these circumstances, these techniques are inappropriate for the regression of this study because of the weaknesses mentioned.

These statistical issues can be defeated based on one study by Arellano and Bond (1991). They established an econometric technique called the GMM. The model manages the influences of country time-invariant, time-specific, and country-specific by employing the first difference. Arellano and Bond (1991) highly recommended the first differencing approach because

it uses instrumental determinants, and the exogenous factors may perform as specialised tools.

Also, the differenced lagged of the dependent factor and other endogenous factors might be fixed, with their lags in rates, lagged 2, or further terms. This estimation is named the first difference GMM validator. Referring to Ahn and Schmidt (1995), the primary deficiency of the first difference the GMM approach is that it neglects the possible information in the level correlation, and the relationship among the first difference estimator and the levels estimator.

Furthermore, Blundell and Bond (1998) referred to the limitations of the first difference GMM approach. They stated that it could impact the validity of the applied regress. Also, they can be weak instruments in the first difference if the level determinants show stability. Arellano and Bover (1995) point out that regressing level and first difference as a GMM system method can address this weakness and limitations. According to Blundell and Bond (1998), the GMM system approach develops from the first difference GMM. It is more suitable when the time series is short, or the dependent factor is highly aligned with the

autoregressive term nearing unity. Regarding the highlighted econometric points, the current research implements the GMM difference and system approaches. The first difference of the GMM approach was also applied as a validation test inspector.

According to earlier studies by Arellano and Bover (1995), the validity and reliability of the GMM approach are evaluated using various diagnostic checks related to Hansen’s diagnostic check for over defining weakness and the second-order serial relationship. Hansen’s diagnostic test investigates the overall reliability of the instruments in the regressed analysis. On the other hand, second-order serial correlation estimators can be applied to investigate the hypothesis not related to the serial correlation in the error term.

RESULTS

Before regressing the primary model, illustrative statistics and the relationship matrix were applied as preliminary tests. Table 1 elaborates the findings of the illustrative statistics and includes figures related to maximum, minimum, standard deviation, mean, and observations values, overall the studied sample and between the investigated samples for different countries.

Table 1
Illustrative statistics

Variable	Observations	Mean	Std. Dev.	Min	Max
CON	249	-0.000	0.239	-1.300	1.068
GDP	250	-9.716	1.010	-11.857	-7.327
INV	250	-2.417	3.985	-6.597	20.700
PR	250	1.774	2.068	-3.999	6.979
CI	250	-4.870	2.590	-9.324	1.203

The findings show interesting differences within countries and between countries. The results rationalise the implementation of the panel regression approach.

Table 2 presents the relation matrix among the independent determinants in the current study. The findings show there is no evidence for a high relationship between bioenergy consumption and the economic determinants. Therefore, this study can proceed with the estimation. For other determinants, the scale of relationship is acceptable between and within the used variables. Essentially, this analysis can be considered a safe estimation that is free from problems of multicollinearity.

Table 2
Correlation matrix

	GDP	INV	PR	CI
GDP	1.000			
INV	0.252	1.000		
PR	0.045	0.028	1.000	
CI	0.256	0.776	0.021	1.000

Tables 3, 4 and 5, show the findings of the regressed econometric model applying GMM system estimator and GMM difference estimator with bioenergy consumption in ECC as the dependent factor. The identification tests were applied to check the validity and appropriateness of the two GMM approaches. For example, the Hansen-J estimator could not decline the over-defining limits, nor could the Diff-in-Hansen estimator decline the additional tools needed for GMM regression. These specifications tests emphasise the reliability and appropriateness of the used tools.

Likewise, the serial correlation estimator declines the null hypothesis related to no autocorrelation of first-order and confirms the invalid assumption related to no autocorrelation of second-order. As a result, the residues of the regressed model may not include autocorrelation issues. Essentially, the lagged dependent factor shows a significant and positive correlation; this refers to the functional of the applied econometric approach.

Table 3
Estimated results of the panel GMM with the bioenergy consumption in the ECC

	<u>System GMM</u>	<u>Difference GMM</u>
	Coefficients	Coefficients
GDP	0.000 (0.904)	0.002 (0.608)
INV	0.000 (0.279)	0.007 (0.652)
PR	-0.006** (0.038)	-0.000 (0.981)
CI	0.001 (0.648)	0.009 (0.138)
Instruments	9	11
No of groups	50	50
AR2: p-value	0.155	0.495
Hansen J-test	0.233	0.244
Diff-in-Hansen test	0.672	0.224

Notes: ***indicates significant at 1%, **indicates significant at 5%, *indicates significant at 10%. Parenthesis are the standard errors.

Table 4
Estimated results of the panel GMM with the bioenergy intensity in the ECC developing countries

	<u>System GMM</u>	<u>Difference GMM</u>
	Coefficients	Coefficients
GDP	0.014 (0.381)	0.002 (0.336)
INV	0.007** (0.019)	0.007 (0.620)
PR	- 0.003 (0.488)	-0.000 (0.731)
CI	0.019** (0.023)	0.007 (0.175)
Instruments	8	11
No of groups	32	32
AR2: p-value	0.630	0.455
Hansen J-test	0.657	0.978
Diff-in-Hansen test	0.245	0.118

Notes: ***indicates significant at 1%, **indicates significant at 5%, *indicates significant at 10%. Parenthesis are the standard errors.

As per the previous statement in the method section, this paper's estimation of will mainly consider the GMM system approach findings. Also, the GMM difference approach outcomes are employed as a validation test.

This research provides justifications for the GMM system and difference findings and the coefficients of the independent determinants such as investment (INV) in ECC developing (Table 4) and ECC developed countries (Table 5); bioenergy price (PR) in ECC overall (Table 3) and ECC developed countries (Table 5); and capital input (CI) in ECC developing (Table 4) and ECC developed countries (Table 5).

Importantly, the findings coefficient of the lagged dependent factor shows a significant and positive correlation, which approves the functional quality of the applied econometric analysis leading to justify the implementation of a GMM approach. The estimated findings in Table 3 follow earlier expectations that bioenergy consumption rate increase with the increase

of GDP, INV, and CI, and rates in ECC. Also, bioenergy consumption levels increase with the decrease of PR in ECC. The two GMM regressors show that an increase in GDP, INV and CI, and rates in ECC are strongly linked with increased bioenergy consumption. The estimated coefficient of bioenergy consumption in the GMM system regress suggests that a decrease of approximately 0.6% in PR can increase the bioenergy consumption by 1%.

Table 4 contains the results showing the economic determinants' influence on the dependent variable bio-energy consumption in ECC developing countries. The specification checks' outcomes for both system and difference GMM regressors favoured the analysed findings. The result of the coefficient related to the lagged dependent factor shows a significant positive relationship. The findings also show that INV and CI have a significant positive correlation as predicted. The GMM system approach shows that an increase of 0.07% and 0.01% in INV and CI, respectively,

Table 5

Estimated results of the panel GMM with the bioenergy consumption in the ECC developed countries

	<u>System GMM</u>	<u>Difference GMM</u>
	Coefficients	Coefficients
GDP	0.020 (0.209)	0.067 (0.649)
INV	0.003 (0.353)	0.052* (0.059)
PR	-0.008*** (0.002)	-0.001 (0.787)
CI	0.007*** (0.004)	0.045*** (0.005)
Instruments	9	11
No of groups	18	18
AR2: p-value	0.260	0.685
Hansen J-test	0.476	0.661
Diff-in-Hansen test	0.391	0.442

Notes: ***indicates significant at 1%, **indicates significant at 5%, *indicates significant at 10%. Parenthesis are the standard errors.

can lead to a 1% increase in bioenergy consumption.

Thus, the determinants INV and CI have a positive and vital impact on bioenergy consumption in ECC developing countries. The regressed coefficients of independent determinants provided by the GMM system provide somewhat similar findings compared to the coefficients of independent determinants presented by the GMM difference approach. The robust estimator GMM difference shows that increases in GDP, INV, and CI increase the consumption of bioenergy output.

However, the coefficients of the GDP, INV and CI, remain similar in both the GMM difference and GMM system. Therefore, the results obtained from the GMM difference estimator are considered to be a robust test. Furthermore, the estimated coefficient of bioenergy PR in GMM difference and GMM system regress suggests that a decrease in PR increases in bioenergy consumption.

From Table 5, the GMM system and GMM difference results depict that

CI positively and significantly impacts bioenergy consumption in ECC developed countries. To be precise, the increase of 0.7% in CI, as shown by the GMM system estimator can increase bioenergy consumption by 1%. On the other hand, the finding of Table 5 shows that PR has a negative and significant impact on bioenergy consumption in ECC-developed countries. To be specific, the decrease of 0.7% in PR as shown by the GMM system estimator, can increase bioenergy consumption by 1%.

This result indicates that the impact of INV and PR bioenergy consumption in ECC developed countries is higher than that of ECC developing countries. The regressors GMM shows that an increase in the economic determinant INV and CI by 0.05% and 0.04%, respectively, can increase the consumption of the bioenergy industry by 1% in the developed countries model. It is essential to highlight that the three investigated models in Table 3, Table 4, and Table 5 succeeded in the applied specification tests.

DISCUSSION

Bioenergy consumption is defined as per unit capita in previous studies (Lin et al., 2014; Mahalik et al., 2016; Omri & Nguyen, 2014). It is the most widely used measurement of socio-economic development. High bioenergy consumption indicates a significant improvement in the sustainable energy industry in the region. In comparison, nominal use of bioenergy shows a lower sustainability level of the energy industry in the area. Furthermore, substantial bioenergy consumption means higher civilisation in society. In contrast, areas with low bioenergy consumption represent limitations or a lack of development in the socio-economic-political sphere.

Following a previous study by Omri and Nguyen (2014), determinant PR is assumed to be the primary explanatory variable. Table 3 evaluated the findings of the panel GMM system with the bioenergy consumption in the ECC, and the findings reveal that PR has a significant negative influence on bioenergy consumption at the statistical level of 5%.

Table 4 estimation results explain that PR has a negative impact on bioenergy consumption. Also, the study results showed in Table 5 illustrating that the PR independent variable has a negative and significant effect on bioenergy consumption at the 1% statistical level.

In line with research by Mehrara et al. (2015), Table 4 shows the impact of economic factors on bio-energy consumption in the ECC developing members applying the panel GMM system approach. The findings show that the INV determinant has a significant positive impact on bioenergy

consumption in ECC developing countries at the statistical level of 5%. Furthermore, Table 3 shows that INV positively correlates with bioenergy consumption level in the ECC countries using the panel GMM system approach. Finally, Table 5 shows that the INV variable positively relates to bioenergy consumption level in the ECC developed countries.

In line with an earlier study by Lin et al. (2014), Table 5 reveals the influence of economic factors on the bio-energy consumption level in the ECC developed countries using the panel GMM system estimator. Table 5 results indicate that the CI variable has a significant positive impact on the consumption level of bioenergy in developed countries at a statistical level of 1%. On the other hand, the finding of Table 4 indicates that the CI variable has a significant favourable influence on the consumption level of bioenergy in developing countries at the statistical level of 5%. However, Table 3 shows a positive relationship between the CI and bioenergy consumption in EEC countries.

The following explanatory variable is GDP, which plays a large part in increasing bioenergy consumption and improving the bioenergy industry (Alsaleh et al., 2016). To meet the scheduled NREAP targets by the end of 2030, European governments implemented an economic stimulus policy that led to the rapid development in the bioenergy industry. As a result, many large projects related to bioenergy development were implemented to increase production. Also, the rapid increase in GDP can add value and lead to significant increases in

bioenergy production. In line with previous studies (Azam et al., 2015; Samuel et al., 2013), which highlighted the impact of GDP determinant on renewable energy consumption, Table 4 and Table 5 showed that the GDP determinant has a positive effect on the consumption of bioenergy.

CONCLUSION

This research investigates the determinants that influenced the bioenergy industry and the bioenergy consumption in the European Continental Countries between 2005 and 2013. In the first section of this research, the economic drivers of bioenergy consumption are investigated. The GMM approach succeeds in determining the economic factors that affect bioenergy consumption in the developing and developed members of the ECC. Next, the impact of factors like GDP, investment, price, and capital input on bioenergy consumption is investigated.

In the case of GDP, there is no substantial impact on aggregate bioenergy consumption. However, a strong GDP influences the efficacy of the bio-energy sector (Alsaleh et al., 2016). Considering the development and competition between ECC countries, attention to bioenergy storage will significantly be restricted through a bioenergy efficiency approach with limited interest in the need to reduce bioenergy use with amendments in consumption and production methods. Therefore, the venture is that the gains in bioenergy efficiency are stabilised by raising consumption (the so-called Jevon's Effect). This effect will resume as long as consumption approaches

are not seriously considered and economic development takes precedence.

It was established that INV and CI positively influence on the consumption of bioenergy output in developing countries and developed countries in ECC (Tables 4 and 5). The most significant influence on bioenergy consumption, was CI in all terms of solidity and explanatory power. At the same time, the economic variable that had a lower significance than was estimated was INV. The findings suggest that PR should be used as a valuable tool to develop the bioenergy industry and increase adoption, particularly in ECC.

The results from the study give objective regulation and policy recommendations for increasing the efficacy of bioenergy consumption in the ECC. However, decision-makers should consider a combination or framework of policies rather than individual policies in isolation. Sustainable bioenergy resources can improve efficiency by maximising greenhouse gas reduction, optimising bioenergy contribution to the security of energy supply, avoiding competition with food, feed, and fibre, and applying performance-based incentives for bioenergy proportional to the benefits delivered and demonstrated.

The evidence shows that CI, INV, and PR have been the primary keys in increasing bioenergy consumption in recent years in ECC countries. It is because they have advanced the efficiency of bioenergy consumption. Countries with less-developed bioenergy sectors should adopt the most successful strategies from other countries to expand their bioenergy industries. Many

pieces of research about the macroeconomic and microeconomic determinants of bioenergy consumption have specific restrictions and obstacles that should be considered. The primary limitation of the data availability of bioenergy consumption studies in an empirical analysis relies on a persistence time series for an acceptable long term. Also, more complete data allows for more efficient and functional measurement of bioenergy consumption.

Identifying the economic variables that influence bioenergy consumption adds to the knowledge about the topic, which is a highly significant index of sustainable improvement. Bioenergy consumption increment is happening surprisingly quickly, but not fast enough to meet the world's bioenergy challenges. Significant consumption increases of around 20-27% are expected between 2020 and 2030. However, because of expected rapid economic growth, these improvements in bioenergy consumption will not stop the growth and development of the bioenergy industry, with its associated benefits to the environment and the stability of the world economy.

COMPLIANCE WITH ETHICAL STANDARDS

Conflict of interest: The authors declare that they have no conflict of interest.

ACKNOWLEDGEMENT

An essential support has been provided for this research by University Putra Malaysia.

REFERENCES

- Ahn, S., & Schmidt, P. (1995). Efficient estimation of models with dynamic panel data. *Journal Economic*, 68(1), 5-28. [https://doi.org/10.1016/0304-4076\(94\)01641-C](https://doi.org/10.1016/0304-4076(94)01641-C)
- Albani, M., Blaschke, B., Denis, N., & Granskog, A. (2014). Bioenergy in Europe: A new beginning — or the end of the road? *McKinsey on Sustainability & Resource Productivity*, 3(4), 222-241.
- Andersen, B. H. (2016). *Bioenergy in the EU: contradictions driving excess and unequal land use for industrial biomass production* (Colloquium Paper No. 54.). International Institute of Social Studies (ISS). https://www.iss.nl/sites/corporate/files/54-ICAS_CP_Andersen.pdf
- Alsaleh, M., & Abdul-Rahim, A. S. (2019). The forecasted accuracy of the bioenergy market in the EU-28 region. *Journal of Sustainability Science and Management*, 14(4), 118-129. <http://jssm.umt.edu.my/.../10-V14N4.pdf>
- Alsaleh, M., Abdul-Rahim, A. S., & Mohd-Shahwahid, H. O. (2016). Determinants of technical efficiency in the bioenergy industry in the EU28 region. *Renewable and Sustainable Energy Reviews*, 78, 1331-1349. <https://doi.org/10.1016/j.rser.2017.04.049>
- Alsaleh, M., Abdul-Rahim, A. S., Mohd-Shahwahid, H. O. (2017). An empirical and forecasting analysis of the bioenergy market in the EU28 region: Evidence from a panel data simultaneous equation model. *Renewable and Sustainable Energy Review*, 80, 1123-1137. <https://doi.org/10.1016/j.rser.2017.05.167>
- Arellano, M., & Bond, S. (1991). Some tests of specification for panel data: Monte Carlo evidence and an application to employment equations. *The Review Economic Studies*, 58(2), 277-297. <https://doi.org/10.2307/2297968>

- Arellano, M., & Bover, O. (1995). Another look at the instrumental variable estimation of error-components models. *Journal Economic*, 68(1), 29-51. [https://doi.org/10.1016/0304-4076\(94\)01642-D](https://doi.org/10.1016/0304-4076(94)01642-D)
- Arodudu, O., Helming, K., Wiggering, H., & Voinov, A. (2016). Towards a more holistic sustainability assessment framework for agro-bioenergy systems — A review. *Environmental Impact Assessment Review*, 62, 61-75. <https://doi.org/10.1016/j.eiar.2016.07.008>
- Azam, M., Khan, A. Q., Zafeiriou, E., & Arabatzis, G. (2015). Socio-economic determinants of energy consumption: An empirical survey for Greece. *Renewable and Sustainable Energy Reviews*, 57, 1556-1567. <https://doi.org/10.1016/j.rser.2015.12.082>
- Bamiro, O. M., & Ogunjobi, J. O. (2015). Determinants of household energy consumption in Nigeria: Evidence from Ogun State. *Research Journal for Social Science and Management*, 4(12), 35-41. <https://core.ac.uk/download/pdf/34725344.pdf>
- Bhattacharya, M., Paramati, S. R., Ozturk, I., & Bhattacharya, S. (2015). The effect of renewable energy consumption on economic growth: Evidence from top 38 countries. *Applied Energy* 162, 733-741. <https://doi.org/10.1016/j.apenergy.2015.10.104>
- Blundell, R., & Bond, S. (1998). Initial conditions and moment restrictions in dynamic panel data models. *Journal Economic*, 87(1), 115-143. [https://doi.org/10.1016/S0304-4076\(98\)00009-8](https://doi.org/10.1016/S0304-4076(98)00009-8)
- Brien, K. O., & Torugsa, N. A. (2011). Supply-side determinants of Energy Consumption and Efficiency (ECE) innovations. *Journal of Business Chemistry*, 8(3) 115-122. <https://nbn-resolving.org/urn:nbn:de:hbz:6-69379468538>
- Burck, J., Hermswille, L., & Krings, L. (2012). *Climate change performance index result 2013*. Climate Action Network Europe. <https://germanwatch.org/sites/default/files/publication/7159.pdf>
- Calderon, C., Gauthier, G., & Jossart, J. M. (2015). *Emerging Central European Bioenergy Fund. European Biomass Association statistical report*. European Biomass Association. <https://bioenergyeurope.org/statistical-report.html>
- Chang, L., Leung, D. Y. C., Wu, C. Z., & Yuan, Z. H. (2003). A review on the energy production, consumption, and prospect of renewable energy in China. *Renewable and Sustainable Energy Reviews*, 7(5), 453-468. [https://doi.org/10.1016/S1364-0321\(03\)00065-0](https://doi.org/10.1016/S1364-0321(03)00065-0)
- Clerici, A., & Assayag, M. (2013). *World Energy Resource 2013 survey* (World Energy Council Report: ISBN: 978 0 946121 29 8). World Energy Council. <https://www.worldenergy.org/publications/entry/world-energy-resources-2013-survey>
- Dam, J., Faaij, A. P. C., Hilbert, J., Petrucci, H., & Turkenburg, W. C. (2009). Large-scale bioenergy production from soybeans and switch grass in Argentina Part A: Potential and economic feasibility for national and international markets. *Renewable and Sustainable Energy Reviews*, 13(8), 1710-1733. <https://doi.org/10.1016/j.rser.2009.03.009>
- Geheeb, G. (2007). *The Renewable Energy Sources Act: The success story of sustainable policies for Germany*. Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU). <https://www.bmu.de/en/publication/climate-action-plan-2050>
- Hara, K., Uwasu, M., Kishita, Y., & Takeda, H. (2015). Determinant factors of residential consumption and perception of energy conservation: Time-series analysis by large-scale questionnaire in Suita, Japan. *Energy Policy*, 87, 240-249. <https://doi.org/10.1016/j.enpol.2015.09.016>

- Hu, J. L., & Wang, S. C. (2005). Total-factor energy efficiency of regions in China. *Energy Policy*, 34(17), 3206-3217. <https://doi.org/10.1016/j.enpol.2005.06.015>
- Ibrahim, M. H., & Law, S. H. (2014). Social capital and CO₂ emission-output relations: A panel analysis. *Renewable & Sustainable Energy Review*, 29, 528-534. <https://doi.org/10.1016/j.rser.2013.08.076>
- Johnson, K. A. (2016). Structural determinants of energy consumption in an importing country: The case of Togo. *British Journal of Economics, Management & Trade*, 14(3), 1-11. <https://doi.org/10.9734/BJEMT/2016/27636>
- Jossart, J. M., & Calderon, C. (2013). *European Bioenergy outlook report 2013 AEBIOM*. European Biomass Association. <https://bioenergyeurope.org/statistical-report.html>
- Junginger, M., Dam, J., Zarrilli, S., Mohamed, F., Marchal, D., & Faaij, A. (2011). Opportunities and barriers for international bioenergy trade. *Energy Policy*, 39(4), 2028-2042. <https://doi.org/10.1016/j.enpol.2011.01.040>
- Khishtandar, S., Zandieh, M., & Dorri, B. (2016). A multi criteria decision making framework for sustainability assessment of bioenergy production technologies with hesitant fuzzy linguistic term sets: The case of Iran. *Renewable and Sustainable Energy Reviews*, 77, 1130-1145. <http://dx.doi.org/10.1016/j.rser.2016.11.212>
- Lin, B., & Moubarak, M. (2014). Renewable energy consumption – Economic growth nexus for China. *Renewable and Sustainable Energy Reviews*, 40, 111-117. <https://doi.org/10.1016/j.rser.2014.07.128>
- Lin, B., Omoju, O. E., & Okonkwo, J. U. (2015). Factors influencing renewable electricity consumption in China. *Renewable and Sustainable Energy Reviews*, 55, 687-696. <https://doi.org/10.1016/j.rser.2015.11.003>
- Levy, J. P., & Belaid, F. (2017). The determinants of domestic energy consumption in France: Energy modes, habitat, households and life cycles. *Renewable and Sustainable Energy Reviews*, 81(2), 2104-2114. <http://dx.doi.org/10.1016/j.rser.2017.06.022>
- Mahalik, M. K., Babu, M. S., Nanthakumar, L., & Shahbaz, M. M. (2016). Does financial development intensify energy consumption in Saudi Arabia? *Renewable and Sustainable Energy Reviews*, 75, 1022-1034. <https://doi.org/10.1016/j.rser.2016.11.081>
- Mehrara, M., Rezaei, S., & Razi, D. H. (2015). Determinants of renewable energy consumption among ECO countries; Based on Bayesian Model Averaging and Weighted Average Least Square. *International Letters of Social and Humanistic Sciences*, 54, 96-109. <https://doi.org/10.18052/www.scipress.com/ILSHS.54.96>
- Meyer, A. D., Cattrysse, D., Rasinmäki, J., & Orshoven, J. V. (2013). Methods to optimize the design and management of biomass-for-bioenergy supply chains: A review. *Renewable and Sustainable Energy Reviews*, 31, 657-670. <https://doi.org/10.1016/j.rser.2013.12.036>
- Meyer, M. A., & Priess, J. A. (2014). Indicators of bioenergy-related certification schemes - An analysis of the quality and comprehensiveness for assessing local/regional environmental impacts. *Biomass and Bioenergy*, 65, 151-169. <https://doi.org/10.1016/j.biombioe.2014.03.041>
- Mileva, E. (2007). *Using Arellano – Bond Dynamic Panel GMM Estimators in Stata: Tutorial with examples using Stata 9.0*. Economics Department, Fordham University.
- Nybakk, E., & Lunnan, A. (2013). Introduction to special issue on bioenergy markets. *Biomass and Bioenergy*, 57, 1-3. <https://doi.org/10.1016/j.biombioe.2013.04.001>
- Omri, A., & Nguyen, D. K. (2014). On the determinants of renewable energy consumption: International

- Evidence. *Energy*, 72, 554-560. <https://doi.org/10.1016/j.energy.2014.05.081>
- Raitano, M., Romano, E., & Zoppoli, P. (2017). Renewable energy sources in Italy: Sectorial intensity and effects on earnings. *Renewable and Sustainable Energy Reviews*, 72, 117-127. <https://doi.org/10.1016/j.rser.2017.01.042>
- Samuel, Y. A., Manu, O., & Wereko, T. B. (2013). Determinants of energy consumption: A review. *International Journal of Management Sciences*, 1(12), 482-487.
- Salim, R., Yao, Y., & Chen, G. (2017). Does human capital matter for energy consumption in China? *Energy Economics*, 67, 49-59. <https://doi.org/10.1016/j.eneco.2017.05.016>
- Scowcroft, J., & Nies, S. (2011). *Biomass 2020: Opportunities, challenges and solutions*. Eurelectric.
- Snieskiene, G., & Cibinskiene, A. (2015). Export price: How to make it more competitive. *Procedia-Social and Behavioral Sciences*, 213, 9-98. <https://doi.org/10.1016/j.sbspro.2015.11.409>
- Sulaiman, C., Abdul-Rahim, A. S., Chin, L., & Mohd-Shahwahid, H. O. (2016). Wood fuel consumption, institutional quality, and forest degradation in sub-Saharan Africa: Evidence from a dynamic panel framework. *Ecological Indicators*, 74, 414-419. <https://doi.org/10.1016/j.ecolind.2016.11.045>
- Sulaiman, C., Abdul-Rahim, A. S., Chin, L., & Mohd-Shahwahid, H. O. (2017). Wood fuel consumption and mortality rates in Sub-Saharan Africa: Evidence from a dynamic panel study. *Chemosphere*, 177, 224-231. <https://doi.org/10.1016/j.chemosphere.2017.03.019>
- Susaeta, A., Lal, P., Carter, D. R., & Alavalapati, J. (2012). Modeling nonindustrial private forest landowner behavior in face of woody bioenergy markets. *Biomass and Bioenergy*, 46, 419-428. <https://doi.org/10.1016/j.biombioe.2012.07.018>
- Tewathia, N. (2014). Determinants of the household electricity consumption: A case study of Delhi. *International Journal of Energy Economics and Policy*, 4(3), 337-348. <https://www.econjournals.com/index.php/ijeep/article/view/796/456>
- Tromborg, E., Ranta, T., Schweinle, J., Solberg, B., Skjjevraak, G., & Tiffany, D. G. (2013). Economic sustainability for wood pellets production - A comparative study between Finland, Germany, Norway, Sweden and the US. *Biomass and Bioenergy*, 57, 68-77. <https://doi.org/10.1016/j.biombioe.2013.01.030>
- Tye, Y. Y., Lee, K. T., Abdullah, W. N. N. W., & Leh, C. P. (2011). Second-generation bioethanol as a sustainable energy source in Malaysia transportation sector: Status, potential and future prospects. *Renewable and Sustainable Energy Reviews*, 15(9), 4521-4536. <https://doi.org/10.1016/j.rser.2011.07.099>
- World Bioenergy Association. (2014). *The future contribution of Bioenergy to the European Energy System: How to reduce the dependence on fossil energy imports and improve the climate mitigation policy*.
- Yuxiang, K., & Chen, Z. (2009). Government expenditure and energy intensity in China. *Energy Policy*, 38(2), 691-694. <https://doi.org/10.1016/j.enpol.2009.10.031>
- Zhang, S., Gilles, J. K., & Stewart, W. (2013). Modeling price-driven interactions between wood bioenergy and global wood product markets. *Biomass and Bioenergy*, 60, 68-78. <https://doi.org/10.1016/j.biombioe.2013.10.027>
- Zhang, R., Wei, T., Glomsrod, S., & Shi, Q. (2014). Bioenergy consumption in rural China: Evidence from a survey in three provinces. *Energy Policy*, 75, 136-145. <http://dx.doi.org/10.1016/j.enpol.2014.08.036>

APPENDICES

Appendix A

List of the European Continental countries

European Continental Countries			
Country	Status	Country	Status
Albania	Developing	Austria	Developed
Andorra	Developing	Belgium	Developed
Armenia	Developing	Denmark	Developed
Azerbaijan	Developing	Finland	Developed
Belarus	Developing	France	Developed
Bosnia & Herzegovina	Developing	Germany	Developed
Bulgaria	Developing	Greece	Developed
Croatia	Developing	Iceland	Developed
Cyprus	Developing	Ireland	Developed
Czech Republic	Developing	Italy	Developed
Estonia	Developing	Luxembourg	Developed
Georgia	Developing	Netherlands	Developed
Hungary	Developing	Norway	Developed
Kazakhstan	Developing	Portugal	Developed
Kosovo	Developing	Spain	Developed
Latvia	Developing	Sweden	Developed
Liechtenstein	Developing	Switzerland	Developed
Lithuania	Developing	United Kingdom	Developed
Macedonia	Developing	Russia	Developing
Malta	Developing	San Marino	Developing
Moldova	Developing	Serbia	Developing
Monaco	Developing	Slovakia	Developing
Montenegro	Developing	Slovenia	Developing
Poland	Developing	Turkey	Developing
Romania	Developing	Ukraine	Developing

Source: Countries of the World Official Website (www.countries-ofthe-world.com)

Appendix B

Summary of variables

Variable	Abbreviated	Data Source	Unit
Bio-energy consumption	$\ln\text{CON}_{it}$	Eurostat	Tonnes of oil equivalent (TOE)
Gross Domestic Product per capita	$\ln\text{GDP}_{it}$	World Bank Datasets	Market prices (constant 2005) (billion €)
Investment	$\ln\text{INV}_{it}$	World Bank Datasets	Gross Fixed Capital Formation (Constant 2010 \$)
Bioenergy Price	$\ln\text{PR}_{it}$	Eurostat	USD (\$)
Capital Input	$\ln\text{CI}_{it}$	Eurostat	Fixed Assets Input (Constant 2010 \$)

Sustaining Successful ICT Integration in Remote Rural Schools

Elenita Natalio Que^{1,2}

¹College of Education, University of the Philippines, Diliman 1101, Quezon City, Philippines

²Graduate School for International Development and Cooperation, Hiroshima University, Higashihiroshima-shi, Hiroshima, Japan

ABSTRACT

This paper aims to provide insights into how teachers can sustain ICT integration practices in geographically isolated and disadvantaged areas. A mixed-method case study design was used for the study. Data were collected through interviews, questionnaires, classroom observation, and document examination. Qualitative analysis and descriptive statistics were used to analyse the data. For data validity, triangulation of responses and member checking was carried out. The study identified successful technology integration factors in geographically isolated and disadvantaged schools: a strong community of practice, an adequate support system, and contextual ICT integration practices. It suggests that teachers' pedagogical practices related to ICT toned to undergo a continuous process of review and reflection to ensure that ICT-related practices remain pedagogically effective and relevant to changing needs and contexts. The account of the teachers in this study, focusing on their teaching experiences in a school in a remote, low-income area, creates a paradigm for comparative research on education in challenging contexts. Comparative studies on ICT integration practices in poverty-stricken, post-disaster, and conflict-affected areas, could provide inputs for formulating context-specific policy recommendations that could support successful ICT integration in small rural schools in the Philippines and other developing countries.

Keywords: Contextualized-ICT integration, culturally-relevant instruction, geographically isolated and disadvantaged areas, practice sustainability

ARTICLE INFO

Article history:

Received: 21 October 2019

Accepted: 10 July 2020

Published: 25 August 2021

DOI: <https://doi.org/10.47836/pjssh.29.3.02>

E-mail address:

enque@up.edu.ph

ISSN: 0128-7702

e-ISSN 2231-8534

INTRODUCTION

The advent of ICT in the classroom has created a specialized teaching and learning process. It has provided a wide range of experiences that made teaching subject content areas more engaging and relevant

to the students of today's world. Studies have shown that integrating technology in the classrooms contributed significant outcomes and brought significant benefits to learners and teachers alike (Jimoyiannis, 2010; Lu et al., 2015; Wang & Woo, 2007). As the use of ICT becomes widespread, changes in the curriculum and infrastructure were effected to accommodate innovations ushered in by the digital world. As a result, educational reforms have been instituted for 21st-century society. At the same time, the focus is given on the evolving nature of and students' access to knowledge (Jimoyiannis, 2010; Tearle, 2004). Fundamental also to this change is the need to equip the teachers to learn the new set of skills required to use and apply the technology with and re-design learning to work with the technology (Bensalem, 2019; Craciun & Bunoiu, 2015). Therefore, teachers must be adequately trained to effectively and efficiently use ICT in the classroom, design technology-mediated lessons, and keep pace with the fast-advancing technological environment (Aslan & Zhu, 2018; Jimenez, 2005; Lim, 2007).

Many studies showed the positive impact of ICT among students. ICT-mediated instruction offers flexible learning options that contribute to concept deepening and increased academic performance of students. ICT use creates student-centred teaching and an environment that promotes creative and independent learning (Collier-Reed et al., 2013; Gurcay, 2013; Millanes et al., 2018). Whether the schools are in urban or rural settings, students in both areas

have shown a positive view of ICT use in education. ICT use promotes a high level of readiness in self-directed learning and establishes interactions among peers and students (Asfar & Zainuddin, 2015; Halili & Sulaiman, 2019).

Introducing innovations in the schools, however, is not without challenges (Livingstone, 2012). Especially for those in remote, rural areas, the process of instituting changes in schools that utilise ICT is faced with various socio-economic, geographical, political, cultural issues (Jimoyiannis, 2010; Lim et al., 2018). Although there has been increased access to computer and Internet technologies, the potential of ICT is yet to be harnessed and recognised to bring about positive changes in the education system. Lack of technological resources, poor Internet connection, and teachers' lack of technological and pedagogical knowledge on the design and implementation of technology-enabled instruction remains to be the significant challenges in bringing ICT into the mainstream of today's educational setting (Aldous, 2008; Aslan & Zhu, 2018; Donnelly et al., 2011; Goktas et al., 2009; Jimenez, 2005; Mtebe et al., 2011; Tearle, 2004).

Numerous research studies suggest that the allocation for ICT infrastructure in disadvantaged areas must be increased to address these issues. ICT courses provided to students must give closer attention to improving their abilities in using the technologies and adapting to the ICT-enabled learning environment (Jimoyiannis, 2010; Lu et al., 2015; Krause et al., 2017).

Developing teachers' positive self-efficacy towards the use of digital media in their classrooms must be facilitated through teacher training on integrating ICT in the curriculum and designing technology-enabled instruction. School administrators must prioritise reaching out to various learning networks for sharing of knowledge, resources, and experiences to enable the adoption of technological innovations in their respective institutions (Aldous, 2008; Jimenez, 2005; Rogers & Twiddle, 2013).

The study intends to contribute to the literature on ICT integration in remote, rural schools. To date, no study was found to have mainly focused on the sustainability of ICT integration in depressed, disadvantaged, and underserved remote villages of the Philippines and have analysed ICT-integration practices of science teachers in these areas. With the challenges posed by the global pandemic caused by Covid19 in Philippine schools, addressing the issues related to ICT use in remote schools now becomes more imperative.

The purpose of this study is to identify factors that could sustain effective and efficient integration of technologies in the classroom, even in geographically isolated and disadvantaged areas (GIDA). The research focused on describing the science teachers' experiences with ICT integration and gaining insights to design teacher education. In addition, establish an effective system for acquiring resources and formulate strategies to improve access to ICT resources and enhance technical knowledge and skills for integrating technology in GIDA.

Specifically, the following are the research objectives:

1. To describe ICT integration practices of science teachers in a small rural school in the Philippines.
2. To determine the challenges teachers encountered when they used the technologies and how they overcame them.
3. To identify facilitating factors to sustain successful integration of technology in geographically isolated and disadvantaged schools.

METHODS

The study applied a mixed-method case study design to focus the inquiry on the teaching strategies employed by the teachers in teaching science concepts through the use of ICT. It employed an exploratory sequential approach. The researcher first explored the qualitative and quantitative data in the second phase of data analysis (Creswell, 2014). Yin (2003) mentioned that the case study is an excellent methodological framework to perform mixed-method research in the social sciences. This study collected qualitative data from interviews, open-ended questions shared with the principals and teachers, and document review. The questionnaire and classroom observation checklist, on the other hand, generated the quantitative data for the study.

The study examined the teaching strategies of science teachers teaching in GIDA in the Philippines. GIDA refers to communities, physically and socio-economically separated from the mainstream

society and characterised by isolation due to distance, weather conditions, and transportation difficulties (Department of Health, n.d.). It also identified the challenges teachers encountered when they used the technologies and how they overcame them. Both qualitative and quantitative data were used to identify facilitating factors that could promote the sustainability of practices.

The researcher obtained permission from the Schools Division superintendent to conduct the research in the school identified for the study. After the permission was granted, the researcher coordinated with the school principal and teachers to schedule and program research activities. The study was conducted within the school year 2018-2019. The researcher was allowed to conduct class observation, administer test instruments, and interview the principal and teachers from August 2018 to April 2019. Each classroom has a class size of 35. It was noted that the number of students was a challenge in conducting the technology-based activities because there were not enough computers for the students to use. Furthermore, simultaneously accessing the Internet resulted to a slow connection.

The school is located in a landlocked town and is 73 kilometres away from the capital city of the province. The town is a fifth class municipality. It earns an average income of 1,000,000 Philippine Pesos (approximately US\$19,775) or more, but not more than 3,000,000 Philippine Pesos (approximately US\$59,320) per year. The school site can be accessed by tricycle, a three-wheeled vehicle, or

motorcycle. However, due to the school's remoteness, most teachers, including the principal, travel to school by motorcycles. The school, established in 1994, is managed by the country's Department of Education (DepEd). It is headed by a principal, with a headteacher assisting her in managing the school. It has 12 teachers, where eight are teaching in the Junior High School (Grades 7 to 10), while four are in Senior High School (Grades 11 to 12). As of the time of research, in 2018-2019, 208 students were enrolled in Junior High School level, and 46 in the Senior High School. The majority of the students (70%) belong to a cultural community called Isneg. In contrast, the rest of the students belong to an ethnolinguistic group called Ilocanos. Families of the students are recipients of the Pantawid Pamilyang Pilipino Program (4Ps), a social development program of the Philippine government that provides conditional cash grants to families belonging to the lowest economic bracket. 4Ps helps improve the health, nutrition, and education of children age 0-18. Details of the 4Ps program are provided in the Philippine Official Gazette (n.d.).

Science teaching at the Junior High School level was chosen because of the following factors:

1. It follows a uniform science curriculum unlike in Senior High School, where its academic strand has specific tracks;
2. The curriculum is implemented in spiral progression, an approach where concepts introduced in grade

school are re-taught in succeeding years with increasing complexity and sophistication to ensure concept mastery after each level; and

3. Teachers have to teach a science discipline that is not his or her major field.

With the recent implementation of the K-12 program in the Philippines, science teachers are expected to teach science subjects other than their major program in their pre-service education. For example, a teacher whose major is Chemistry also teaches Physics, Biology, and Earth Science.

The key participants in this study were the three science teachers. They were coded for analysis as Teacher A, Teacher B, and Teacher C. Teacher A is 24 years old and a new teacher. She is teaching science subjects in three grade levels, Grades 7 to 9. She has a Bachelor in Secondary Education degree and master's degree. Teacher B is a 43-year old male who has been teaching science for 21 years, where five years were in the current school. He is an ICT teacher and a science teacher teaching Junior High School (Grades 7, 9-10) and Senior High School (Grades 11-12) students. He is a graduate of the General Education course and has master's degree. Teacher B started teaching in a city school in the National Capital Region of the country. On the other hand, Teacher C is a 34-year old female teacher teaching three subjects to Grades 7 and 10 students: Science; Technology and Livelihood Education; and *Edukasyon sa Pagpapakatao* (Values Education). She is a graduate of Bachelor of Secondary

Education major in Biology and has master's degree. She is also the school's headteacher. She assists the principal in managing and monitoring the teaching-learning process in the school.

Data were collected through open-ended interviews with the teachers, a classroom observation form that elicited students' attitudes towards ICT-integrated learning activities, and attitudes towards knowledge and experiences gained after the teacher implementation of the activities, and a questionnaire on ICT use and integration practices used in Bazzar's (2016) study. The following documents were also examined: The school's improvement plan helped to determine the extent to which ICT was integrated into the whole school environment; the teacher's learning plan, used during the lesson observation, provided information on how ICT is integrated into the delivery of lessons, and four local news releases with accompanying photographs that helped to understand the geographical and cultural landscape of the school. A form adopted from the open access publication UNESCO (2016) was used for the lesson observation. Permissions was sought from and granted from the authors of the instruments used. Follow-up interviews were conducted via the messaging app Facebook Messenger to deepen understanding of the responses to the questionnaire and face-to-face interviews. The number of chat messages analysed in the study totalled 31, broken down as follows: Teacher A, 6; Teacher B, 14; and Teacher C, 11.

The researcher observed one class. The observation was held in the regular classroom. The lesson was on the Nervous System, which, based on the learning plan, was one of the topics under Module 1 (Coordinated Functions of the Nervous, Endocrine, and Reproductive System) for the Third Quarter. The observation form recorded the event's encoding, which includes the sequence of instructional activities, ICT and non-ICT tools used, activity guidelines, and the students' attitudes towards the learning activities that utilised ICT.

Data were analysed using descriptive statistics and qualitative analysis. Quantitative values generated from questionnaire responses were normalised for aggregation. It was done to make the measurements comparable, considering the differences in the underlying property or objectives. The arithmetic mean was used as a statistical tool for aggregation due to the small data involved, and there were no extreme values. The evaluation and scoring of the items followed the scale shown in Appendix A. The participant's responses to the open-ended questions in the questionnaire, and interview data were transcribed and a code was assigned to each 'case' teacher. As the analysis was ongoing, themes were identified and continuously reviewed for overlap and completeness. For data validity, triangulation of teachers' responses during interviews and the online survey results on ICT utilisation and competencies was done. Results of which were used to build a coherent justification for

the themes established during the analysis. Member checking was conducted through chat messaging to deepen understanding of the teachers' responses during data processing and determine the accuracy of the qualitative findings.

RESULTS AND DISCUSSIONS

The study's findings were derived from the teachers' responses from interviews and questionnaires, notes from classroom observation, chat messages and relevant data in the school improvement plan. The results informed the author of the pedagogical practices of teachers using ICT in GIDA, the challenges associated with implementing of those practices and facilitating factors that could sustain successful ICT integration in said areas.

Pedagogical Practices using ICT

Data from interviews and questionnaires, notes from classroom observation, and relevant data in the school improvement plan showed teachers' pedagogical practices in using ICT. The teachers used a mix of traditional and digital teaching strategies and implemented indigenised ICT-mediated instruction.

A Mix of Traditional and Digital Strategies. Teacher A mentioned that adopting technologies in teaching was not new to her. "I start (*sic*) using ICT in my teaching since 2014, my first year in service". She started with technologies like "Ppt , video clips, swf files", which she utilised up to the research time. She used

them so her “students can understand the lesson well”. She said she always considers the availability of materials appropriate to the topic and an Internet connection when integrating ICT in teaching science.

When she was hired as a science teacher in 2014, she implemented activities to develop higher-order thinking skills. She used digital technologies but also traditional strategies like “role-playing, puzzle, and quiz”. She said students in her classroom were heterogeneously grouped, so she wanted to involve every child, even those who had difficulty catching up with the lesson. Teacher A described her strategies as mixed:

... ginagawa ko kapag discussion, ppt or video clips pero pag nasa transfer of learning, na dun ko po ginagamit ung mga nabanggit ko po.” (In discussing the lesson, I use ppt or video clips, but when it comes to transferring of learning, that’s when I use the traditional strategies I mentioned earlier).

Teacher B, on the other hand, had experienced using different types of technologies. From software running in DOS (Disk Operating System) in the 1990s up to this time when technologies have become more efficient and ubiquitous. He started using productivity tools to perform administrative tasks, and used ICT for research, robotics, and presentation software to present his lessons. His teaching strategies further evolved when he engaged his students in interactive activities that

maximised the use of technology in lesson implementation starting in 2012.

Teacher B shared that he used ICT and various approaches like guided inquiry, reflective journals, brainstorming, open-ended questions, complemented with face-to-face discussion. Through these, students deepened their understanding of science concepts and applied them to real-world situations. He said,

Learners today are technology babies, they grew up with technologies, and I think this is a great tool for learning. Integrating technology into learning is like bringing learning to their comfort zones.

Teacher C had explored digital technology resources such as SIM (Strategic Intervention Material), presentation software, models, and videos in teaching science concepts. Like Teacher B, her adoption and use of ICT tools progressed as her teaching experience deepened. From her qualitative responses during an interview and online questionnaire, it can be deduced that Teacher C used digital technology resources. She helps her students understand scientific concepts and relate them to real-life situations.

She pointed out that teaching science could be made more meaningful through simulations, “especially in subjects like atoms, space exploration and others that cannot be done with real experiments”. However, she indicated that she did not use digital technologies in teaching science

lessons most of the time. However, she made sure that her teaching strategies would enable her students to acquire 21st-century skills. For example, to develop critical thinking skills, she required her students to create memes with “hugot” lines to measure their mastery of the science concepts. “Hugot” lines are words with deep personal meaning or emotional undertones used by most Filipinos to express their feelings subtly. The memes are then posted on Facebook for concept sharing and assessment. Furthermore, to promote high level thinking skills, she has also scheduled performances where students prepare the script and production for “madulang sabayang pagbigkas” (theatrical spoken choir), write and recite poetry, compose songs, choreograph a dance, tell stories, conduct interactive lab activities and manipulatives, and conduct interviews. These activities enhanced the critical thinking and creativity of students, she said. In addition, Teacher C’s teaching strategies were affirmed in Craciun and Bunoiu’s (2015) study, which indicates that creativity serves as a foundation of progress and innovation in science. The authors suggested that teachers must implement activities that will facilitate divergent thinking, imagination, communication, and collaboration skills to foster creativity.

The three ‘case’ teachers combined traditional and digital teaching strategies to deepen concept understanding, develop critical thinking, and provide authentic learning experiences. Through this process, they enhanced their teaching

skills and evolved new strategies to enrich learning experiences. Rogers and Twiddle (2013) mentioned that the adoption of innovation is successful when ICT activities complement non-ICT activities to facilitate science learning objectives. Steiner and Mendelovitch (2017) pointed out that science teachers need to adopt a pedagogical paradigm that promotes the learner as an active participant in knowledge construction, with the teacher assuming the role of supporter and guide in the teaching-learning process.

The use of traditional and digital technologies in specific instructional procedures showed that the teachers perceived ICT as helpful in providing meaningful learning experiences. Rogers’ Diffusion of Innovation theory (DOI) poses that teachers adopt innovation when it is seen as a tool to provide helpful learning experiences and consistent with the existing values, past experiences, and needs of the potential adopters (Sahin, 2006).

The findings complemented their rating on the extent of ICT utilization (Table 1). Table 1 shows that the school has high ICT utilisation with a mean rating of 83.3. Furthermore, Teacher A and Teacher C utilised ICT “Always”, while Teacher B mentioned using ICT “Often”. With these results, one can construe that the school recognises the potential of ICT in the classroom.

The findings are found to be in consonance with their responses in Table 2 which showed the teachers’ “High” competencies in using ICT tools in the classroom (with a general mean of 84.22).

Table 1
Teachers' ICT utilisation

ICT Utilisation	Normalised value (%)	Qualitative Equivalent	Normalised value (%)	Qualitative Equivalent	Normalised value (%)	Qualitative Equivalent
	Teacher A		Teacher B		Teacher C	
Mean	93.33	Always	76.66	Often	95	Always
	88.33	Always				

Table 2
Teachers' competencies in using ICT tools

ICT Competencies	Normalized value (%)	Qualitative Equivalent	Normalized value (%)	Qualitative Equivalent	Normalized value (%)	Qualitative Equivalent
	Teacher A		Teacher B		Teacher C	
Computer operations	72	High	100	Very High	100	Very High
Productivity tools	70	High	98.33	Very High	100	Very High
Internet and network applications	65.71	High	80	High	100	Very High
Legal aspects of technology use	73.33	High	80	High	80	High
Ethical use of technology	60	Average	84	Very High	100	Very High
Mean	68.20	High	88.47	Very High	96	Very High
General Mean	84.22	Very High				

Teacher A rated herself “High” in almost all competencies. The two other science teachers rated most of their ICT competencies “High” and “Very High”. Teacher A has been teaching for four years, compared to Teacher B and Teacher C, who have teaching experience of 21 years and 11 years, respectively. This could indicate that teaching experience could be a factor in the teachers' perceived self-efficacy on using ICT in teaching. Knowledge and skills of the use of ICT are necessary. However, it is also essential that teachers have the confidence to integrate technology in their teaching. Buabeng-Andoh (2012) and Taimalu and Luik (2019) mentioned

that older teachers who have “rich teaching experience, classroom management and competent in using computers could easily integrate ICT into their teaching”.

In terms of research competency, the teachers' ratings ranged from “Low” to “High” (Table 3). Except for Teacher C, who rated herself “High”, a lack of research competency was noted on the responses.

It can be noted that Teachers B and C gave themselves a very high rating when exploring new technologies. On the other hand, Teacher A rated “Average” for her research-related activities competency. At the same time, Teacher B gave himself a “Low” rating. His “Low” rating in

Table 3
Teachers' research-related competencies

ICT Competencies	Normalized value (%)	Qualitative Equivalent	Normalized value (%)	Qualitative Equivalent	Normalized value (%)	Qualitative Equivalent
	Teacher A		Teacher B		Teacher C	
Exploring new technologies	60	Average	80	High	93.33	Very High
Research on the use of technology	60	Average	40	Low	73	High
Sharing of expertise	55	Average	40	Low	60	Average
Mean	58.33	Average	53.33	Average	75.44	High
General Mean	62.37	High				

competencies related to research validated his response. He had not done any research to test the effectiveness of the technological tools he used in his classes. Teacher A also admitted that she had not done any ICT-related research or any research at all.

These findings indicate a need to develop a culture of research in the school to enrich their academic experiences. A study conducted by Ulla et al. (2017), revealed that lack of research knowledge and skills, heavy teaching loads, and lack of financial support from the school constrained teachers from developing their research skills. Thus, the study could also explain the teachers' responses regarding their competency related to sharing expertise in academic conferences. With the dearth of research initiated by teachers, particularly in remote rural areas, presenting in academic events like conferences and forums would not be a priority as expected. In this study, based on the questionnaire, Teacher A and Teacher C rated themselves "Average". In contrast, Teacher B rated himself "Low" in this particular ICT competency.

Indigenised Delivery of Instruction. In a school where majority of students belong to a cultural community, teachers believed that it is important to take into account their culture and socio-economic situation when using ICT in the classroom. Teacher B, during an interview, expressed that using technologies in the classroom must consider the learning abilities and the socio-cultural background of the learners. He mentioned that he wanted his students "to blend with other communities" and develop competencies at par with other youths. In their school, he said, they "develop students to be competitive not only in the community they belong but also globally without sacrificing the culture of the community they belong (*sic*)". He rated his competency "High" in designing instruction that addresses diversity.

On the other hand, Teacher C commented that their school has already transcended cultural barriers in integrating ICT. She emphasised that they "do not have a cultural barrier because our students have good and positive acceptance of them. We have programs that strengthen respect and cultural

participation. Moreover, in using ICT, the benefit it could give to the community is the most important.” She added that their school has programs that preserve the culture of the community where most of their students belong. She said that one of her teaching strategies is to prepare instructional materials that reflect the students’ cultural backgrounds. This practice was highlighted in the school’s improvement plan and local news releases examined by the author. Under its project known as Inculcating the Significance of Noble Ethnic Group, which has the acronym ISNEG, the school reported integrating the Isneg’s culture in the curriculum during the year. At the time of research, they were developing ICT-based materials that teachers and students can use. These include *Picture It*, documentation of significant people, events, materials, and traditions of the Isnegs, and the crafting of the Yapayao (local language of the cultural community) orthography for classroom

instruction. These initiatives were done in partnership with the community elders, local government, and a non-government group called Bayani (Hero) Club.

Their cognisance to address diversity in the classroom is reflected in their responses in Table 4, where a general mean of 74.2 (“High” rating) was recorded.

Based on the results, Teacher A rated herself “Average” in all tasks designing ICT-enabled lessons that address learning, social, and cultural diversity. Teacher C has the highest rating of 91.7 or Very High. Finally, Teacher B got a High rating with a value of 71.1. The result shows that the three teachers in particular, and the school in general, are giving high value on addressing the needs of their diverse learners.

Challenges in ICT Integration

Challenges in ICT integration were likewise reflected from the questionnaire and follow-up interviews through chat messaging and

Table 4
Teachers’ competencies in addressing learner diversity

ICT Utilization and Competencies	Normalized value (%)	Qualitative Equivalent	Normalized value (%)	Qualitative Equivalent	Normalized value (%)	Qualitative Equivalent
	Teacher A		Teacher B		Teacher C	
Promotion of sound learning environment	60	Average	73.33	High	100	Very High
Learning, Social and Cultural Diversity	60	Average	70	High	95	Very High
Addressing diversity of learners	60	Average	70	High	80	High
Mean	60	Average	71.1	High	91.7	Very High
General Mean	74.2	High				

notes from classroom observation. These are as follows:

1. lack of time to prepare ICT-based materials;
2. lack of technical infrastructure in the school;
3. lack of teaching methods or strategies for ICT use; and
4. absence of a reward system to encourage ICT use.

The same set of data emerged the measures that they employed to overcome these challenges, as follows:

1. forming a community of practice for collaborative learning;
2. maintaining a solid support system with stakeholders; and
3. a positive attitude towards the use of technology.

Finding adequate time to prepare ICT-based materials is a significant challenge for all the three 'case' teachers. For example, Teacher A may be teaching science subjects only. However, she said that there is too much workload that consumed even her scheduled breaks between classes. "Lack of time to prepare because as a teacher we have many things to do if we have our vacant [time]", she explained. On the other hand, Teacher B is also a division ICT trainer, which means that he not only trains his peers in his school but also provides training to teachers in other schools of the province. Finally, Teacher C is the schools' headteacher. Other than teaching three subjects in two grade levels, she performs other tasks, including providing management support to the school, monitoring the teaching-learning

process, and establishing and maintaining strong linkage with stakeholders. This finding is subscribed to by Aslan and Zhu (2018). They stated that teachers could not effectively integrate ICT because they have many content areas to cover and examinations to prepare. Goktas et al. (2009) also found out that too much workload is one of the barriers to effective ICT integration in pre-service teacher education programs.

Another challenge they mentioned is the lack of technical infrastructure in the school. Again, the researcher was able to see this problem during a classroom observation. Teacher B introduced Internet-based instructional material for the students. The students were told to access the online material using the school's pocket Wi-Fi and participate in the activity. However, due to poor connectivity, access to the online site lagged and consumed so much time that caused frustration and boredom to the students. The teacher had to request some of the students to log out to improve the connection to the site. According to Teacher C, they could not subscribe to existing Internet providers in the province due to their school's location. They had to use mobile phone data or the pocket Wi-Fi the school purchased to access the Internet. She said the teachers spent their own money to pay for the mobile data used for instructional purposes.

Teachers B and C added to the challenges the lack of teaching methods for ICT use. Teacher B said that he has adequate knowledge of ICT-mediated teaching strategies, which he acquired from when he

started teaching. However, he clarified in a chat message that he had his colleagues in mind when he mentioned the inadequacy of ICT-based teaching methods as a challenge on ICT integration:

“Some of my co teachers still don’t embrace the change. kahit kc mga millenials ang karamihan sa kanila, iba pa rin kc pag apps na ang ginamit sa pagtuturo, they find it time consuming ang paggawa, kc bibihira ang materials pag filipino, ap ang subjects. Di po kc tulad ng science, marami ang ready materials.” (Some of my co-teachers still don’t embrace the change, though most of them are millennials. Having their own apps for instruction makes a lot of difference. Yet, they found developing their own apps time-consuming. [I am particularly concerned about developing apps] for Filipino [language] and AP [Araling Panlipunan or Social Studies] subjects for which (technological resources) are few. Unlike science, there are already plenty of ready [ICT-based instructional] materials).

Teachers B and C also cited the absence of reward systems for encouraging ICT use. The absence, they said, contributed to the lack of interest of some teachers in using ICT in their teaching. Teachers B and C both hold the administrative load. So it can be presumed that they are concerned about

motivating their co-teachers to integrate technology in their respective classrooms. Sahin (2006), in his review of the DOI theory, cited that incentives may be used to increase the rate of adoption of innovations by the teachers. Incentives, he said, are part of the cost and motivation factors under the relative advantage attribute. Lim (2007) subscribed to this when he recommended setting up a mechanism to provide incentives to use ICT. He mentioned that this practice would develop among teachers’ positive attitudes towards ICT.

The teachers, however, explained that they were able to overcome these challenges through the sense of community they developed not only in their school but also with other schools of the province. Teacher B said he coordinated with “fellow teachers and other stakeholders on resolving issues such as lack of Internet connection and inadequate knowledge to integrate technology in the classroom”. He also assisted his peers in acquiring ICT competencies during their Learning Action Cell (LAC) sessions to increase their interest in ICT integration and provide continuous support to teachers using various Internet applications. LAC sessions are held every Thursday where teachers and staff work together to solve problems related to curriculum implementation in the school. Teacher A shared that attending the LAC session was a great help. It taught her how to motivate students to participate in classroom activities actively and efficiently assess their performance. “... alam nmn po natin na ung mga bata mas gusto nila ung may games

ka gya ng hot potatoes, swf Files, kahoot. Nakakatulong din po ito sa amon lalo na pag exam ang zipgrade (We all know that children prefer games like hot potatoes, swf files, kahoot. Zipgrade also is helpful to us especially during examination)”.

Teacher C further shared that they were able to overcome the challenges despite the remoteness of their school because of the ‘effective’ support system they maintain with local and international institutions. “With internal and external shareholders willing to help, all challenges are/were slowly addressed,” she said. She attributed this to her school close collaboration with local government, department of education, and international organisations. They have facilitated the professional development for teachers and staff and the acquisition of ICT resources for the school. She also said they had established a link with a higher education institution in Japan for funding and professional development.

There is an indication that the school highly recognises the potential of ICT in the implementation of its curriculum. Teacher A pointed this out when she acknowledged the importance of integrating technology for the 21st-century classroom “especially this time so that we can adapt to the changes in our environment”. Teacher C affirmed her response, who said that ICT integration could help meet “the demands of the curriculum in this modern age”. Teacher B saw technology as helpful in “easing the burdens of teaching, from recording

assessment of students, up to learning materials preparation”.

Based on the above responses, a positive attitude toward using ICT in the classroom could have helped the school overcome the challenges. They did not regard the lack of technological resources, inadequate teaching strategies, or absence of the reward system as hindrances. Instead, they used their resources like cellular phones, laptop computers in developing their digital instructional materials and mobile data to connect to the Internet. They also took the initiative to participate in teacher training programs to improve their competencies in using ICT. One of the teachers called it “sariling sikap” (own efforts). This positive attitude towards ICT use subscribes to the research findings of Jimenez (2005). He included a positive predisposition towards technological innovations as the conditions that rural schools need to sustain classrooms ICT integration.

Factors to Sustain Successful ICT Integration Practices in GIDA

The study on teachers’ pedagogical practices for ICT use, the challenges and solutions, and the geographical and cultural landscapes surrounding the school’s learning environment gave insights on promoting sustainability of successful ICT integration practices in geographically isolated disadvantaged areas or GIDA. The facilitating factors are a strong community of practice, an adequate support system, and contextualised ICT integration.

A Strong Community of Practice.

The regular holding of the LAC session strengthened the sense of community among the school leaders, teachers, and staff. Held every Thursday, all school community members were allowed to work together in developing ICT-based instructional materials.

... kaya nga po ngayon every LAC namin, pakunti kunti we are compiling our materials. (That is why every LAC [session], we are gradually compiling our materials). (Teacher B)

...sa pamamangitan po ng LAC time po namin at my allotted time po for preparation of IM po” (During LAC time, we are allotted time for preparation of IM [instructional materials]) (Teacher C)

The materials were also shared with other schools in the province. Teacher B said they look forward to having these materials included in the depository of instructional materials that all teachers in the Division can download and use.

... even in the division ung mga pinapagawa namin (those we are developing) every training, naishashare namin (we can share) to other teachers in the division. And sooner, the division will be launching the division LRMDs here every teacher can download ready-made materials. Un na rin po ang target namin sa school (that's also

the target of our school), mam”. (Teacher B)

LRMDS or Learning Resources Management and Development System serves as a portal of learning, teaching, and professional development resources for DepEd teachers.

This sense of community was also underlined by Teachers B and C's concern to help their colleagues overcome the challenges of insufficient knowledge about how to implement ICT-mediated instruction and the lack of a reward system to encourage ICT in teaching. Their commitment to supporting them in developing their competencies in integrating technologies indicates that sustaining successful ICT integration in small rural schools can be achieved if they consistently “scaffold each other in their professional development” (Lim, 2007).

Effective Support System. Interviews with teachers and digital photographs highlighted the school's different activities further to strengthen its linkages with local and international institutions. The school regularly tapped the elders of the community for activities that will keep the students aware of and at the same time instill pride in their cultural roots. The photographs featured the IP (Indigenous People) day celebration where community elders wearing traditional costumes were invited to recount the history and teach their traditions.

Teacher C reiterated that they had maintained a strong relationship with the

town and provincial governments, which they could always count on for funding and the professional development of their teachers. She added that they have the full support of the local office of DepEd in their province, which always involved them in ICT-related activities. Furthermore, at the time of the research, the school had just forged a partnership with an academic institution in Japan. The institution is committed to assisting them in improving the teaching strategies of their teachers through ICT use.

Contextualised ICT Integration Practices. Teacher A is a member of the Isneg community. The two other teachers belong to the ethnolinguistic group Ilocanos. Teacher A said being a community member enabled her to give examples “related to their culture that students could easily relate to”.

Teacher B admitted that integrating culture in teaching science concepts is challenging. However, he said they could integrate culture in other classroom tasks.

... every end of the quarter, we give students a group project showcasing what they have learned from the lessons. It could be video clips, a drama, brochures, a symposium, etc. That will be presented in the community. So most of the time, they use their dialect for communicating. (Teacher B)

Teacher C confirmed that their instructional materials are being

contextualised, localised, and indigenised. The local culture is integrated into any appropriate context.

... wala pong specific lesson po kc pinapasok po namin sa any applicable po...may contextualization, localization n indigenization po kmi sa IMs, discussion, performance tasks at test questions po na nasasama culture and local events and situations po (There is no specific lesson that we integrate the culture, as long as its applicable, we include it... we have contextualisation, localisation, and indigenisation for our IMs [instructional materials], discussion, performance tasks, and test questions, where we integrate culture, local events, and situations). (Teacher C)

The teachers used technological tools to advance the culture, practices, indigenous knowledge, and learning system of the community. They kept their learners engaged by helping them relate content to their own cultural identity. It highlights the delivery of instruction that applies indigenised practices in classroom activities and instructional materials utilisation.

Limitations of the Study

The study has a small number of teachers. It is suggested that more rural schools located in remote areas be used in future research to gain a broader picture of this topic. Future research may also focus on other subject content areas.

CONCLUSION

Given socio-economic, cultural, and geographical factors, the challenges in integrating ICT in remote rural schools may be more significant. However, meeting with these challenges and sustaining teaching strategies that use ICT requires a strong sense of community to promote collaborative learning, building new and expanding existing relationships with national and international partners to provide resources, and contextualisation ICT integration to make learning relevant and exciting.

Successful ICT practices can be sustained in rural schools when teachers have a positive attitude towards technological innovations. This positive predisposition translates to a deep commitment to providing meaningful learning experiences despite the challenges associated with integrating technology in geographically isolated and disadvantaged areas.

Thus, the teachers' pedagogical practices related to ICT must be subjected to a continuing process of review and reflection. Then when necessary, changes or adjustments must be undertaken to make such ICT-related practices remain pedagogically potent and relevant to changing needs and contexts.

IMPLICATIONS FOR FUTURE RESEARCH

The findings of this study could aid school administrators and policymakers set up policies and programs. That would help improve access to ICT resources and

upgrade teachers' technological knowledge and skills in integrating technology for schools in GIDA. In addition, the account of the teachers, which focused on their teaching experiences in a school located in a low-income remote area, provides perspectives for comparative research within the purview of education under challenging contexts. Comparative studies on ICT integration practices in poverty-stricken, post-disaster, and conflict-affected areas could generate inputs for formulating contextually appropriate policy directions to sustain successful ICT integration in small rural schools of the Philippines and other developing countries. However, this study recognises further limitations in the timescales. In the light of the rapid change of pace involved in technology applications in education, how long should this type of study be observed before technology integration becomes contextually relevant? It is yet another question that future research will have to address.

ACKNOWLEDGMENT

The researcher expresses her gratitude to Dr Tatsuya Kusakabe, Associate Professor and Deputy Director of the Center for the Study of International Cooperation in Education, Hiroshima University, Japan, for his mentoring and support to the conduct of this study.

REFERENCES

- Aldous, C. (2008). Turning the tide: Transforming science learning and teaching in rural and remote schools. *Teaching Science*, 54(3), 44-48.

- Asfar, N., & Zainuddin, Z. (2015). Secondary students' perceptions of information, communication and technology (ICT) use in promoting self-directed learning in Malaysia. *The Online Journal of Distance and Online Learning*, 3(4), 74-89.
- Aslan, A., & Zhu, C. (2018). Starting teachers' integration of ICT into their teaching practices in the lower secondary schools in Turkey. *Educational Sciences: Theory & Practice*, 18(1), 23-45. <http://dx.doi.org/10.12738/estp.2018.1.0431>
- Bazzer, S. (2016). *ICT competencies and integration practices of public secondary school teachers in Lanao del Norte* [Unpublished Master's thesis]. University of the Philippines.
- Buabeng-Andoh, C. (2012). Factors influencing teachers' adoption and integration of information and communication technology into teaching: A review of the literature. *International Journal of Education and Development using Information and Communication Technology*, 8(1), 136-155.
- Bensalem, E. (2019). English teachers' perceptions of technology integration: Are they different from their peers in Engineering and Medical Science. *International Journal of English Linguistics*, 9(1), 152-158. <https://doi.org/10.5539/ijel.v9n1p152>
- Collier-Reed, B. I., Case, J. M., & Stott, A. (2013). The influence of podcasting on student learning: A case study across two courses. *European Journal of Engineering Education*, 38(3), 329-339. <https://doi.org/10.1080/03043797.2013.786026>
- Craciun, D., & Bunoiu, M. (2015). Training teachers for the Knowledge Society: Social media in science education. *BRAIN. Broad Research in Artificial Intelligence and Neuroscience*, 6(3-4), 82-88.
- Creswell, J. W. (2014). *Research design: Qualitative, quantitative and mixed methods approaches* (4th ed.). Thousand Oaks, CA: Sage.
- Department of Health. (n.d). *What is GIDA?* Retrieved June 30, 2019, from <https://doh.gov.ph/faqs/What-is-GIDA>
- Donnelly, D., McGarr, O., & O-Reilly, J. (2011). A framework for teachers' integration of ICT into their classroom practice. *Computers & Education*, 57(2), 1469-1483. <https://doi.org/10.1016/j.compedu.2011.02.014>
- Goktas, Y., Yildirim, S., & Yildirim, Z. (2009). Main barriers and possible enablers of ICTs integration into pre-service teacher education programs. *Educational Technology & Society*, 12(1), 193-204.
- Gurcay, D., Wong, B., & Chai, C. (2013). Turkish and Singaporean pre-service physics teachers' beliefs about teaching and use of technology. *Asia-Pacific Education Research*, 22(2), 155-162.
- Halili, S. H., & Sulaiman, H. (2019). Factors influencing the rural students' acceptance of using ICT for educational purposes. *Kasetsart Journal of Social Sciences*, 40(3), 574-579. <https://doi.org/10.1016/j.kjss.2017.12.022>
- Jimenez, A. B. (2005). The rural school and its teaching staff facing the challenge of the advancing information and communication technologies. In E. Blumel (Ed.), *ICTE in regional development: Annual Proceedings of Vidzeme University College* (pp. 8-11). Vidzeme University College.
- Jimoyiannis, A. (2010). Designing and implementing an integrated technological pedagogical science knowledge framework for science teachers professional development. *Computers & Education*, 55(3), 1259-1269. <https://doi.org/10.1016/j.compedu.2010.05.022>
- Krause, M., Pietzner, V., Dori, Y.J., & Eilks, I. (2017). Differences and developments in attitudes and self-efficacy of prospective Chemistry teachers concerning the use of ICT in education. *Eurasia Journal of Mathematics Science and Technology Education*, 13(8), 4405-4417. <https://doi.org/10.12973/eurasia.2017.00935a>

- Lim, C. P. (2007). International Review: Effective integration of ICT in Singapore schools: Pedagogical and policy implications. *Educational Technology Research and Development*, 55, 83-116. <https://doi.org/10.1007/s11423-006-9025-2>
- Lim, C. P., Tinio, V. L., Smith, M., & Bhowmik, M. K. (2018). Digital learning from developing Asian countries: Achieving equity, quality, and efficiency in education. In K. J. Kennedy & J. C.-K. Lee (Eds.), *Routledge international handbook of schools and schooling in Asia*. Routledge Taylor & Francis Group. <https://doi.org/10.4324/9781315694382>
- Livingstone, S. (2012). Critical reflections on the benefits of ICT in education. *Oxford Review of Education*, 38(1), 9-24. <https://doi.org/10.1080/03054985.2011.577938>
- Lu, C., Tsai, C.-C., & Wu, D. (2015). The role of ICT infrastructure in its application to classrooms: A large scale survey for middle and primary schools in China. *Educational Technology & Society*, 18(2), 249-261. <https://doi.org/10.2307/jeductechsoci.18.2.249>
- Millanes, M. A. A., Paderna, E. E. S., & Que, E. N. (2018). Effects of utilizing Physics podcasts on the ICT literacy skills of Grade 9 junior high school students. *Alipato: A Journal of Basic Education*, 9, 14-24.
- Mtebe, J. S., Dachi, H., & Raphael, C. (August 2011). Report: Integrating ICT into teaching and learning at the University of Dar es Salaam. *Distance education*, 32(2), 289-294. <https://doi.org/10.1080/01587919.2011.584854>
- Philippine Official Gazette. (n.d.). *Pantawid Pamilyang Pilipino Program*. Retrieved June 30, 2019, from <https://www.officialgazette.gov.ph/programs/conditional-cash-transfer/>
- Rogers, L., & Twidle, J. (2013). A pedagogical framework for developing innovative science teachers with ICT. *Research in Science & Technological Education*, 3(3), 227-251. <https://doi.org/10.1080/02635143.2013.833900>
- Sahin, I. (2006). Detailed review of Rogers' diffusion of innovations theory and educational technology-related studies based on Rogers' theory. *Turkish Online Journal of Educational Technology*, 5(2), 14-23.
- Steiner, D., & Mendelovitch, M. (2017). "I'm the same teacher": The attitudes of science and computer literacy teachers regarding integrating ICT in instruction to advance meaningful learning. *Eurasia Journal of Mathematics Science and Technology Education*, 13(5), 1259-1282. <https://doi.org/10.12973/eurasia.2017.00670a>
- Taimalu, M., & Luik, P. (2019). The impact of beliefs and knowledge on the integration of technology among teacher educators: A path analysis. *Teaching and Teacher Education*, 79, 101-110. <https://doi.org/10.1016/j.tate.2018.12.012>
- Tearle, P. (2004). A theoretical and instrumental framework for implementing change in ICT in education. *Cambridge Journal of Education*, 34(3), 331-352. <https://doi.org/10.1080/0305764042000289956>
- Ulla, M. B., Barrera, K. B., & Acompañado, M. M. (2017). Philippine classroom teachers as researchers: Teachers' perceptions, motivations, and challenges. *Australian Journal of Teacher Education*, 42(11), 52-64. <http://dx.doi.org/10.14221/ajte.2017v42n11.4>
- UNESCO. (2016). *Diverse approaches to developing and implementing competency-based ICT training for teachers: A case study* (Vol. 1). <https://unesdoc.unesco.org/ark:/48223/pf0000246003>
- Wang, Q., & Woo, H. L. (2007). Systematic planning for ICT integration in topic learning. *Educational Technology & Society*, 10(1), 148-156.
- Yin, R. K. (2003). *Case study research: Design and methods* (3rd ed.). Sage. https://iwansuharyanto.files.wordpress.com/2013/04/robert_k_yin_case_study_research_design_and_mebookfi-org.pdf

APPENDIX

Appendix A

Evaluation and scoring scale

Unit Weight	Normalized value interval (%)	Verbal interpretation	
		ICT Utilization	ICT Competency
5	81-100	Always	Very High
4	61-80	Often	High
3	41-60	Sometimes	Average
2	21-40	Rarely	Low
1	1-20	Never	Very Low

Evaluating the Performance of e-government: Does Citizens' Access to ICT Matter?

Abdulrazaq Kayode Abdulkareem^{1,2} and Razlini Mohd Ramli^{1*}

¹*School of Social Sciences, Universiti Sains Malaysia, 11800, Pulau Pinang, Malaysia*

²*Department of Public Administration, University of Ilorin, 1515, Ilorin, Kwara State, Nigeria*

ABSTRACT

Different studies have evaluated the success of e-government in developed and developing countries. However, many of these studies rely on the economic and conventional approaches to evaluate e-government like other ICT projects. Also, they do not consider citizens' access to ICT in their studies. This study, therefore, examines the moderating effect of citizens' access to ICT on the performance of e-government within the context of IS Success Model and public value theory. The public value of e-government represents the net benefits of e-government. Data were collected from 369 experienced e-government users through a range of selected e-government services. The results show that citizens' access to ICT positively and significantly moderates the relationship between actual use and the public value of e-government. This finding implies that access to ICT will drive more use of e-government and increase the value of e-government services. Also, the quality dimensions affect the actual use and user satisfaction with e-government. The most significant effect was established in the relationship between service quality and the actual use of e-government. In essence, this study emphasized the efficacy of ICT access as a stimulating effect on creating public value through increased citizens' use of e-government for interacting with the government. Ultimately, it prompts the government to improve ICT access for the citizens to use more e-government services.

ARTICLE INFO

Article history:

Received: 11 February 2021

Accepted: 22 June 2021

Published: 15 September 2021

DOI: <https://doi.org/10.47836/pjssh.29.3.03>

E-mail addresses:

abdulkareem.ka@unilorin.edu.ng

(Abdulrazaq Kayode Abdulkareem)

razlini@usm.my (Razlini Mohd Ramli)

* Corresponding author

Keywords: Access to ICT, e-government performance, information quality, public value, service quality

INTRODUCTION

E-government uses of information and communications technology (ICT) to disseminate government information and deliver quality services to the citizens. ICTs

was advanced to improve and reorganise the public sector by changing the internal operations, external communications and capacity to deliver various stakeholders' services (Meijer, 2011). The growing level of e-government use and adoption in the public sector has increased sporadically in recent years. Almost all the world countries have adopted the electronic means of service delivery to their respective stakeholders, identifying their benefits. Consequently, the urgent need to evaluate the performance of different initiatives and projects of e-government has gained attention among academics and professionals (Deng, 2008).

E-government services are intended for all the people; however, unequal access to ICT hampers the government's efforts to make their electronic services fair and beneficial. A high failure rate has characterised e-government projects in developing countries, usually with less than expected outcomes (Gartner, 2007; Heeks, 2008). The failure of e-government is not only a manifestation of weak government policies, inadequate infrastructure and political will. Recently, it has been advanced that successful e-government hinges on citizens' ability to access ICT. The rate and level of ICT usage, particularly in developing countries, is often slowed down by digital divide between those who have access to ICT and those who do not have it due to socio-economic barriers. The citizens' inability to access smart technologies accounts for user failure (Lee & Porumbescu, 2019), culminating in the failure of e-government and jeopardise the overall objective of e-government.

For citizens to benefit from the effective implementation of e-government, their capacity and knowledge to use ICT must be considered in the readiness stage. Citizens who have no access to ICT will continue to use the conventional service delivery and information dissemination mode. They may later be cut off from the society as accessibility to a computer and the internet are indispensable today. Therefore, accessibility becomes a central point in the evaluation of the success of e-government programs.

E-government started in Nigeria in the early 2000s with the National Communications Act 2003, approval of the National Information Technology Policy in 2001 and the National Information Technology Development Agency in 2007 as the implementation agency. The objective was to serve as a panacea to excessive bureaucracy problems in the public service and provide the governments with the avenue to increase its efficiency, effectiveness, and transparency in delivering public services. Since its implementation, the government has strived to make services available to the citizens through web and mobile platforms (www.services.gov.ng and *347*48#) such as application and renewal of international passports, driver licence, registration of businesses and filing of taxes (Abdulkareem & Ishola, 2016). Similarly, capacity building and infrastructure programmes have been embarked upon, such as the eNigeria project, National eGovernment Strategies (NeGST), ICT for Development (ICT4D) SchoolNet Nigeria, DigiNet Project, and the Nigerian Universities Network (Fatile,

2012; National eGovernment Strategies, 2019).

Currently, ICT is integrated into people's daily activities; however, the majority are still unable to have access to it, especially in developing countries. There are currently around 4.1 billion people around the world who access the internet. With just a partly 28.2 per cent of the population having internet access, Africa remains the region with the least internet penetration (International Telecommunications Union, 2019). As of January 2020, internet users in Nigeria were estimated at 128 million, while broadband penetration was 38.5 per cent (Nigeria Communications Commission, 2020). The spread, use and acceptance of ICTs in the public sector are growing in Nigeria, signalling the country's potential to become an ICT hub in sub-Saharan Africa (Abdulkareem & Ishola, 2016). United Nations e-government survey showed that Nigeria rose from 162nd among the United Nations member states in 2012 to 143rd in 2018 (United Nations, 2018). In Africa, Nigeria moved from 30th place in 2012 to 21st place in 2018.

Some studies have analysed Nigeria's e-government performance, with some of them relying on conventional strategies such as the e-readiness approach to test government and citizens willingness and capacity to pursue such initiatives such as infrastructure and human capital assessment (Adeyemo, 2011; Ifinedo & Davidrajuh, 2005; Matthew & Monica, 2011). Some other studies used the Technology Acceptance Model (TAM) and the Unified Theory of Acceptance and Use of Technology

(UTAUT) to access citizens' behavioural attitudes to adopt e-government at the individual levels. Similarly, the impact assessment of e-government services in Nigeria was also assessed by some studies. The studies assessed the separate effects of e-government on, for example, transparency, trust and the quality of service (Abdulkareem et al., 2016), the openness (Ayo & Azeta, 2009) and on the quality of service (Abasilim et al., 2017; Ibrahim et al., 2016).

It is crucial to understand and examine the performance of e-government, particularly from the users' perspective. It is because it helps the Nigerian government to have an in-depth understanding of the actual value of its investments in the e-government project to understand the critical factors that contribute to the performance. Also, it helps in tracking the progress of policies and programmes in e-government. According to Agbabiaka (2018), for investments in e-government to be justified, it is important to seek feedback from the citizens who are the primary users of e-government. Therefore, in evaluating the performance of e-government, it becomes imperative to examine the moderating role of citizens' access to ICT on the relationship between e-government use and the performance of e-government in Nigeria. Several studies have investigated the adoption and performance of e-government in Nigeria; however, there is scarce literature on the moderating role of ICT access. This gap is expected to form the research gap and contribute to developing increasing e-government literature.

LITERATURE REVIEW

Citizens' Access to ICT

The citizens' expectation in developed and developing countries is that the government will provide high-quality G2C services. The ultimate purpose of G2C services is to facilitate government and citizens' proximity through government web portals. It is also seen as the primary objective of e-government (Seifert & Chung, 2009). However, how far G2C services have been delivered remains a matter of multiple variables. Arguably, not all government services and information are accessed online. In addition, users can face various obstacles to entirely using all of these online government services. Obstacles such as inadequate infrastructure, low internet speed (Du Bois & Chigona, 2018), different levels of literacy, and physical limitations (e.g. older people, adolescents and people with disabilities) (Sorn-In et al., 2015) can limit citizens' access to e-services.

G2C networks are expected to be designed based on multi-channel communication options to allow the government to support more citizens as much as possible (Rao, 2018). Although the internet and information kiosks are the necessary means of providing government services and information to individuals, other channels such as computers, emails and mobile technologies remain relevant in G2C interactions (Rao, 2018). However, ICT penetration within the local community in developing countries remains a significant obstacle to implementing e-government (Asongu & Le Roux, 2017). However,

mobile payment kiosks and information gathering continue to be necessary, especially in rural areas. Similarly, in more industrialised economies and developed nations with wider smartphone use, governments experience providing services and information through mobile technologies. Therefore, the achievement of G2C by the citizens is, largely dependent on access to multi-channel distribution methods (Rao, 2018).

Citizens have various ways to access G2C services, including internet ownership of cell phones, computers and other ICT devices at home and workplaces (Siddiquee, 2016). In the schools and libraries, some people rely on internet connectivity and computer access to G2C services and developing countries. In addition, there are times where neighbourhoods provide community members with access centres to access the internet (Joshi & Islam, 2018). Apart from these facilities' ownership, there is also a high presence of online commercial service access centres, such as cyber cafes, pay per site centres or pay per access municipalities. Those possessing personal computers and mobile technologies can also use public service access centres to reduce access costs (Zeleti & Mustonen-Ollila, 2011).

Public Value Theory

The public value theory affirms that the public service aims to create values for the citizens (Moore, 1995; Try & Radnor, 2007). Citizens are the ultimate consumers of public services. Therefore, they derive

values from such services' consumption (Alford et al., 2017; Kelly et al., 2002; Omar et al., 2011). On this assumption, public organisations' actions are guided by citizens' preferences in producing such services (Moore, 1995). Kavanagh (2014) explained that public value makes officials reflect on the benefits of public services from the economic angle and how the government can influence important social values such as participation, democratic principles and human rights.

Kelly et al. (2002) developed Moore (1995)'s public value theory's strategic triangle. In their model, they expressed public value as the preferences of the citizens articulated through various means. Their model produced three comprehensive dimensional sources of public values; Services, Outcomes and Trust. Kearns (2004) argues that these three areas are not mutually exclusive; they overlap. Moreover, they can be useful to examine the performance of government services. Though too broad and generic for evaluation hence, other scholars such as Deng et al. (2018), Golubeva and Merkurjeva (2006), and Scott et al. (2016) have developed on it to produce more quantifiable indicators for the evaluation of e-government. Their frameworks suggested that the concept of public value affords a valuable means of presenting public sector reform strategies, a way of achieving and evaluating them. Many studies have employed the public value theory as an analytical tool to analyse research in various ways (Agbabiaka, 2018; Alomari et al., 2012; Bossert et al., 1998; Erridge, 2007; Grimsley et al., 2007;

Karunasena & Deng, 2012; Marie, 2016; Scott et al., 2016; Talbot & Wiggan, 2010; Try, 2007; Try & Radnor, 2007).

DeLone and McLean Information System Success Model

DeLone and McLean (1992, 2003) Information System (IS) success model is the theory that guides this study. It is the most widely cited assessment framework within IS's discipline (Lowry et al., 2007). It is also one of the most popular success models of IS to have been used to assess the impact of the quality of service on e-government. DeLone and McLean (1992, 2003) IS success model was developed to address the growing challenge of inadequacy in measuring the information system's net benefits. When developed, six variables were initially identified to make IS success components: system quality, information quality, use, user satisfaction, individual, and organisational impacts. Changes were made to the model in 2003 due to the authors' calls to improve the model. Quality of service was added to the variables, while net benefits replaced individual and organisational impacts (Urbach & Müller, 2012). The model argues that the performance of an IS is determined by the collective or independent impact of the quality dimensions (information quality, system quality and service quality) to affect the use (or perceived usefulness), user satisfaction, and the net benefits as depicted in Figure 1 (DeLone & McLean, 2003).

The model was initially conceived for IS within the context of the private sector. However, the model was extended over the

years by different studies to accommodate for other areas of IS such as smartphone use and social media use (Cho & Park, 2012), e-health (Wu, 2018), e-procurement (Aminah et al., 2018), e-learning (Aldholay et al., 2018), tax e-filing (Veeramootoo et al., 2018) and e-government (Widiyanto et al., 2016). For example, Y.-S. Wang and Liao (2008) used the model in the assessment of e-commerce websites. In addition, Connolly et al. (2010), Scott et al. (2016) and Teo et al. (2008) measured the delivery of e-government services using the model.

Similarly, most of the studies that used the D&M performance model were from the private sector. Even the limited studies that emerged in the public sector study, especially from the e-government side, focused mainly on governments' internal relationships and employees' satisfaction (Ali & Al Kabbi, 2018; Gable et al., 2008). However, a further

need to improve measures to evaluate IS's efficiency was suggested (Petter et al., 2012). Nevertheless, the net benefits conceived in this model match the human preferences and organisational advantages well, as these were the initial variables that led to the conceptualisation of net benefits (Gable et al., 2008; Van der Heijden, 2004). Therefore, in response to Delone and McLean (2003) request to further evaluate and validate the model, various studies have expanded and revised the model (Abdelsalam et al., 2012; Agbabiaka, 2018; Teo et al., 2008; Urbach & Müller, 2012). Therefore, the model was updated to measure the net benefits based on the public value perspective in the context of this study and to examine the moderating role of citizens' access to ICT in assessing the relationship between actual use, user satisfaction, and the public value of e-government.

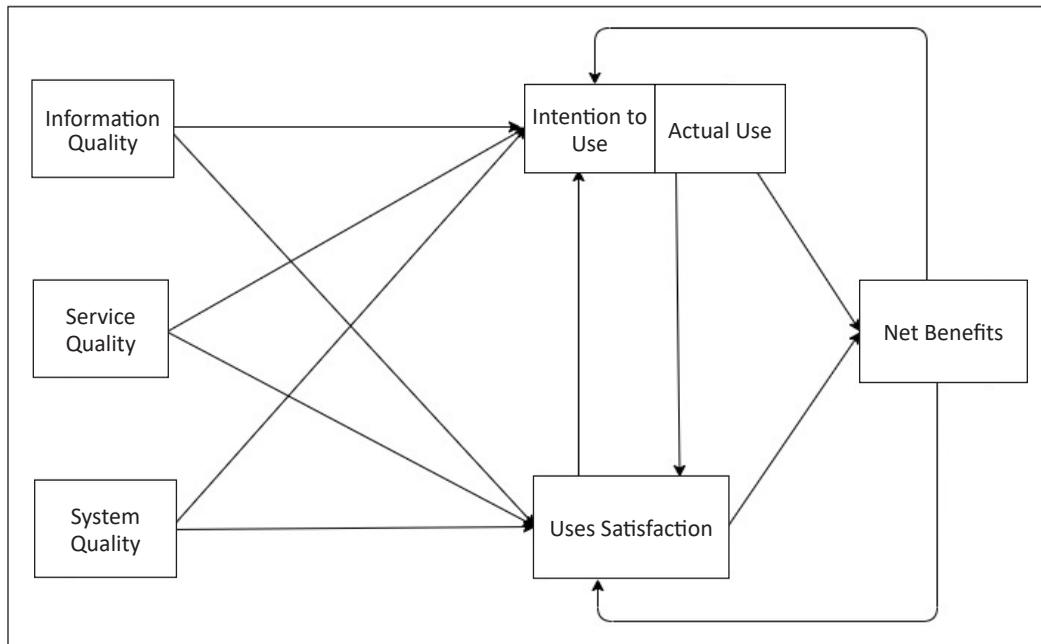


Figure 1. DeLone and Mclean IS Success Model

Conceptual Model and Hypotheses Formation

As shown in Figure 2, this study's conceptual model and hypotheses are formed according to the DeLone and Mclean (2003) IS success model and the public value theory (Moore, 1995).

Quality Dimension. Actual usage is the degree to which users utilises the IS in terms of frequency, complexity and length of use (DeLone & McLean, 2016). It means that it is vital to determine the effect of the quality dimensions on IS use. The IS quality dimensions have been researched and found to predict actual usage based on the accuracy, completeness, comprehensibility and timeliness of the information made available on the e-government platform. Also, the information's consistency is useful in predicting the degree and justification of citizens' use of IS. Studies like Susanto and Aljoza (2015) have shown that completeness of information, cost and time savings can motivate individual e-government services. Other characteristics of a quality e-government system, such as privacy and security users' data, ease of accessing government websites, ability to quickly browse through government website pages (Hirwade, 2010), frequently asked questions (FAQ), ability to easily use site maps, short, friendly and straightforward website addresses (Deng et al., 2018), all influences the use of an e-government system (L.-Y. Wang et al., 2019).

The DeLone and McLean (2003) model indicate that IS's three qualities (information

quality, system quality and service quality) that affect users' satisfaction. Kearns (2004) observed that service quality is a major underlying factor influencing IS users' expectations. The citizens' perceived qualities of an IS as the essential factors that influence service use or non-use. Satisfaction is defined in the IS success model as the level at which IS users are satisfied with the degree of privacy, navigability, content, accuracy, completeness and usefulness of the e-government platform's information. It also defines the extent of fulfilment of the system's usefulness in terms of its flexibility and ability to provide the necessary services based on users' requests (DeLone & McLean, 2003). Studies have found that quality dimensions are good predictors of user satisfaction with IS in various ways, such as online tax filing for e-commerce (Chen et al., 2015; Floropoulos et al., 2010), e-learning (Mtebe & Raphael, 2018; Yakubu & Dasuki, 2018), and e-government system (Agbabiaka, 2018; Al-Haddad et al., 2011; Y.-S. Wang & Liao, 2008). It is therefore hypothesised thus:

H1: Information quality has a positive and significant influence on the actual use of e-government.

H2: Service quality has a positive and significant influence on the actual use of e-government.

H3: System quality has a positive and significant influence on the actual use of e-government.

H4: Information quality has a positive and significant influence on user satisfaction with e-government.

H5: Service quality has a positive and significant influence on user satisfaction with e-government.

H6: System quality has a positive and significant influence on user satisfaction with e-government.

Actual Use. The actual use of IS is the degree, rate and frequency at which a citizen uses the electronic medium for activities that may otherwise be performed manually (Delone & McLean, 2003). In the IS literature, the Delone and Mclean IS success model is fundamental to the assumption that IS's actual usage impacts user satisfaction (Delone & McLean, 2003). Based on the model's assumption, users' satisfaction with the e-services provided is predicted by their level, frequency or behaviour. They are more likely to be fulfilled if the earlier expectations from ICT services are met. Positive experience with the use of e-government will also predict the degree of satisfaction with the e-government system in this context (DeLone & McLean, 2016; Y.-S. Wang & Liao, 2008). Some studies have found a strong correlation between IS's use and user satisfaction (Isaac et al., 2017; Makokha & Ochieng, 2014; Mensah et al., 2017).

Numerous studies have also studied the interrelationship between IS's use and the net benefits obtained from it (Aldholay et al., 2018; Martins et al., 2019). Y.-S. Wang and Liao (2008) find that the greater use of IS predicted by website performance dimensions leads to a greater realisation of IS values. F. Wang (2009) discovered that

the greater use of IS predicted by website efficiency dimensions contributes to a greater realisation of the benefits of IS. Lin (2007) also acknowledged the use of quality e-learning platforms as part of other factors that promote predictors of the net benefits of using e-learning platforms. Similarly, Balaban et al. (2013) discovered a strong, positive and significant relationship between students' actual use of IS and the net benefits. Therefore, it is hypothesised thus:

H7: The actual usage of e-government systems influences user satisfaction positively and significantly.

H8: The actual use of e-government influences the public value of e-government positively and significantly.

User Satisfaction. Various studies have studied user satisfaction as a proxy for the success of IS. However, we observe user satisfaction as a predictor for IS's success (Gong et al., 2018; Ma & Zheng, 2019). Satisfaction is perceived using an online service driven by innovativeness, efficiency, and the ability to carry out tasks for the citizens (Agbabiaka, 2018, F. Wang & Chen, 2010). The user satisfaction of e-government initiatives focuses on the accessibility of information, the quality of services and the degree of choice available to users (Kearns, 2004). Citizen satisfaction describes the degree to which users or people are generally pleased with the overall use of e-government (Zaidi et al., 2017). Based on the IS performance model, the satisfaction derived from using an online

service determines the net benefits of services (Hsu & Chiu, 2004; Li & Shang, 2019). Similarly, the study of Ma and Zheng (2019) on the e-government ranking (performance) found satisfaction with the net benefits of IS as a significant predictor. We, therefore, hypothesise thus:

H9: User satisfaction with e-government positively and significantly influence the public value of e-government.

Access to ICT. The rationale for the use of ICT differs among citizens. For example, some use the internet to search for information, learn and satisfy themselves, connect and communicate with others, and engage in business, trade, and other financial transactions (Papacharissi & Rubin, 2000). Scheerder et al. (2017) examine how ICT use leads to various economic, social, cultural, and political effects. The use of ICT today serves as a vital connection for accessing e-government services (Alhabshi, 2009).

Therefore, getting e-government users to access ICT is a critical deciding factor for the use and satisfaction of e-government (Farhan & Sanderson, 2010). Specifically, broadband access continues to generate issues in both developed and developing countries, owing to the proliferation of ICT, the country’s infrastructure capability, and the cost of access.

Therefore, a few studies have explored the effect of access to ICT, its use and satisfaction. Access to ICT is proposed here in this study to affirm the positive relationship between actual use, user satisfaction and the public value of e-government. In these relationships, previous studies have reported mixed findings. For example, Ismail et al. (2016) examined the relationship between internet access frequency, internet attitudes, and internet self-efficacy and behavioural intention to use the internet. Their study showed that the frequency of internet access and internet self-efficacy both affect

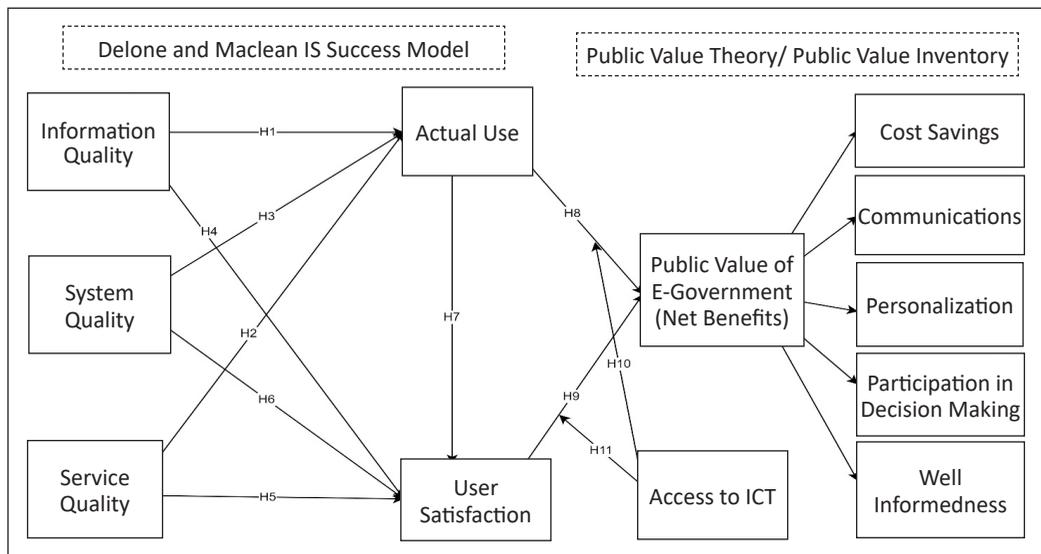


Figure 2. Conceptual Model

behavioural intent. Through various studies, Khan et al. (2020) explore how internet access affects the online contribution of services and resources in the Appalachian region of Ohio, United States, considered fundamental to social needs (education, health, jobs and social media). Their research indicates a mixed outcome, i.e. internet skills improve the ability to use ICT and establish social needs. We, therefore, hypothesised thus:

H10: Citizens' access to ICT moderates the positive and significant relationship between the actual use of e-government and the public value of e-government

H11: Citizens' access to ICT moderates the positive and significant relationship between the user satisfaction with e-government and the public value of e-government.

METHODS

The study's data stemmed from a survey of e-government users in Nigeria through a self-administered questionnaire between April and July 2019. The questionnaires were distributed randomly among the staff of six federal universities in Nigeria. The university environment was deemed appropriate for the study population because it houses the most experienced and frequent users of e-government and ICT skilled people like graduate students and staff with a high level of education, computer and internet literacy, and usage (Scott et al., 2016). In addition, experience from previous studies also showed that the university environment stakeholders shared similar

characteristics with e-government users (Carter & Bélanger, 2005; Reddick, 2005; Scott et al., 2016).

The first round of pretest was done through a content validation process by six experts to evaluate the adequacy of the items and constructs in the survey. Then, a pilot study followed this process through fifty respondents, about 11% of the final respondents. Thus, Forty eight responses were recorded. The result of the pilot study showed that all constructs have reliability scores above 0.7 thresholds. Finally, a thought aloud process followed the pilot study. Seven participants commented on the instrument, and their comments were used to improve the final instrument.

The survey collected information on demographic details such as gender, age, level of education, income state, and access to ICT. In addition, the respondents' experience was required to examine a set of a selected eight G2C services of government agencies through their websites and other option. The services include e-passport application and renewal, electronic voters' card, driving license and road tax, health insurance, loan applications and electronic national identity cards. The services were pulled from the Federal Government of Nigeria one-stop website "<https://services.gov.ng/>" and selected because of their high usage and popularity. In addition, they rank high among the G2C MDAs in the 2018 MDAs website ranking in Nigeria (Bureau of Public Service Reforms, 2019).

The G*power software was used to estimate the minimum sample size with a predictive power of 0.95 (Alzahrani et al., 2019). Calculations indicated that the required sample size, with a maximum of three predictors, was 129 with an effect size of 0.15. Four hundred fifty questionnaires were distributed, out of which 369 were returned, correctly filled out and usable. We entered the data collected in the Statistical Packages for Social Sciences (SPSS Version 24) for initial data creation, screening, coding and preliminary analysis. Similarly, due to the complex nature of the conceptual model (Figure 2), SmartPLS 3.3.2 was used for Structural Equation Modelling-Partial Least Squares (SEM-PLS) for the confirmatory factor analysis (Ringle et al., 2015). Structural Equation Modelling (SEM) is one of the most commonly accepted statistical analyses used to study quantitative data to evaluate measurement and structural models (Hair et al., 2014).

A two-stage analysis of structural equation modelling was done, starting with the measurement model and later the structural model (Hair et al., 2013). We assessed the measurement model's indicator reliability, internal consistency, convergent validity, and discriminant validity in the first stage. First, indicator reliability was assessed using items loadings ≥ 0.708 (Hair et al., 2019). Next, the internal consistency and convergent validity were examined using the composite reliability (CR) and average variance extracted (AVE),

respectively. Values are accepted when CR and AVE ≥ 0.7 and 0.5 , respectively. Finally, the discriminant validity was also assessed using the heterotrait-monotrait ratio of correlations (HTMT); values are expected to be $HTMT \leq 0.9$ (Gold et al., 2001). For the structural model, we examined the variance inflation factor (VIF), path coefficient, significance levels, effect sizes (f^2) and coefficient of determinations (R^2). First, the VIF was examined to determine the level of collinearity among the constructs, where $VIF \leq 3.3$ (Diamantopoulos & Siguaw, 2006). Next, the path coefficient and significance levels were assessed, and hypotheses were accepted where p values < 0.05 and t value > 1.645 (Hair et al., 2019).

Scale and Measurement of Variables

The survey included items used for the measurement of various constructs adopted for the study. The Likert scale adopted was the agreement scale of 1 to 5 (Strongly Disagree to Strongly Agree), as shown in Table 2. To measure the quality dimensions (information quality, system quality and service quality) and actual use, DeLone and McLean (2003), Urbach and Müller (2012) survey items were adopted. Satisfaction with e-government service was measured using the (Spreng et al., 1996) measurement items. Finally, the public value of e-government representing net benefits was measured using five constructs and their respective items adapted from Deng et al. (2018) and Scott et al. (2016) public values of e-government measurement items.

RESULTS

Common Method Bias Test

The only instrument used to collect data in this study was a survey questionnaire. Therefore, following Kock and Lynn (2012) recommendation, we checked the common method bias using full collinearity test. All constructs were regressed against a random variable. If the variance inflation factor (VIF) is less than or equal to 3.3, there is no bias in the single data source. As shown in Table 1, the analysis yielded a VIF lower than 3.3. Therefore, common method bias is not a problem in our study.

Profile of Respondents

This survey generated responses from 246 males and 123 females. Similarly, 165 of the respondents had a Master’s degree, 101 had a PhD degree, 86 had a Bachelor’s degree, 10 respondents had Ordinary National Diploma (OND) and National Certificate of Education (NCE). At the same time, 7 were secondary school certificate holders. More so, 24 respondents are below 21 years of age. The majority of the respondents were between 21 to 35 and 36 to 45 years, sharing 128 responses. Eighty-nine respondents were between the ages of 46 to 60. In addition, 186 of the total respondents last used e-government within the last three (3) months, 90 and 93 of the respondents used

it in the last six (6) months and beyond six months, respectively. The response indicates that the experience of the respondents is useful to validate the response from the questionnaire.

Measurement Model

The measurement model was evaluated by assessing the loadings, average variance extracted (AVE), and composite reliability (CR) of the constructs, as suggested by (Hair Jr. et al., 2010). More specifically, the following three criteria fulfilment was assessed: all indicator loadings should be greater than 0.5, and for each construct, the CR and AVE should be greater than 0.7 and 0.5, respectively. Both indicator loadings and CRs were greater than 0.5 and 0.7, respectively, as seen in Table 2, and the AVE was also above 0.50. For the reliability and convergent validity of the model, the three requirements were confirmed.

Discriminant validity was also tested to assess the degree to which constructs vary from each other in the same model (Henseler et al., 2015). The Heterotrait-Monotrait ratio (HTMT) criterion was used to assess the validity of discriminants for this analysis. The constructs are different if the HTMT value is below 0.85. As seen in Table 3, the HTMT values are lower than 0.85, so the discriminant validity was confirmed.

Table 1
Full collinearity analysis

IFQ	SVQ	SYQ	SAT	USE	COM	COS	PAR	PER	WIN
1.34	1.73	1.56	2.21	2.19	2.26	1.45	2.36	1.70	1.36

Table 2
Constructs, Items, Loadings, AVE and Construct Reliability

Constructs	Items & Description	Sources	Loadings	CR	AVE
Access to ICT	ACCS1- I have access to personal mobile devices	Verba et al. (1995)	0.953	0.795	0.667
	ACCS2- I have access to personal internet		0.652		
Information Quality	INFQ1- Information on the government website is easy to understand	Delone & McLean (2003); Urbach & Müller (2012)	0.828	0.887	0.613
	INFQ2- Information on the government website is up to date		0.770		
	INFQ3- Information on the government website is accurate		0.809		
	INFQ4- Information on the government website is relevant		0.838		
	INFQ5- Information on the government website is complete		0.655		
Service Quality	SVQT2- Service delivered on the government website is reliable		0.877	0.904	0.615
	SVQT3- Service delivered on the government website is tangible		0.793		
	SVQT4- Service delivered on the government website is responsive		0.688		
	SVQT5- Service delivered on the government website is dependable		0.851		
	SVQT6- Service delivered on the government website is timely		0.865		
	System Quality		SYQT1- The e-government website is secure		
SYQT2- The e-government website is well organised		0.855			
SYQT3- The e-government website is easy to navigate		0.882			
SYQT4- The e-government website is easy to use		0.785			
SYQT5- The e-government website address is simple and easy to remember		0.769			
Actual Use	USE1- I use the e-government website for information searching		0.836	0.887	0.662
	USE2- I use the e-government website for payment		0.825		
	USE3- I use e-government to interact with government online		0.797		
	USE4- I use the e-government platform to request for services from the government		0.737		
	USE5- Overall, I prefer to use e-government websites to carryout business with the government		0.733		

Table 2 (continue)

Constructs	Items & Description	Sources	Loadings	CR	AVE
Communication	COMM1- Using e-government is an effective way of communicating with government agencies.	Deng et al. (2018); Scott et al. (2016)	0.899	0.929	0.813
	COMM2- Using e-government is a valuable way of communicating with government agencies		0.913		
	COMM3- Using e-government is an efficient way of communicating with government agencies		0.894		
Cost Savings	COSTT1- Using e-government saves me money		0.819	0.854	0.661
	COSTT2- Using e-government reduces the cost of assessing services.		0.795		
	COSTT3- I value the cost savings from using e-government		0.824		
Participation	PART1- E-government makes me get informed of upcoming policies for inputs		0.721	0.897	0.687
	PART2- E-government allows opportunities for me to participate in public discussions		0.875		
	PART3- E-government allows my views for consideration in decision making		0.854		
	PART4- E-government allows me to have avenue to post issues for public consideration		0.857		
Personalisation	PERS1- I am able to personalise the services offered to me on government websites		0.799	0.883	0.716
	PERS2- I value the personalised services on government websites		0.906		
	PERS3- I can tailor messages to my own requirements on government websites		0.831		
Well Informedness	WINF1- E-government helps to increase my understanding of government issues		0.844	0.882	0.713
	WINF2- E-government enables me to build up knowledge about issues important to me		0.858		
	WINF3- I am better informed because of using e-government		0.832		
User Satisfaction	SATF1- I feel more satisfied with the performance of the e-government website	Spreng et al. (1996)	0.735	0.891	0.673
	SATF2- I feel more fulfilled with the experience of using e-government		0.858		
	SATF3- I am satisfied with the quality of information		0.852		
	SATF4- I am satisfied with the quality of e-service delivery		0.83		

*ACCS3 and SVQT1 were deleted due to lower loadings

Table 3

Discriminant validity

	1	2	3	4	5	6	7	8	9	10	11
1											
2	0.145										
3	0.125	0.511									
4	0.368	0.332	0.415								
5	0.126	0.368	0.176	0.225							
6	0.203	0.532	0.732	0.544	0.286						
7	0.138	0.531	0.646	0.257	0.271	0.567					
8	0.149	0.802	0.485	0.322	0.479	0.803	0.416				
9	0.082	0.698	0.504	0.251	0.296	0.424	0.787	0.649			
10	0.153	0.525	0.340	0.303	0.537	0.322	0.338	0.592	0.474		
11	0.072	0.248	0.211	0.296	0.805	0.401	0.424	0.296	0.225	0.330	

1= Access to ICT 2 = Actual Use 3 = Communication 4= Cost Savings 5 = Info Quality 6 = Participation 7 = Personalization 8= User Satisfaction 9 = Service Quality 10 = System Quality 11 = Well Informedness

Structural Model

The primary endogenous construct (public value of e-government) is a higher-order construct (HOC) with five other sub-constructs (Communication, cost-cutting, personalisation, participation, and well informedness) modelled based on the reflective-reflective type. Therefore, a disjoint two-stage approach was used to reduce the number of structural paths by extracting the latent variable scores (LVS) of the lower order constructs (LOC) (Sarstedt et al., 2019). After that, based on Hair et al. (2019) suggestion, we reported the path-coefficients and t-statistics for all paths using a subsample of 5000 bootstraps. Finally, based on Hahn et al. (2017) recommendation, we used a combination of p-values, confidence intervals, and effect sizes to assess the hypotheses' statistical and substantive relevance, as shown in Table 4 and Figure 3.

Information quality has a positive and significant relationship with actual use ($\beta = 0.100$, p -value < 0.050) and user satisfaction ($\beta = 0.157$, p -value < 0.050), therefore hypotheses H1 and H4 are supported. Service quality has a positive and significant effect on both actual use ($\beta = 0.484$, p -value < 0.001) and user satisfaction ($\beta = 0.185$, p -value < 0.001). Therefore, hypotheses H2 and H5 are supported. System quality has a positive and significant influence on both actual use ($\beta = 0.226$, p -value < 0.001) and user satisfaction ($\beta = 0.152$, p -value < 0.001). Therefore, hypotheses H3 and H6 are supported. The support for hypothesis H7 and H8 can be confirmed as actual use has positive and significant effect on both user satisfaction ($\beta = 0.449$, p -value < 0.001) and the public value of e-government ($\beta = 0.219$, p -value < 0.001). The support for H9 can also be confirmed as user satisfaction has a positive and significant effect on the

Table 4
Hypothesis testing

Hypo	Relationships	Std Beta	Std Error	t-value	p-value	BCILL	BCIUL	f ²
H1	Information quality->actual use	0.100	0.057	1.759	0.042	0.003	0.176	0.014
H2	Service quality->actual use	0.484	0.045	10.800	0.000	0.418	0.551	0.336
H3	System quality->actual use	0.226	0.045	4.981	0.000	0.147	0.295	0.063
H4	Information quality->user satisfaction	0.157	0.049	3.221	0.001	0.091	0.244	0.043
H5	Service quality-> user satisfaction	0.185	0.050	3.663	0.000	0.083	0.232	0.047
H6	System quality->user satisfaction	0.152	0.047	3.198	0.001	0.072	0.210	0.034
H7	Actual use-> user satisfaction	0.449	0.052	8.649	0.000	0.318	0.505	0.255
H8	Actual use->public value	0.219	0.060	3.656	0.000	0.088	0.285	0.043
H9	User satisfaction-> public value	0.443	0.069	6.431	0.000	0.331	0.526	0.176
H10	Actual use*Access -> Public Value	0.093	0.038	2.467	0.009	0.032	0.142	
H11	User satisfaction*Access -> Public Value	0.097	0.049	1.963	0.028	0.019	0.156	

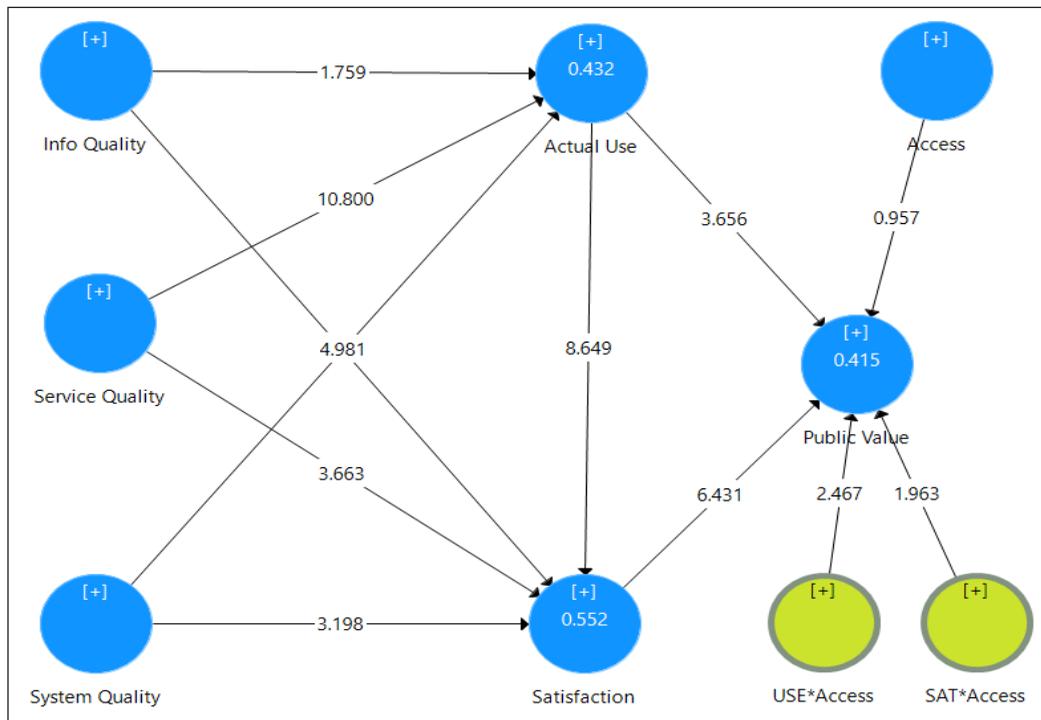


Figure 3. Result of the structural model

public value of e-government ($\beta = 0.443$, p -value < 0.001). The moderating effect of access to ICT positively and significantly impacts the relationship between actual use of e-government ($\beta = 0.093$, p -value < 0.050) and the public value of e-government, therefore, hypothesis H10 is supported. However, the moderating effect of access to ICT does not impact on the relationship between user satisfaction ($\beta = 0.097$, p -value < 0.050) and the public value of e-government.

The model's explanatory power can be confirmed based on the R^2 values of 0.75, 0.50 and 0.25, which signify substantial, moderate and small, respectively (Hair et al., 2019). Based on the result of this study, the following R^2 values can be confirmed Actual use = 0.432; user satisfaction = 0.552 and Public value of e-government = 0.451. Therefore, the R^2 value can be accepted for the model's in-sample prediction based on the key endogenous constructs' values.

DISCUSSION

The findings show that information quality, system quality, and service quality significantly influence actual use and user satisfaction with e-government. This result aligns with other studies' findings where the system quality was significant using e-government and user satisfaction. Seddon (1997) noted that enhancing an IS's characteristics would increase the use and satisfaction of such a project. DeLone and McLean (2016) have indicated that responsiveness, accuracy, reliability, and flexibility are the characteristics

of an IS that can induce e-government. Also, web interface, speed of response to queries, payment speed, data security, and user information will be a basis for the citizens' use of e-government. In this study, service quality refers to service features such as tangibility, responsiveness, empathy, assurance and efficiency of services and their providers. Y.-S. Wang and Liao (2008), and Wangpipatwong et al. (2009) stressed the importance of quality of service in the e-government ecosystem, where it is expected to influence the use of e-government and its components. Similarly, this result demonstrates the sense of fulfilment the citizens will have when interacting with e-government seamlessly (Shim & Jo, 2020). These findings confirm the importance of providing accurate, easy to understand, up-to-date and reliable information, seamless ability to pay for services online, and tangibility of services for the e-service users.

Similarly, access to ICT positively and significantly moderates the relationships between the two exogenous constructs (actual use and user satisfaction) and the public value of e-government. This finding helps to understand the significant interaction effect on citizens' access to ICT to increase the positive relationship between the actual usage of e-government, user satisfaction with e-government and the creation of the public values of e-government. This outcome is further evident in the slope analysis (Figures 4 and 5), where the positive moderating effect between the interaction term and the endogenous constructs high

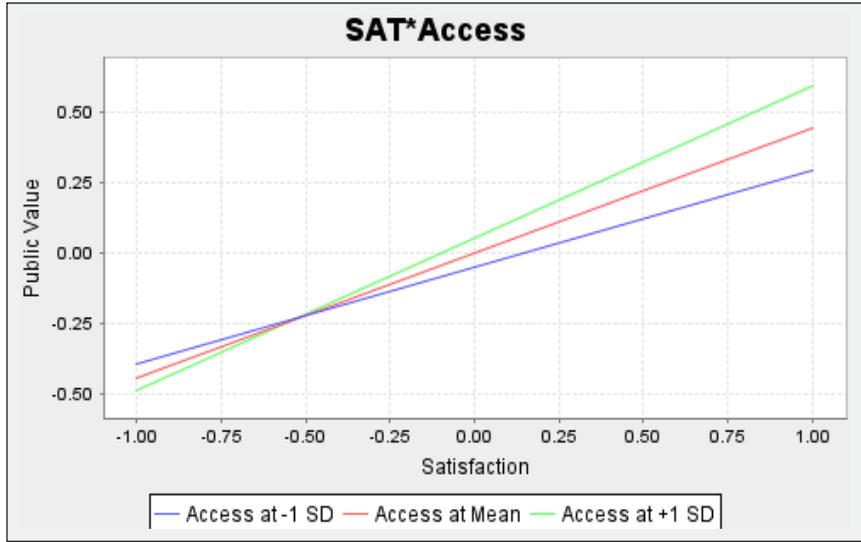


Figure 4. Moderation analysis slope (SAT*Access -> Public Value of E-government)

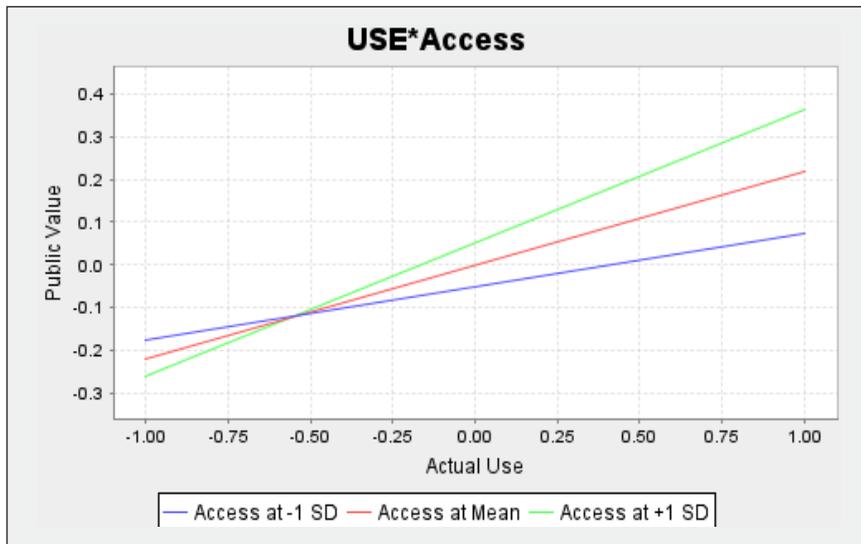


Figure 5. Moderation analysis slope (USE*Access -> Public Value of E-government)

moderator lines' are steeper. This analysis indicates that the relationships between the actual use of e-government and the public value of e-government become stronger with the interaction effect of citizens' access to ICT, likewise, for user satisfaction with e-government.

This relationship's importance will be evident in creating public values such as effective communications between citizens and the MDAs, cost savings, well informedness about government policies, public participation when citizens have more access to ICT through mobile devices

and affordable internet. Similarly, this result confirms that citizens with more access to ICT, especially the internet and computer, will use e-government more and consequently have more values of e-government compared with citizens without access (Oni et al., 2017). The affordability of computers and the internet is the primary determinant in this regard. The development of ICT of any country, which includes citizens access to ICT, is an enabler of e-government development (Adam, 2020). E-government has been reported to be marginally failing worldwide due to the citizens' inability to access ICT through direct ownership or shared in public places (Anthopoulos et al., 2016). The issue of limited access to ICT has occurred repeatedly as an enabler broadening the digital divide problem, particularly in developing countries (Rana et al., 2013).

CONCLUSION

This study assessed the efficacy of the DeLone and McLean IS success model for examining the performance of e-government in a developing country by contributing further to the development of the model. Also, it tested citizens' access to ICT as a construct to moderate the relationship between the actual use of e-government, citizen satisfaction and the public value of e-government. The rationale to include access to ICT was informed due to the wide digital divide level in a country with lower infrastructural and digital literacy for citizens to access ICT for e-government purposes. The expectation is that broader

access to ICT by the citizens will contribute to the government's e-government programme's overall performance. PLS-SEM was employed for data analysis to simultaneously assess the relationships among the constructs in the conceptual model. The efficacy of the citizens' access to ICT was demonstrated, suggesting the importance of broader access to ICT for citizens' to use e-government services.

This study provided implications for both theory and policy. Theoretically, the public value theory was applied to measure the net benefits of e-government. This method tilts e-government success research to a range of non-financial indicators away from conventional and financial measures. Access to ICT is an essential factor in e-government development. This study tested its interaction effect in determining its effect between actual use and the public value of e-government and user satisfaction and the public value of e-government. Using citizens' access to ICT as a moderator in the study was envisaged as part of this study's contributions to DeLone and MacLean IS's theoretical development and the public value theory, especially concerning the public value of ICT.

This study also provides policy implications. Public sector administrators and implementers are expected to learn and take advantage of the e-service benefits and shortcomings and discuss citizens' demands to strengthen the system. This research would allow them to determine essential quality variables, in this case, the public value framework and the service qualities.

The fact that the quality of e-government websites currently does not fulfil people's needs, especially in a developing country like Nigeria, is one of the main challenges facing e-government success. Therefore, this study suggests that further efforts need to be made to increase the quality of e-services to satisfy citizens' demands. Furthermore, system breakdowns and downtimes undermine the consistency of the expectations of the system and services. Therefore, system operators would consider investing more resources in updating the ageing technical systems to reduce these technical failures and raise usage and satisfaction standards.

The overall level of technological competence, acceptance and usage, and even literacy among government agencies' workers and people are still relatively low. This study further reiterates the government's need to bridge the digital divide gap. The gap may have removed some people from the digital community and digital resources due to loss or lack of ICT capacity and connectivity. It is also a wake-up call for the government to step up efforts to develop ICT teaching and expertise by instilling ICT in schools' curriculum at all stages. It would provide public administrators with a more robust, realistic, comprehensive and citizen-oriented guide to disseminating e-services and easy access to ICT to improve service delivery and achieve the overall objective of promoting good governance.

There are some limitations to generalising the findings from this study.

First, the use of the targeted sample and the resulting small sample size are the drawbacks of the research that may affect the relationship between the variables. While it is impossible to estimate the total number of e-government users in Nigeria, the amount of the survey taken relative to the level of Teledensity indicates that the analysis has a limited sample size. Second, Nigeria is an example of a developing country where the introduction of e-government has not yet fully evolved (United Nations, 2018). Third, given the complexity of the bureaucratic and institutional system and population dynamics, other variables of interest outside the study model, particularly the impact of government bureaucracy and responsiveness on success, cannot be adequately accounted for in the analytical model.

However, despite the drawbacks, future research could concentrate on a more general and varied population with a broader sample size to further examine the success of e-government in other developing countries. Similarly, as other constructs can help explore the success of e-government in Nigeria, future studies can use these constructs, such as digital literacy, self-efficacy, and other individual characteristics, to further pursue an in-depth analysis of e-government performance.

ACKNOWLEDGEMENT

The authors would like to thank the Tertiary Education Trust Fund, Nigeria (TETFund), the editors and the anonymous reviewers for their excellent suggestions.

REFERENCES

- Abasilim, U., Gberevbie, D., & Ifaloye, O. (2017). Attaining a better public service delivery through e-governance adoption in Nigeria. In *4rd Covenant University Conference on E-Governance In Nigeria (CUCEN 2017)*. <http://eprints.covenantuniversity.edu.ng/8379/1/Binder2.pdf>
- Abdelsalam, H. M., Reddick, C. G., & El Kadi, H. A. (2012). Success and failure of local e-government projects: Lessons learned from Egypt. In S. K. Aikins (Ed.), *Digital democracy: Concepts, methodologies, tools, and applications* (pp. 183-201). IGI Global. <https://doi.org/10.4018/978-1-4666-1740-7.ch010>
- Abdulkareem, A. K., & Ishola, A. A. (2016). E-government in Nigeria: Progress and prospects. *Ilorin Journal of Administration and Development*, 12(1), 59-67.
- Abdulkareem, A. K., Ameen, A., & Ishola, A. A. (2016). A review of e-government as a tool for building citizens trust in the Nigerian government. *Sahel Analyst: Journal of Management Sciences*, 13(2), 10.
- Adam, I. O. (2020). Examining e-government development effects on corruption in Africa: The mediating effects of ICT development and institutional quality. *Technology in Society*, Article 101245. <https://doi.org/10.1016/j.techsoc.2020.101245>
- Adeyemo, A. (2011). E-government implementation in Nigeria: An assessment of Nigerias global e-gov ranking. *Journal of Internet and Information Systems*, 2(1), 11-19.
- Agbabiaka, O. (2018, April 4-6). The public value creation of e-government: An empirical study from citizen perspective. In *11th International Conference on Theory and Practice of Electronic Governance (ICEGOV 2018)*. Association for Computing Machinery. <https://doi.org/10.1145/3209415.3209416>
- Aldholay, A. H., Isaac, O., Abdullah, Z., Alrajawy, I., & Nusari, M. (2018). The role of compatibility as a moderating variable in the information system success model: The context of online learning usage. *International Journal of Management and Human Science*, 2(1), 9-15.
- Alford, J., Douglas, S., Geuijen, K., & 't Hart, P. (2017). Ventures in public value management: Introduction to the symposium. *Public Management Review*, 19(5), 589-604. <https://doi.org/10.1080/14719037.2016.1192160>
- Alhabshi, S. M. (2009). What we have & have-not: E-government in Malaysia. In *International Conference on Malaysia: Malaysia in Global Perspective, 27-28 September 2009, Cairo University, Egypt*. <http://eprints.um.edu.my/id/eprint/10902>
- Al-Haddad, S. A., Hyland, P., & Hubona, G. (2011). An assessment tool for e-government system performance: A citizen-centric model. In *Proceedings of the Seventeenth Americas Conference on Information Systems (AMCIS 2011)*; pp. 1-11. AIS eLibrary. <https://ro.uow.edu.au/infopapers/1955>
- Ali, H., & Al Kabbi, R. (2018). M-government applications: Measurement of users' satisfaction in the Kingdom of Bahrain. *Electronic Government, an International Journal*, 14(4), 375-388. <https://doi.org/10.1504/eg.2018.10015111>
- Alomari, M., Woods, P., & Sandhu, K. (2012). Predictors for e-government adoption in Jordan; Deployment of an empirical evaluation based on a citizen-centric approach. *Information Technology & People*, 25(2), 207-234. <https://doi.org/10.1108/09593841211232712>
- Alzahrani, A. I., Mahmud, I., Ramayah, T., Alfarraj, O., & Alalwan, N. (2019). Modelling digital library success using the DeLone and McLean information system success model. *Journal of Librarianship and Information Science*, 51(2), 291-306. <https://doi.org/10.1177/0961000617726123>

- Aminah, S., Ditari, Y., Kumaralalita, L., Hidayanto, A. N., Phusavat, K., & Anussornnitisarn, P. (2018). E-procurement system success factors and their impact on transparency perceptions: Perspectives from the supplier side. *Electronic Government: An International Journal*, 14(2), 177-199. <https://doi.org/10.1504/eg.2018.090929>
- Anthopoulos, L., Reddick, C. G., Giannakidou, I., & Mavridis, N. (2016). Why e-government projects fail? An analysis of the Healthcare.gov website. *Government information quarterly*, 33(1), 161-173. <https://doi.org/10.1016/j.giq.2015.07.003>
- Asongu, S. A., & Le Roux, S. (2017). Enhancing ICT for inclusive human development in Sub-Saharan Africa. *Technological Forecasting and Social Change*, 118, 44-54. <https://doi.org/10.1016/j.techfore.2017.01.026>
- Ayo, C., & Azeta, A. (2009, June 29-30). *A framework for voice-enabled m-voting system: Nigeria a case study* [Paper presentation]. 9th European Conference on e-Government (ECEG 2009), Westminster Business School, University of Westminster, London, UK.
- Balaban, I., Mu, E., & Divjak, B. (2013). Development of an electronic Portfolio system success model: An information systems approach. *Computers & Education*, 60(1), 396-411.
- Bossert, T., Hsiao, W., Barrera, M., Alarcon, L., Leo, M., & Casares, C. (1998). Transformation of ministries of health in the era of health reform: The case of Colombia. *Health Policy and Planning*, 13(1), 59-77. <https://doi.org/10.1093/heapol/13.1.59>
- Bureau of Public Service Reforms. (2019). *2018 Federal Government Scorecard Ranking & Scoring of Ministries, Department & Agencies (MDAS)*. <https://www.bpsr.gov.ng/index.php/publications/bpsr-resources/reports/general-report/study-survey-review#>
- Carter, L., & Bélanger, F. (2005). The utilization of e-government services: Citizen trust, innovation and acceptance factors*. *Information Systems Journal*, 15(1), 5-25. <https://doi.org/10.1111/j.1365-2575.2005.00183.x>
- Chen, J. V., Jubilado, R. J. M., Capistrano, E. P. S., & Yen, D. C. (2015). Factors affecting online tax filing - an application of the IS success model and trust theory. *Computers in Human Behavior*, 43(1), 251-262. <https://doi.org/10.1016/j.chb.2014.11.017>
- Cho, S. E., & Park, H. W. (2012). Government organizations' innovative use of the Internet: The case of the Twitter activity of South Korea's Ministry for Food, Agriculture, Forestry and Fisheries. *Scientometrics*, 90(1), 9-23. <https://doi.org/10.1007/s11192-011-0519-2>
- Connolly, R., Bannister, F., & Kearney, A. (2010). Government website service quality: A study of the Irish revenue online service. *European Journal of Information Systems*, 19(6), 649-667. <https://doi.org/10.1057/ejis.2010.45>
- DeLone, W. H., & McLean, E. R. (1992). Information systems success: The quest for the dependent variable. *Information Systems Research*, 3(1), 60-95. <https://doi.org/10.1287/isre.3.1.60>
- DeLone, W. H., & McLean, E. R. (2003). The DeLone and McLean model of information systems success: A ten-year update. *Journal of Management Information Systems*, 19(4), 9-30. <https://doi.org/10.1080/07421222.2003.11045748>
- DeLone, W. H., & McLean, E. R. (2016). Information systems success measurement. *Foundations and Trends® in Information Systems*, 2(1), 1-116. <http://doi.org/10.1561/2900000005>
- Deng, H. (2008). Towards objective benchmarking of electronic government: An inter-country analysis. *Transforming Government: People, Process and Policy*, 2(3), 162-176.
- Deng, H., Karunasena, K., & Xu, W. (2018). Evaluating the performance of e-government in

- developing countries: A public value perspective. *Internet Research*, 28(1), 169-190. <https://doi.org/10.1108/IntR-10-2016-0296>
- Diamantopoulos, A., & Siguaw, J. A. (2006). Formative versus reflective indicators in organizational measure development: A comparison and empirical illustration. *British Journal of Management*, 17(4), 263-282. <https://doi.org/10.1111/j.1467-8551.2006.00500.x>
- Du Bois, J., & Chigona, W. (2018). Use of free public Wi-Fi and telecentres in disadvantaged communities in the Western Cape. *Development Informatics Association (IDIA 2018)*, 2. https://collections.unu.edu/eserv/UNU:6647/IDIA2018_Proceedings.pdf#page=14
- Erridge, A. (2007). Public procurement, public value and the Northern Ireland unemployment pilot project. *Public Administration*, 85(4), 1023-1043. <https://doi.org/10.1111/j.1467-9299.2007.00674.x>
- Farhan, H. R., & Sanderson, M. (2010). User's satisfaction of Kuwait e-government portal: Organization of information in particular. In M. Janssen, W. Lamersdorf, J. Pries-Heje, & M. Roseman (Eds.), *E-Government, E-Services and Global Processes* (pp. 201-209). Springer. https://doi.org/10.1007/978-3-642-15346-4_16
- Fatile, J. O. (2012). Electronic governance: Myth or opportunity for Nigerian public administration? *International Journal of Academic Research in Business and Social Sciences*, 2(9), 122.
- Floropoulos, J., Spathis, C., Halvatzis, D., & Tsiouridou, M. (2010). Measuring the success of the greek taxation information system. *International Journal of Information Management*, 30(1), 47-56. <https://doi.org/10.1016/j.ijinfomgt.2009.03.013>
- Gable, G. G., Sedera, D., & Chan, T. (2008). Re-conceptualizing information system success: The IS-impact measurement model. *Journal of the Association for Information Systems*, 9(7), 18.
- Gartner, A. (2007). Majority of e-government initiatives fail or fall short of expectations. In *Inc's Executive Programs*. San Diego.
- Gold, A. H., Malhotra, A., & Segars, A. H. (2001). Knowledge management: An organizational capabilities perspective. *Journal of Management Information Systems*, 18(1), 185-214. <https://doi.org/10.1080/07421222.2001.11045669>
- Golubeva, A., & Merkuryeva, I. (2006). Demand for online government services: Case studies from St. Petersburg. *Information Polity: The International Journal of Government & Democracy in the Information Age*, 11(3-4), 241-254. <https://doi.org/10.3233/ip-2006-0105>
- Gong, X., Lee, M. K., Liu, Z., & Zheng, X. (2018). Examining the role of tie strength in users' continuance intention of second-generation mobile instant messaging services. *Information Systems Frontiers*, 22(1), 1-22. <https://doi.org/10.1007/s10796-018-9852-9>
- Grimsley, M., Meehan, A., & Tan, A. (2007). Evaluative design of e-government projects: A community development perspective. *Transforming Government: People, Process and Policy*, 1(2), 174-198. <https://doi.org/10.1108/17506160710751995>
- Hahn, S.-E., Sparks, B., Wilkins, H., & Jin, X. (2017). E-service quality management of a hotel website: A scale and implications for management. *Journal of Hospitality Marketing & Management*, 26(7), 694-716. <https://doi.org/10.1080/19368623.2017.1309612>
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2013). Partial least squares structural equation modeling: Rigorous applications, better results and higher acceptance. *Long Range Planning*, 46(1-2), 1-12. <https://doi.org/10.1016/j.lrp.2013.01.001>

- Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, 31(1), 2-24. <https://doi.org/10.1108/EBR-11-2018-0203>
- Hair, J. F., Sarstedt, M., Hopkins, L., & Kuppelwieser, V. (2014). Partial Least Squares Structural Equation Modeling (PLS-SEM) An emerging tool in business research. *European Business Review*, 26(2), 106-121. <https://doi.org/10.1108/EBR-10-2013-0128>
- Hair Jr., J., Black, W., Babin, B., Anderson, R., & Tatham, R. (2010). SEM: An introduction. *Multivariate data analysis: A global perspective*, 5(6), 629-686.
- Heeks, R. (2008). Benchmarking e-government: Improving the national and international measurement, evaluation and comparison of e-government. In *Evaluating Information Systems* (pp. 257-301). <https://doi.org/10.1016/B978-0-7506-8587-0.50017-2>
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115-135. <https://doi.org/10.1007/s11747-014-0403-8>
- Hirwade, M. A. (2010). Responding to information needs of the citizens through e-government portals and online services in India. *The International Information & Library Review*, 42(3), 154-163. <https://doi.org/10.1080/10572317.2010.10762860>
- Hsu, M.-H., & Chiu, C.-M. (2004). Predicting electronic service continuance with a decomposed theory of planned behaviour. *Behaviour & Information Technology*, 23(5), 359-373. <https://doi.org/10.1080/01449290410001669969>
- Ibrahim, R., Hilles, S. M. S., Muhammad Adam, S., Jamous, M. M., & Yafooz, W. M. S. (2016). Theoretical framework formation for e-government services evaluation: Case study of Federal Republic of Nigeria. *Indian Journal of Science and Technology*, 9(37). <https://doi.org/10.17485/ijst/2016/v9i37/94575>
- Ifinedo, P., & Davidrajuh, R. (2005). Digital divide in Europe: assessing and comparing the e-readiness of a developed and an emerging economy in the Nordic region. *Electronic Government, an International Journal*, 2(2), 111-133. <https://doi.org/10.1504/eg.2005.007090>
- International Telecommunications Union. (2019). *Measuring digital development Facts and figures 2019*. <https://www.itu.int/en/ITU-D/Statistics/Documents/facts/FactsFigures2019.pdf>
- Isaac, O., Abdullah, Z., Ramayah, T., & Mutahar, A. M. (2017). Internet usage, user satisfaction, task-technology fit, and performance impact among public sector employees in Yemen. *International Journal of Information and Learning Technology*, 34(3), 210-241. <https://doi.org/10.1108/Ijilt-11-2016-0051>
- Ismail, N. H., Ayub, A. F. M., & Luan, W. S. (2016). The relationship between Internet access frequency, attitudes towards the internet and internet self-efficacy and behaviour intention in using the internet among secondary school students. *International Journal of Education and Training*, 8(1), 1-8.
- Joshi, P. R., & Islam, S. (2018). E-government maturity model for sustainable e-government services from the perspective of developing countries. *Sustainability*, 10(6), 1882. <https://doi.org/10.3390/su10061882>
- Karunasena, K., & Deng, H. (2012). Critical factors for evaluating the public value of e-government in Sri Lanka. *Government Information Quarterly*, 29(1), 76-84. <https://doi.org/10.1016/j.giq.2011.04.005>
- Kavanagh, S. (2014). Defining and creating value for the public. *Government Finance Review*, 57-60.

- Kearns, I. (2004). *Public value and e-government*. Citeseer.
- Kelly, G., Mulgan, G., & Muers, S. (2002). *Creating public value*. London, Cabinet Office.
- Khan, M. L., Welser, H. T., Cisneros, C., Manatong, G., & Idris, I. K. (2020). Digital inequality in the Appalachian Ohio: Understanding how demographics, internet access, and skills can shape vital information use (VIU). *Telematics and Informatics*, 50, Article 101380. <https://doi.org/10.1016/j.tele.2020.101380>
- Kock, N., & Lynn, G. (2012). Lateral collinearity and misleading results in variance-based SEM: An illustration and recommendations. *Journal of the Association for Information Systems*, 13(7). <https://doi.org/10.17705/1jais.00302>
- Lee, J. B., & Porumbescu, G. A. (2019). Engendering inclusive e-government use through citizen IT training programs. *Government Information Quarterly*, 36(1), 69-76. <https://doi.org/10.1016/j.giq.2018.11.007>
- Li, Y., & Shang, H. (2019). Service quality, perceived value, and citizens' continuous-use intention regarding e-government: Empirical evidence from China. *Information & Management*, 57(3), 1-15. <https://doi.org/10.1016/j.im.2019.103197>
- Lin, H.-F. (2007). Measuring online learning systems success: Applying the updated Delone and Mclean Model. *Cyberpsychology & Behavior*, 10(6), 817-820. <https://doi.org/10.1089/cpb.2007.9948>
- Lowry, P. B., Karuga, G. G., & Richardson, V. J. (2007). Assessing leading institutions, faculty, and articles in premier information systems research journals. *Communications of the Association for Information Systems (CAIS)*, 20(16), 142-203. <https://doi.org/10.17705/1CAIS.02016>
- Ma, L., & Zheng, Y. (2019). National e-government performance and citizen satisfaction: A multilevel analysis across European countries. *International Review of Administrative Sciences*, 85(3), 506-526. <https://doi.org/10.1177/0020852317703691>
- Makokha, M., & Ochieng, D. (2014). Assessing the success of ICT's from a user perspective: a case of coffee research foundation. *Journal of Chemical Information and Modeling*, 53(9), 1689-1699. <https://doi.org/10.5430/jms.v5n4p46>
- Marie, T. T. (2016). Public values as essential criteria for public entrepreneurship: Water management in France. *Utilities Policy*, 40(1), 162-169. <https://doi.org/10.1016/j.jup.2016.02.005>
- Martins, J., Branco, F., Gonçalves, R., Au-Yong-Oliveira, M., Oliveira, T., Naranjo-Zolotov, M., & Cruz-Jesus, F. (2019). Assessing the success behind the use of education management information systems in higher education. *Telematics And Informatics*, 38(1), 182-193. <https://doi.org/10.1016/j.tele.2018.10.001>
- Matthew, C. O., & Monica, N. A. (2011). E-readiness assessment of enugu state, Nigeria. *Asian Journal of Information Management*, 5(1), 25-34. <https://dx.doi.org/10.3923/ajim.2011.25.34>
- Meijer, A. J. (2011). Networked coproduction of public services in virtual communities: From a government-centric to a community approach to public service support. *Public Administration Review*, 71(4), 598-607. <https://doi.org/10.1111/j.1540-6210.2011.02391.x>
- Mensah, I. K., Jianing, M., & Durrani, D. K. (2017). Factors influencing citizens' intention to use e-government services: A case study of South Korean Students in China. *International Journal of Electronic Government Research (IJEGR)*, 13(1), 14-32. <https://doi.org/10.4018/IJEGR.2017010102>
- Moore, M. H. (1995). *Creating public value: Strategic management in government*. Harvard University Press.
- Mtebe, J. S., & Raphael, C. (2018). Key factors in learners' satisfaction with the e-learning system

- at the University Of Dar Es Salaam, Tanzania. *Australasian Journal Of Educational Technology*, 34(4), 107-122. <https://doi.org/10.14742/ajet.2993>
- National eGovernment Strategies. (2019). *National eGovernment Strategies*. <https://www.negst.com.ng/index.php/about-us/a-few-words-about-us>
- Nigeria Communications Commission. (2020). *Industry Statistics*. <https://www.ncc.gov.ng/statistics-reports/industry-overview#>
- Omar K., Scheepers H., Stockdale R. (2011). eGovernment service quality assessed through the public value lens. In M. Janssen, H. J. Scholl, M. A. Wimmer, Y. Tan (Eds.), *Electronic Government (EGOV 2011). Lecture Notes in Computer Science, vol 6846*. Springer. https://doi.org/10.1007/978-3-642-22878-0_36
- Oni, A. A., Oni, S., Mbarika, V., & Ayo, C. K. (2017). Empirical study of user acceptance of online political participation: Integrating civic voluntarism model and theory of reasoned action. *Government Information Quarterly*, 34(2), 317-328. <https://doi.org/10.1016/j.giq.2017.02.003>
- Papacharissi, Z., & Rubin, A. M. (2000). Predictors of Internet use. *Journal of Broadcasting & Electronic Media*, 44(2), 175-196. https://doi.org/10.1207/s15506878jobem4402_2
- Petter, S., DeLone, W., & McLean, E. R. (2012). The past, present, and future of "IS Success". *Journal of the Association for Information Systems*, 13(5), 341-362. <https://doi.org/10.17705/1jais.00296>
- Rana, N. P., Dwivedi, Y. K., & Williams, M. D. (2013). Analysing challenges, barriers and CSF of egov adoption. *Transforming Government: People, Process and Policy*, 7(2), 177-198. <https://doi.org/10.1108/17506161311325350>
- Rao, V. R. (2018). Public services through multi-channel issues and challenges: A case from India. In M. Khosrow-Pour (Ed.), *Optimizing Current Practices in E-Services and Mobile Applications* (pp. 273-300). IGI Global. <https://doi.org/10.4018/978-1-5225-5026-6.ch014>
- Reddick, C. G. (2005). Citizen interaction with e-government: From the streets to servers? *Government Information Quarterly*, 22(1), 38-57. <https://doi.org/10.1016/j.giq.2004.10.003>
- Ringle, C., Wende, S., & Becker, J. (2015). SmartPLS 3.2. 7. SmartPLS GmbH: Bönningstedt, Germany.
- Sarstedt, M., Hair Jr, J. F., Cheah, J.-H., Becker, J.-M., & Ringle, C. M. (2019). How to specify, estimate, and validate higher-order constructs in PLS-SEM. *Australasian Marketing Journal (AMJ)*, 27(3), 197-211. <https://doi.org/10.1016/j.ausmj.2019.05.003>
- Scheerder, A., van Deursen, A., & van Dijk, J. (2017). Determinants of Internet skills, uses and outcomes. A systematic review of the second- and third-level digital divide. *Telematics and Informatics*, 34(8), 1607-1624. <https://doi.org/10.1016/j.tele.2017.07.007>
- Scott, M., DeLone, W., & Golden, W. (2016). Measuring eGovernment success: A public value approach. *European Journal of Information Systems*, 25(3), 187-208. <https://doi.org/10.1057/ejis.2015.11>
- Seddon, P. B. (1997). A respecification and extension of the DeLone and McLean model of IS success. *Information Systems Research*, 8(3), 240-253. <https://doi.org/10.1287/isre.8.3.240>
- Seifert, J. W., & Chung, J. (2009). Using e-government to reinforce government-citizen relationships: Comparing government reform in the United States and China. *Social Science Computer Review*, 27(1), 3-23. <https://doi.org/10.1177/0894439308316404>
- Shim, M., & Jo, H. S. (2020). What quality factors matter in enhancing the perceived benefits of online health information sites? Application of the updated DeLone and McLean information

- systems success model. *International Journal of Medical Informatics*, 137, Article 104093. <https://doi.org/10.1016/j.ijmedinf.2020.104093>
- Siddiquee, N. A. (2016). E-government and transformation of service delivery in developing countries. *Transforming Government: People, Process and Policy*, 10(3), 368-390. <https://doi.org/10.1108/tg-09-2015-0039>
- Sorn-In, K., Tuamsuk, K., & Chaopanon, W. (2015). Factors affecting the development of e-government using a citizen-centric approach. *Journal of Science & Technology Policy Management*, 6(3), 206-222. <https://doi.org/https://doi.org/10.1108/jstpm-05-2014-0027>
- Spreng, R. A., MacKenzie, S. B., & Olshavsky, R. W. (1996). A reexamination of the determinants of consumer satisfaction. *Journal of Marketing*, 60(3), 15-32. <https://doi.org/10.1177/002224299606000302>
- Susanto, T. D., & Aljoza, M. (2015). Individual acceptance of e-Government services in a developing country: Dimensions of perceived usefulness and perceived ease of use and the importance of trust and social influence. *Procedia Computer Science*, 72, 622-629. <https://doi.org/10.1016/j.procs.2015.12.171>
- Talbot, C., & Wiggan, J. (2010). The public value of the National Audit Office. *International Journal of Public Sector Management*, 23(1), 54-70. <https://doi.org/10.1108/09513551011012321>
- Teo, T. S., Srivastava, S. C., & Jiang, L. (2008). Trust and electronic government success: An empirical study. *Journal of Management Information Systems*, 25(3), 99-132. <https://doi.org/10.2753/MIS0742-1222250303>
- Try, D. (2007). "Mind the gap, please" Using public value theory to examine executive take-up of results-based management. *International Journal of Productivity and Performance Management*, 57(1), 22-36. <https://doi.org/10.1108/17410400810841218>
- Try, D., & Radnor, Z. (2007). Developing an understanding of results-based management through public value theory. *International Journal of Public Sector Management*, 20(7), 655-673. <https://doi.org/10.1108/09513550710823542>
- United Nations. (2018). *United Nations E-Government Survey 2018: Gearing E-Government to support transformation towards sustainable and resilient societies*. <https://doi.org/10.18356/d54b9179-en>
- Urbach, N., & Müller, B. (2012). The updated DeLone and McLean model of information systems success. In Y. K. Dwivedi, M. R. Wade, & S. L. Schneberger (Eds.), *Information systems theory* (pp. 1-18). Springer. https://doi.org/10.1007/978-1-4419-6108-2_1
- Van der Heijden, H. (2004). User acceptance of hedonic information systems. *MIS Quarterly*, 28(4), 695-704. <https://doi.org/10.2307/25148660>
- Veeramootoo, N., Nunkoo, R., & Dwivedi, Y. K. (2018). What determines success of an e-government service? Validation of an integrative model of e-filing continuance usage. *Government Information Quarterly*, 35(2), 161-174. <https://doi.org/10.1016/j.giq.2018.03.004>
- Verba, S., Schlozman, K. L., & Brady, H. E. (1995). *Voice and equality: Civic voluntarism in American politics*. Harvard University Press. <https://doi.org/10.2307/j.ctv1pnc1k7>
- Wang, F. (2009, August 6-9). Personal influence on citizens' utilization of government information: An Empirical Study. In *15th Americas Conference On Information Systems (AMCIS 2009)*; p. 563. <http://aisel.aisnet.org/amcis2009/563/>
- Wang, F., & Chen, Y. (2010). From potential users to practical users: Use of e-government service by Chinese migrant farmer workers. In *4th International Conference On Theory And Practice Of Electronic Governance (ICEGOV 2010)*; pp. 279-287). Association for Computing Machinery. <https://doi.org/10.1145/1930321.1930380>

- Wang, L.-Y.-K., Lew, S.-L., Lau, S.-H., & Leow, M.-C. (2019). Usability factors predicting continuance of intention to use cloud e-learning application. *Heliyon*, 5(6), Article E01788. <https://doi.org/10.1016/j.heliyon.2019.e01788>
- Wang, Y.-S., & Liao, Y.-W. (2008). Assessing eGovernment systems success: A validation of the DeLone and McLean model of information systems success. *Government information quarterly*, 25(4), 717-733. <https://doi.org/10.1016/j.giq.2007.06.002>
- Wangpipatwong, S., Chutimaskul, W., & Papisratom, B. (2009). Quality enhancing the continued use of e-government web sites: Evidence from e-citizens of Thailand. *International Journal of Electronic Government Research*, 5(1), 19-35. <https://doi.org/10.4018/jegr.2009092202>
- Widiyanto, N., Sandhyaduhita, P. I., Hidayanto, A. N., & Munajat, Q. (2016). Exploring information quality dimensions of government agency's information services through social media: A case of the Ministry of Education and Culture in Indonesia. *Electronic Government, an International Journal*, 12(3), 256-278. <https://doi.org/10.1504/EG.2016.078421>
- Wu, B. (2018). Patient continued use of online health care communities: web mining of patient-doctor communication. *Journal of Medical Internet Research*, 20(4), Article e126. <https://doi.org/10.2196/jmir.9127>
- Yakubu, N., & Dasuki, S. (2018). Measuring e-learning success in developing countries: Applying the updated Delone And Mclean model. *Journal of Information Technology Education: Research*, 17(1), 183-203. <https://doi.org/10.28945/4077>
- Zaidi, S. K. R., Henderson, C. D., & Gupta, G. (2017). The moderating effect of culture on e-filing taxes: Evidence from India. *Journal of Accounting In Emerging Economies*, 7(1), 134-152. <https://doi.org/10.1108/jaee-05-2015-0038>
- Zeleti, F. A., & Mustonen-Ollila, E. (2011). ICT education and wider access of citizens to icts as means to generate and distribute e-government content. In *11th European Conference on E-government*. https://www.researchgate.net/publication/259192864_ICT_Education_and_Access_Strategies_to_Generate_and_Distribute_e-Government_Content

Malaysian State Sports Schools Football Coaching Process Key Themes Development: Constant Comparison Method in Data Analysis

Ramesh Ram Ramalu*, Zulakbal Abd Karim and Gunathevan Elumalai

*Department of Coaching Science, Faculty of Sports Science and Coaching, Universiti Pendidikan Sultan Idris,
35900 Tanjong Malim, Perak, Malaysia*

ABSTRACT

This study compares the Malaysian coaching process's key development themes with Cote and Gilbert's (2009) Effective Coaching Model in Malaysian football development. The participant selection is based on purposive sampling involving fourteen head coaches from State Sports Schools throughout Malaysia. In addition, an in-depth semi-structured interview with open-ended questions was carried out and analysed following Glaser and Strauss's constant comparative method (1967). Based on the analysis, the following seven new development themes have emerged in the context of the Malaysian coaching process as compared to Cote and Gilbert, Effective Coaching Model: i) signature coaching, ii) risk management, iii) fun elements, iv) empowerment, v) spirituality, vi) life skills and vii) coaching intervention. Subsequent exploration is recommended to identify how this knowledge is integrated into the coaching process and applied in the Malaysian football development program.

Keywords: Coaching process, effective coaching, football, key development themes

ARTICLE INFO

Article history:

Received: 08 March 2021

Accepted: 05 August 2021

Published: 15 September 2021

DOI: <https://doi.org/10.47836/pjssh.29.3.04>

E-mail addresses:

ramesh@mbsskl.edu.my (Ramesh Ram Ramalu)

zulakbal@fsskj.upsi.edu.my (Zulakbal Abd Karim)

gunathevan@fsskj.upsi.edu.my (Gunathevan Elumalai)

* Corresponding author

INTRODUCTION

The Football Association of Malaysia (FAM) has always been of great importance to the development of young players for the future of football in Malaysia. Since the 1980s, various development programs have been developed and implemented. These programs are continuously being strengthened and revised to suit the prevailing conditions (Holmes, 2018). Football is

regulated at the grassroots level, along with the Football Association of Malaysia (FAM), the Ministry of Youth and Sports (KBS), the National Sports Council (MSN) and the Ministry of Education of Malaysia (KPM), by producing a program known as the National Football Development Program (NFDP; Karim & Razak, 2018). The NDP aims to create an organised and systematic framework for football development to increase the quantity and standard and create great national football teams.

The mission of FAM is to have a power structure with the requisite consistency for many players who are technically, tactically, physiologically and psychologically capable (Kassim & Che Ali, 2015). It is estimated that there are currently almost 23,000 trainees in 123 centres or academies around the country. Thus, it covers trainees aged 7 to 17, taught by 1,025 full-time and part-time coaches. Nevertheless, the goal of the NFDP was to hit 55,000 trainees by 2020 (Karim & Razak, 2018). It is also controversial to look at these 55,000 trainees' effects if the coaching process is inefficient. Coach development is a primary concern, according to Kassim and Boardley (2018), to set up national standard support for coach education before the organised framework of preparing trained coaches. It is meant to build consensus for the national standard for coaching teaching before the comprehensive structure for the preparation of qualified coaches. In every learning and development scheme, the primary factor in the coaches' quality is more important than a good syllabus, standardised coaching

process, special equipment or state-of-the-art venue (Crawford et al., 2017).

The current study examines all the ingredients of success or key development themes practised by head coaches directly involved with the football development under the NFDP program. The study is also to see whether the findings of these key development themes are in line with the other models of effective coaching process that are widely used in other sports (Fairs, 1987; Franks et al., 1988; Sherman et al., 1997; Lyle, 2002). However, according to Kassim (2014), although all these models have real advantages, but almost all coaching processes do not lead to different environmental perspectives. Although this research referred to many models, the attention is more focused on the Effective Coaching Model of Cote and Gilbert (2009) to look at the similarities and differences from an external perspective. Cote and Gilbert (2009) developed a framework for coaching effectiveness that takes into account the reasons listed above and gives insight into the key components that should be in place for effective coaching: i) the knowledge of coaches; ii) the outcomes of athletes, and iii) the context of coaching. Based on the definition of effective coaching by Cote and Gilbert (2009), it is important to consistently utilise the knowledge of coaches to enhance the confidence, competence, connections and character of athletes given the basic characteristics of a sports background, such as goals, age group, and coaching domain (Cote & Gilbert, 2009; Flett et al., 2016). Philosophy is needed to

move the field forward, which clarifies how coaches dynamically communicate with the learning situations they experience, effectively implement and create information that incorporates and alters their current biography as a whole and links it to situated behaviour.

From the gap study stated by researchers from abroad and within the country, whether the existing development themes in the football development program include the needs of current Malaysian coaches coaching perspective. This study's gap became strong when the NFDPP, undergoing the first phase of development 2014-2020, failed to qualify for the 2019 FIFA Under-17 World Cup, the first vision of the key performance index (KPI). After NFDPP failed in its first hurdle of reaching the 2019 FIFA Under-17

World Cup, the program was called into question what and where it should go from now ("Teong Kim earns", 2018). Therefore, this study aims to gather more information and identify the differences between the coaching process key themes in Malaysian football development with Cote and Gilbert's (2009) effective coaching model. Thus, this framework (see Figure 1) represents the overall direction of this study guided by the literature review and research methodology in answering the research question.

METHODS

The qualitative methodology allowed interviews to be richly descriptive (Creswell, 2014; Lebar, 2014). The data confirmed the resulting findings of usually replicated

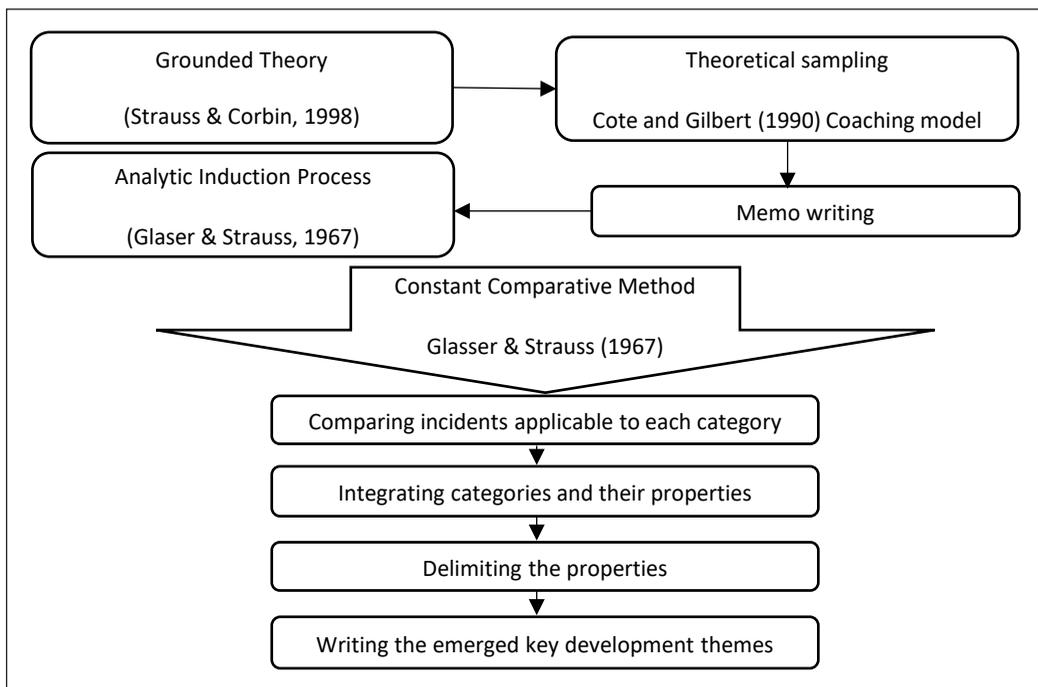


Figure 1. Represents the conceptual framework of the study

patterns. This researcher wants a richer and more descriptive understanding of the recognition and commitment of information in coaching practice to help explain this choice for a qualitative methodology and illustrate in the phase they require. Qualitative analysis methodology needs to be compared with its polar opposite methodology. By defining the 'Grounded Theory' analysis method as the configuration of a theory based on the data gathered, Neuman (2006) concurs with such an interpretation. The researcher concludes that a qualitative approach to Grounded Theory methodology will help serve this research study.

Participants and Sampling

There are fourteen Malaysian State Sports School which undergoing football training for those under 16 and 18. Approximately these fourteen schools were provided with two to three coaches, including the head coach and two assistant coaches. Considering that the head coach is the decision-maker in designing every football development program at the State Sports School, participants are all the head coaches recruited. Therefore, the researcher was driven, specifically from a participant recruiting perspective, by stratified purpose sampling with the combination of theoretical sampling techniques as suggested by Patton (2002) and Strauss and Corbin (1990). To identify and choose information-rich cases related to the phenomena of interest, at first, the researcher guided by stratified

purposive sampling chooses his individuals as part of his analysis. Strauss and Corbin (1990) define theoretical sampling as the data collection method for producing theory; thus, the researchers gathered codes and analyses and chose which data to collect next to reinforce the theory as it appears. Therefore, the research starts with purposeful sampling and analysis of the following data collection phase with the sample the phenomenon arises and where the theoretical sampling begins.

Sampling Procedure

Fourteen state sports schools are divided into five zones to launch this sampling process. Peninsular Malaysia has four regions: the north coast (Perlis, Penang and Kedah), the south coast (Johor, Melaka and Negeri Sembilan), the east coast (Pahang, Terengganu and Kelantan), the west coast (Perak, Selangor and Kuala Lumpur) and East Malaysia (Sabah and Sarawak). After classifying all state sports schools into five regions, the researcher arbitrarily decided to schedule an open-ended semi-structured data collection interview. The data collection analysis occurs concurrently, iteratively, under Glasser and Strauss's (1967) principle, and the continuous comparison of new data with previous data occurs during the theoretically guided data collection following the initial purposive selected participants. Theoretical sampling is employed until theoretical saturation is reached.

Instruments

In this research, the methodology for gathering data was an in-depth semi-structured interview with an open-ended question format. The interview process met Spradley (1979) suggested guidelines for ethnographic interviews. The interview's content validity certification is carried out according to standard qualitative analysis techniques Sarmiento et al. (2014). After the review and discussion of previous transcript versions, certification of the material quality of the interview must be performed in full based on the following steps: i) preparation of the first edition of the transcript based on the particular objectives of the study, as well as review of the literature; (ii) my second and third author's evaluation of interview transcripts with thorough experience in semi-structured interview methods, (iii) confirmation of five experts for interview techniques and verification of the coefficient of Cohen (1968), (0.953 is an outstanding reliability value), (iv) reformulation based on feedback submitted to the second and third reviewers, v) a pilot study undertaken with my authors with government school coaches accredited by FAM vi) adaptation of the transcripts resulting from the reflection of the pilot study, vii) resubmission to my other two authors of this version of the transcripts. It finally culminated in the final version of the interview guide.

Data Collection and Analysis

These fourteen head coaches were interviewed over eight months at mutually convenient locations. The research participants were briefly informed about

the purpose of the study, the risks, and the protection of the study conducted. At the same time, they are allowed to ask questions before signing the consent form. Participants were given opportunities to study the guide before engaging in the interview. Interviews ranging from 70 to 105 minutes were performed, and the digital file was later transcribed verbatim to be analysed according to evolved grounded theory (Corbin & Strauss, 2015). The researcher uses the constant comparative method to establish concepts from the data through coding and interpretation at the same time (Taylor & Bogdan, 1998). The constant comparative method combines theoretical sampling with systematic data collection, coding and analysis to develop an integrated, data-driven theory expressed in a form that is sufficiently clear for further testing (Glaser & Strauss, 1967).

There are four steps of constant comparative methodology: i) comparing incidents applicable to each category, ii) integrating categories and their properties, iii) describing the theory, and iv) writing the theory. The researcher constantly sorts through the data collection, analyses and codes the knowledge during the four phases of the constant comparative method and enhances the theory generation through the theoretical sampling process. The advantage of using this approach is that the analysis starts with raw data; a substantive hypothesis will emerge from continuous comparisons. On the other hand, grounded theory is a labour-intensive assignment that allows the researcher to study data collection processes.

RESULTS

Based on the analysis, the following seven new elements have emerged in the context of the Malaysian coaching process as compared to Cote and Gilbert, Effective Coaching Model: i) signature coaching,

ii) risk management, iii) fun elements, iv) empowerment, v) spirituality, vi) life skills and vii) coaching intervention. Table 1 below shows some of the key themes that exist from the results of block codes from the interview.

Table 1
Key development themes that emerged from the interview

Signature coaching	<ul style="list-style-type: none"> - Many coaches mentioned that the recipe for success depends on how a coach uses their coaching techniques. Expertise will only be gained with existing experience as a player or coach. (MB7) - Coach Sir Alex Ferguson has his coaching style, while Coach Pep Guardiola follows his coaching style. Each has its coaching style that determines success. (MB2) - The success of a coach depends on the planning according to their respective coaching style expertise. - Most successful coaches have their coaching ingredients learned from existing experience. - The coaching strategy expertise for each coach varies. Each has its way or recipe to take the individual or team to a higher level. (MB1) - When switching to another team, some coaches are carried away by their coaching formula, and the results are still thriving. (MA1) - In coaching program planning, implementing a coach's signature style or formula is one of the features that can produce results when correctly used according to their philosophies. - I am a coach who wants all players to follow my pattern even in desperate situations. Maybe I am a selfish person, but I have a reason for using this coaching style. (MB4) - The democratic style coaching system is an option because it believes it is the most appropriate for a development football team. This coaching style can be discussed with the players at the same time. Coach instructions as well need to be followed. (MB1, MB3, MB6, MB7) - The players' maturity varies with each age; all three coaching styles are more systematic in football development programs. (MB2, MA1, MA2, MB5)
Fun element	<ul style="list-style-type: none"> - To learn effectively, young players must enjoy what they are doing and enjoy variance in their preparation and be forced to overcome various on-the-field situations. (MA1) - Some coaches expressed some acknowledgement that kids consider game-like activities to be more fun than many of the drills they have used. However, they also kept a conviction that these drills must be completed. - I can notice signs that these athletes' understanding is greatly increased, which helps me apply in a football match. (MB6) - Many athletes who apply fun tend to defy the odds and do not fear failure because they love the challenge and feel and experience a deep bond. - Honestly, in my observation, when there is an element of fun in the training program, it helps my players mentally and physically. (MB3) - When I give the flexibility so that my players feel happy while in this training session, I make a fun game. We can see a total transformation in terms of their positive character among players. (MB6)

Table 1 (*continue*)

Risk management	<ul style="list-style-type: none"> - I am already familiar with the problem of infrastructure facilities and sports equipment in this school, but I take this problem as a positive lesson as a challenge that I have to face in my coaching process. (MB6) - I do not care much about the existing sports facilities. I am just worried that this constraint's consequences can cause serious injuries to players that can impede individual and team performance. (MA1) - A risk that happens to the player is not necessarily due to unsatisfactory basic facilities, but sometimes it can happen due to the athlete's negligence. So, as a coach, I need to be sensitive to all the knowledge of whatever risks our players face at any time and act according to need. (MB2) - Aware of the high risk of injury in sports due to outdated sports equipment. I always monitor all sports equipment as safe to use with Quarter Master boys' help to inspect the equipment carefully and report to me about any damage. (MB3)
Empowerment	<ul style="list-style-type: none"> - As a coach, we cannot show our players that we are like iron nails instead of giving space to their opinions and expressing what they feel. (MA1) - At the beginning of my coaching, I was a coach who adhered to 'follow my order and no question asked.' But over time, I saw my team seem to be playing with a movement that controlled. I realised this and started giving the players a little freedom and power to make rational decisions. (MB5) - I often instruct my players to follow the game pattern I set before the competition, but I also give them the flexibility to make their own decisions in certain situations. This method has a good effect, probably because it does not feel controlled during the game. (MA2) - If athletes have never been granted power as they have only been provided with the coach's information and answers, they may be unable to accept this burden of power. (MA2) - The position of coaches is vital in enforcing empowerment because of their inability to let their power move on. Coaches will feel like they are not doing their job by not taking responsibility and not explicitly giving the athletes information. Like they are deprived of the 'strength' of the position of coaches. (MB3) - I have my reasons why I give limited freedom to my players. In this development program, the maturity process of these high school students is still below the benchmark unless they have entered the level of elite players because most players use different coaching style methods. (MB4) - Senior players aged 18 years and below who choose to make decisions or empower are more independent than players among 14 years and below. It may be due to the relatively extensive exposure to training and football competitions. While the players are under 16 years, the power is limited because the maturity to master a skill is still unclear (most coaches).
Spirituality	<ul style="list-style-type: none"> - Even if we practice day and night hard, sometimes luck also plays a role. That is why the element of divinity, the ritual that gives inner strength before starting an activity. (MB2) - Even if we prepare to face the opponent after going through excellent preparation, it still depends on the power of God. If he wants to give us victory, be thankful. If we lose even after playing brilliantly, I accept with an open heart. (MB6) - One of the main factors that help me overcome this attitude problem is the religious values we apply from time to time. (MB7) - Because my Sports School is a Cluster School of Excellence, my selected players are among the players who have good academic performance. These selected players of mine do have a high level of discipline. It may be because they are very vulnerable to many religious programs. (MA1)

Table 1 (continue)

	<ul style="list-style-type: none"> - This spiritual value has become a common practice in my coaching process. It is very much related to my players' discipline and behaviour. (MA1) - Making sports a career, physical, mental and spiritual preparation is necessary to be confident when competing. To achieve goals, physical interests are paramount but mental skills also need to be given attention. (most coaches)
Life skills	<ul style="list-style-type: none"> - As the head coach of football in the development program, my goal is to hone and produce quality players while producing skilled workers handling the best life. I would like to see my players succeed in life, not necessarily as football players but also in various aspects. (MB3) - I am also proud to meet my former players everywhere outside the school area who have become police officers, firefighters, some who are government employees, and some who are businessmen. Despite not being a professional player but successful in life and becoming a successful human being is also a big achievement. It is one of my goals and satisfaction as a coach. (MB3) - Shaping the players not only as quality players but also shaping their personality towards becoming successful students in the future. (MA1, MA2, MB2, MB5) - It is impossible to produce all A-grade players and some after completing form five to continue their studies at college or university. No less, some continue to work after form five due to a lack of interest in continuing their studies. What they learned while participating in this football development program will help them develop for future undertakings. (MA2) - I always have the support of my former players who are married and working now. They always come to school to help me financially to form the sports infrastructure of the school area. So I feel like it is not in vain what I thought for five years under my coaching program produced results, where the values of life taught made them useful human beings. (MB5) - Although originally our intention in the development program was to form professional players, our goals may sometimes be less successful due to unavoidable factors. However, I feel that with the application of personality formation and the teaching of these good human values, either helping a player in self-improvement in playing career or those less fortunate as a football player will succeed in daily life as a successful and useful human being. (MB2)
Coaching intervention	<ul style="list-style-type: none"> - Improvement can happen at any time, anywhere according to the objective needs of a coach. Sports coaches are responsible for improving various player results, including developing the technical and tactical skills needed to perform or play the game. (MA1) - I will often monitor the needs of this intervention either during training or in the actual game. It depends on the situation of need. During the training, the intervention is maintained mainly by adapting and altering training activities based on the diagnosis made on the teams' results and the opposing teams. (MB6) - In my coaching program, the intervention often takes place through meetings that are collective, individual or in small groups. (MA1) - Usually, a week before the competition, we will adjust to the training exercises depending on the characteristics of the opposing team. I will try to improve on the weaknesses that exist during training from the results of the strengths available to the opposing team. (MB6) - Sometimes, I have to make a lot of changes when facing a team that we first played. (MB1) - We use other strategies, such as the fact that we have a designated player that also uses to relay information to reach out to their teammates, instant input, and gestures. (MA2)

Table 1 (*continue*)

- Of course, we in the development program want to see an improvement in the achievement of these football athlete's day by day. Even though we achieved the Key Performance Indicator (KPI) that year, we still improve all the program's weaknesses throughout the program. We need to plan a more challenging Key Performance Indicator to achieve next year. (MA1)

Often, as a result of monitoring and observation by other coaches and me, we can assess existing weaknesses. (MB1)

DISCUSSION

The main objective of this comparative study is to identify the differences in the effective coaching process from the perspective of Malaysian culture compared to developing countries in the major developmental issues of football. While the fundamental components of an effective coaching process are the same in the coaching theory, the elements that distinguish coaching culture often play an important role in ensuring that a coaching process is effective in a football coaching program (Kassim & Boardley, 2018). This argument is also confirmed by Lecrom and Dwyer (2013), in which cultural understanding is a phase of being appreciative and sensitive to cultural values, behaviours, lifestyles, practices and problem-solving. When individuals and organisations have come to this awareness to become more culturally sensitive, many find focused and personalised ways to obtain exposure to other cultures.

Researchers chose a comparison with Effective Coaching Model Cote and Gilbert (1990) on many factors across the suggested literature; including the International Council for Coaching Excellence and Association of Summer Olympic International Federations (ICCE & ASOIF; 2012), firmly endorsing

those coaching models as it is directed by several researchers as well as in the International Sport Coaching System (ISCF). Furthermore, any developed nations, such as the United States of America (USA), European countries, Japan, Poland and India, have been seen to have adopted ISCF standards for sports development in their respective countries. In reality, the International Golf Federation and the Professional Golfers Alliances (PGA Alliances) have tailored it to the particular needs of the International Golf Coaching System (IGCF) for golf coaching other than football (Kubischta, 2018).

The results show that there are seven new elements were emerged in the context of the Malaysian coaching process as compared to Cote and Gilbert, Effective Coaching Model: i) signature coaching, ii) risk management, iii) fun elements, iv) empowerment, v) spirituality, vi) life skills and vii) coaching intervention. Cote and Gilbert's basic definition of the Effecting Coaching Model is the consistent implementation of integrated professional, interpersonal, and intrapersonal knowledge to strengthen athletes the competence, confidence, connection, and character in specific coaching contexts. However, this

model is illustrated in the diagram to enable the reader understand better (refer to Figure 2). Referring to the Cote and Gilbert (2009) model of effective coaching, it is found that most of the elements in this model emerged from the findings in this study; although the use of the elements is different it leads to the same meaning. However, seven elements are quite different from this model that appear according to Malaysian football development. Although it looks different, there is a possibility that the meaning inherent in this data is overlapping with the meaning stated in this model. Among them

is signature coaching, where each coach has a different coaching style, and it depends on the training pattern learned. At the same time, they are athletes or the result of long coaching experience with the development football team. Most successful coaches have their coaching ingredients learned from existing experience. As most coaches said, the signature coaching style required players to clearly express and clarify certain thoughts or actions of coaching style preferences. The athlete's detailed description of the desired form of coaching conduct was of considerable significance.

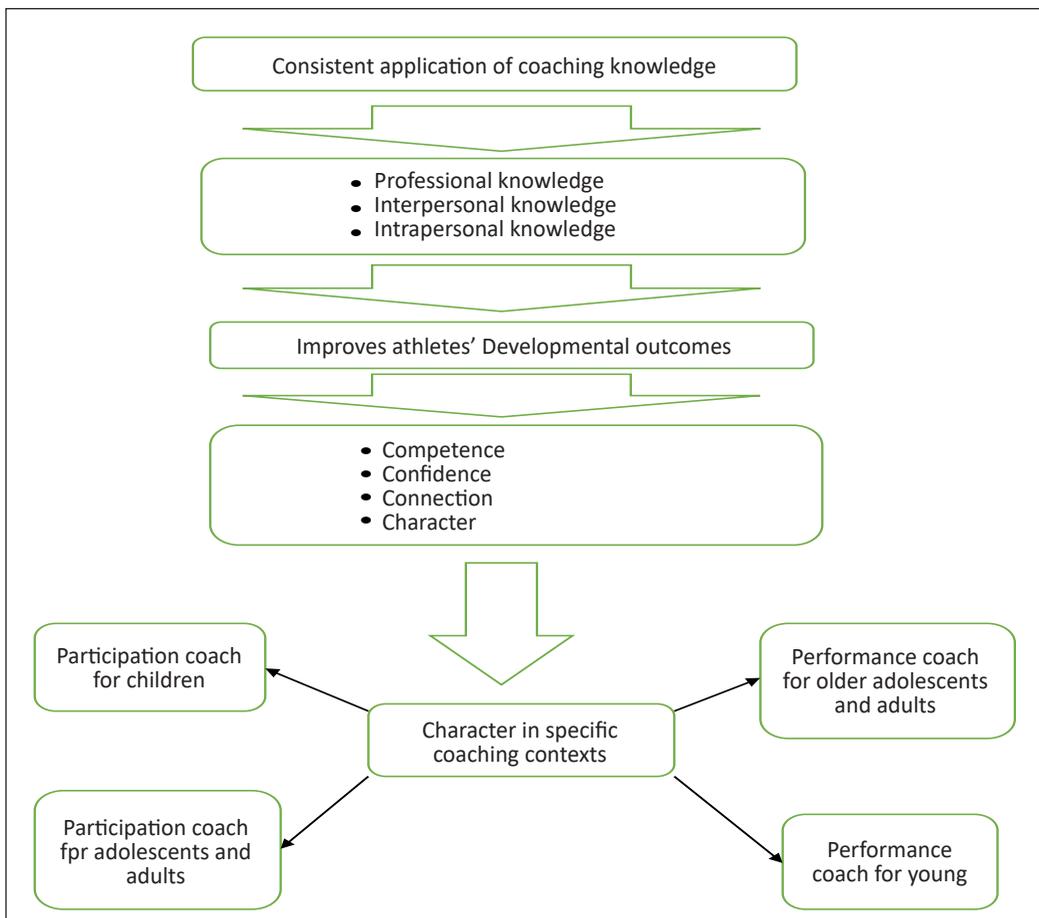


Figure 2. Adopted from Cote & Gilbert Effective Coaching Model (2009)

With more insight into the perceptions of the football player, their favourite signature coach is best appreciated. The greater the awareness, the greater the chance to apply trademark coaching style habits in practice sessions and competition (Carson & Walsh, 2019). Football coaches can be better informed and optimally prepared to pursue the most efficient coaching style. It can be done by reflecting on the aspects that influence football coaches' expectations regarding players' contact with their coach and overall interest in football.

Apart from the signature coaching style, designing football coaching development programs such as fun elements become a priority in teaching periodisation. Most coaches understand that to learn successfully, and young players need to enjoy what they are doing. This young player has to enjoy differences in their preparation and be challenged to overcome many situations on the field. For starters, modified the rules every four to five minutes in small-sided games to encourage players to focus on the field themselves and produce good results. If young athletes are not having fun, they will eventually walk away, regardless of their talent or how good their team or coach is (Visek et al., 2018). In the Cote and Gilbert model, there is mention of implementing the element of fun in coaching; however, it leads to sports coaching for participants who participate in leisure activities. Although the coaches in this study stated that the fun element in coaching should be applied in every coaching activity, even though these players are from the age of 13 to 17 years,

this development program's preparation leads to the preparation of performance athletes.

As athletes age and gain experience in training and skills, shifting from basic movements to physical fitness and from exploration of activity or sport to success, it becomes a crucial necessity for them to be able to spend vast quantities of time and considerable amounts of sweat equity in sport (Visek et al., 2018). As these coaches agree, most often, those, who have not developed a fun foundation quickly get disengaged. Hence, in the early stages of their sports growth, they experienced fun and joy in the sport. That fun was nurtured, designed and given the importance that these athletes become resilient moving from the inevitable defeats, errors and losses in the sport. Many athletes who apply fun tend to defy the odds and do not fear failure because they love the challenge and feel and experience a deep bond. They stay due to having fun, trying mastery, and performing at the best personal levels (Cote & Gilbert, 2009).

The coaches involved in this development program should also be exposed to risk management knowledge in sports. This knowledge is often not revealed when this coach attends a short course organised by NFDP and may even be completely unaware of the importance of risk management. By incorporating appropriate monitoring practices and staying up to date with developments in the external world, coaches may reduce their programs' risk. As a result, coaches have a strong

view of their teams' prospects. It will help coaches minimise possible risks while training their teams to play and is crucial to their successful development (Haag et al., 2016). The main criterion mentioned in the Cote and Gilbert model is that a coach needs to have specific knowledge in coaching. Although risk management knowledge can be categorised as specific knowledge, it is not highlighted in the model's description. Most likely, this risk management knowledge factor is basic knowledge that must be applied in western countries. While in the Malaysian perspective, the coaches see it as something beneficial for the development of sports, especially football.

Apart from risk management, another key development themes mentioned by the coaches in this study are empowerment. That is an athlete-centred approach that encourages a sense of self and offers athletes a role in decision-making and collaborative learning approaches (Solstad et al., 2018). Empowerment also enables athletes to believe that their thoughts are valued and motivates them to shoulder the responsibility for their development in success, which will create a larger degree of motivation (Solstad et al., 2018). This study also believe that coaching style plays a significant role in improving a sport's quality in the development program. As a result of this research, it is found that the internal psychological factors of the player's expectation, such as giving a little freedom in making decisions under this development program, should also be given attention. According to Solstad et al.

(2018), empowerment can be categorised in coaching leadership style under the scope of coaching philosophy. In the summary of the Cote and Gilbert models, this coaching philosophy has to do with interpersonal and intrapersonal knowledge. However, in this study, this key development becomes a priority in the coaching process.

According to Cote and Gilbert's model, there is an element of confidence that a person places in his or her ability to perform a particular task to achieve a particular outcome successfully. For the opinion given by the coach in this study, to strengthen the element of confidence in a person, the element of spirituality is very important in universal human life. According to Malaysian culture, the average student equivalent player has a moderate academic qualification. The study also found that athletes with less academic exposure have a negative attitude towards the behaviour. The only key development theme that can help overcome these players' attitudes is through beliefs and demands on religion (Nik Abdullah et al., 2015). Therefore, applying spirituality is very appropriate in the players' needs, especially in the Malaysian development program. The need for spirituality has to be standardised to plan coaching development programs to align with the coaches' opinions.

The importance of life skills in teaching and learning is also a priority in this study's findings. The coach realises that not all trained players can be excellent players and absorbed in the national or Malaysian League team. Of course, some drop out,

and these coaches hope that the learning resulting from the coaching program for five years should be used properly to become valuable human beings. These coaches want to see the life skills learned during this coaching to succeed even in different fields. It is one of the outcomes of the development program that is the hope of every coach. On the other hand, looking at the Cote and Gilbert model, there is a mention of the connection element in the outcome study's scope. The connection element may carry deep meaning, but it leads to a relationship between the athlete and the coach. In comparison, the coaches in this study want to see how these life skills can form athlete relationships with each community that can be a factor in their success.

The last key development theme to be mentioned in this study is coaching intervention. Looking at the effective coaching model of Cote and Gilbert, it is not called a cyclic model. Maybe Cote and Gilbert want to show coaching effectiveness according to the group context, which varies according to the coaches' needs. Instead, in this study, researchers want to see effective coaching in this coaching process in cyclic form. Since this development program is term, each program result has weaknesses and improvements. Therefore, the study results show that it is necessary to implement a coaching intervention plan during the offseason. Only in this way it can evaluate the trial and error of the effectiveness of a program for the future (Cote & Gilbert, 2009).

In conclusion, it is common for a sports organisation to refer to a coaching model as a guide in a coaching program. The coaching model that is the reference is also the result of the findings of past studies. This model may be closely related to the method of study in certain countries. Although a past coaching model can be used as a basis in a coaching program, according to the study, each country's coaching culture has different influences according to the developmental pattern of an individual in different community groups. Therefore, researchers would like to see the differences between the existing key development themes by comparing the Cote and Gilbert Models. The results of this study are intended to offer feedback to the Football Association of Malaysia (FAM) and the National Football Development Program (NFDP) so that all of the findings may be incorporated into the football coaching curriculum under the development program. This finding is also expected to help all coaches involved in football development understand the development themes in the Malaysian culture to be absorbed in their coaching process.

ACKNOWLEDGEMENT

The authors would like to thank the anonymous participants for their cooperation and time in providing the researcher with all the needed information.

REFERENCES

Carson, F., & Walsh, J. (2019): Are we there yet? A signature pedagogy for sports coaching. *Annals*

- of Leisure Research*, 24(2), 1-7. <https://doi.org/10.1080/11745398.2019.1672570>
- Cohen, J. (1968). Weighted Kappa – a nominal scale agreement with provision for scaled disagreement or partial credit. *Psychological Bulletin*, 70(4), 213-220. <https://doi.org/10.1037/h0026256>
- Corbin, J., & Strauss, A. (2015). *Basics of qualitative research*. Sage.
- Cote, J., & Gilbert, W. (2009). An integrative definition of coaching effectiveness and expertise. *International Journal of Sports Science and Coaching*, 4(3), 307-322. <https://doi.org/10.1260/174795409789623892>
- Crawford, A., Zucker, T., Horne, B. V., & Landry, S. (2017). Integrating professional development content and formative assessment with the coaching process: *The Texas School Ready Model, Theory into Practice*, 56(1), 56-65. <https://doi.org/10.1080/00405841.2016.1241945>
- Creswell, J. W. (2014). *Research design: Qualitative, quantitative and mixed methods approaches* (4th ed.). Sage.
- Fairs, J. R. (1987). The coaching process: The essence of coaching. *Sports Coach*, 11(1), 17-19.
- Flett, M. R., Carson Sackett, S., & Camire, M. (2016). Understanding effective coaching: Antecedents and consequences. In R. Thelwell, C. Harwood, & I. Greenlees (Eds.), *The psychology of sports coaching: Research and practice* (pp. 156-169). Routledge. <https://doi.org/10.1080/21640629.2018.1459356>
- Franks, I. M., Sinclair, G. D., Thompson, W., & Goodman, D. (1988). Analysis of the coaching process. *Science Periodical on Research and Technology in Sport*, January, 1-12.
- Glaser, B., & Strauss, A. (1967). *The discovery of grounded theory*. Aldine Publishing Co.
- Haag, T.-B., Mayer, H. M., Schneider, A. S., Rumpf, M. C., Handel, M., & Schneider, C. (2016). Risk assessment of back pain in youth soccer players. *Research in Sports Medicine*, 24(4), 395-406. <https://doi.org/10.1080/15438627.2016.1222275>
- Holmes, B., (2018, December 10). Business of sports: Putting Malaysian football back on the road. *The Edge Malaysia*. <https://www.theedgemarkets.com/article/business-sports-putting-malaysian-football-back-road>
- International Council for Coaching Excellence and Association of Summer Olympic International Federations. (2012). *International Sport Coaching Framework*. Human Kinetics. https://www.icce.ws/_assets/files/news/ISCF_1_aug_2012.pdf
- Karim, Z. B. A., & Razak, N. (2018). Lesson learned from coaches of Malaysia National Football Development Program (NFDPP): Preferred career development pathway and accredited coaching course. *International Journal of Academic Research in Business and Social Sciences*, 8(6), 1069-1082. <https://doi.org/10.6007/IJARBS/v8-i6/4302>
- Kassim, M. (2014). Towards the reflective football coach from qualitative analysis. *Journal of Human Sport & Exercise*, 9(Proc1), 249-256. <http://doi.org/10.14198/jhse.2014.9.Proc1.06>
- Kassim, M., & Boardley, I. (2018). ‘Athletes’ perceptions of coaching effectiveness and athlete-level outcomes in team and individual sports: A cross-cultural investigation. *The Sport Psychologist*, 32(3), 189-198. <https://doi.org/10.1123/tsp.2016-0159>
- Kassim, M., & Che Ali, N. R. (2015). An effective coaching through “coaching model”. *Journal of Scientific Research and Development*, 2(13), 158-164.
- Kubischta, F. (2018). The coach development framework for the International Ice Hockey Federation [Doctoral thesis, University of Applied Sciences, Haaga-Helia]. <https://www.theseus.fi/handle/10024/156802>

- Lebar, O. (2014). *Penyelidikan kualitatif: Pengenalan kepada teori dan metod Edisi Keempat* [Qualitative research: An introduction to theory and methods Fourth Edition]. Penerbit Universiti Pendidikan Sultan Idris.
- Lecrom, C. W., & Dwyer, B. (2013). Plus sport: The impact of a cross-cultural soccer coaching exchange. *Journal of Sports for Development*, 1(2), 1-16.
- Lyle, J. (2002). *Sports coaching concepts: A framework for coaches' behavior*. Routledge.
- Neuman, J. (2006). *Protection through participation: Young people affected by forced migration and political crisis* (Refugee Studies Centre Working Paper No. 20). University of Oxford.
- Nik Abdullah, N. S., Maamor, S., Abdul Ghani, A., Abd. Wahab, N., Ahmad Razimi, M. S., Aziz, A. B., & Elias, N. H. (2015). Kepentingan elemen kerohanian dalam pelaksanaan aktiviti di MRSM Ulul Albab: Kajian kes di MRSM Gemencheh, Negeri Sembilan [The importance of spiritual elements in the implementation of activities at MRSM Ulul Albab: A case study at MRSM Gemencheh, Negeri Sembilan]. *Journal of Global Business and Social Entrepreneurship*, 1(2), 77-88.
- Patton, M. Q. (2002). *Qualitative research and evaluation methods* (3rd ed.). Sage.
- Sarmiento, H., Pereira, A., & Anguera, M. T. (2014). The coaching process in football- A qualitative perspective. *Journal of Sports Science Medicine*, 3(1), 9-16.
- Sherman, C., Crassini, B., Maschette W., & Sands R. (1997) Instructional sports psychology: A reconceptualization of sports coaching as instruction. *International Journal of Sports Psychology*, 28(2), 103-125.
- Solstad, B. E., Ivarsson, A., Haug, E. M., & Ommundsen, Y. (2018). Youth sport coaches' well-being across the season: The psychological costs and benefits of giving empowering and disempowering sports coaching to athletes. *International Sport Coaching Journal*, 5(2), 124-135. <https://doi.org/10.1123/iscj.2017-0026>
- Spradley, J. P. (1979). *The ethnographic interview*. Holt, Rinehart & Winston.
- Strauss, A., & Corbin, J. (1990). *Basic of qualitative research: Grounded theory, procedures, and techniques*. Sage.
- Strauss, A., & Corbin, J. (1998). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (2nd ed.). Sage.
- Taylor, S. J., & Bogdan, R. (1998). *Introduction to qualitative research methods: A guidebook and resource* (3rd ed.). John Wiley & Sons Inc.
- Teong Kim earns RM175,000 a month-Syed Saddiq. (2018, September 27). *Bernamea.com*. <http://www.bernama.com/en/news.php?id=1647262>
- Visek, A. J., Mannix, H., Chandran, A., Cleary, S. D., McDonnell, K., & DiPietro, L. (2018). Perceived importance of the fun integration theory's factors and determinants: A comparison among players, parents, and coaches. *International Journal of Sports Science & Coaching*, 13(6), 849-862. <https://doi.org/10.1177/1747954118798057>



Review Article

The Impact of Government Efficiency, Corruption, and Inflation on Public Debt: Empirical Evidence from Advanced and Emerging Economies

Wei Ni Soh*, Haslinah Muhamad and Ong Tze San

School of Business and Economics, Universiti Putra Malaysia, 43400 Serdang, Selangor, Malaysia

ABSTRACT

This research investigates the empirical relationship of government efficiency, corruption, and inflation regarding public debt between advanced and emerging economies. Random effects estimation is used to analyse a sample of 40 countries. The analysis results show that corruption and inflation in advanced economies have a significant and positive effect on public debt. Corruption affects public debt to increase, but on the flip side, inflation affects public debt to decrease. In emerging economies, the results show a positive impact of government efficiency on public debt. Hence, government efficiency will be considered an obstacle when a policy initiated to reduce public debt. Meanwhile, policymakers should take note countries' corruption and inflation rates when formulating policies to reduce public debt in advanced economies.

Keywords: Advanced countries, emerging countries, government efficiency, macroeconomics, public debt

ARTICLE INFO

Article history:

Received: 13 November 2020

Accepted: 11 June 2021

Published: 13 September 2021

DOI: <https://doi.org/10.47836/pjssh.29.3.05>

E-mail addresses:

sohweini@upm.edu.my (Soh Wei Ni)

hasm@upm.edu.my (Haslinah Muhamad)

tzesan@upm.edu.my (Ong Tze San)

*Corresponding author

INTRODUCTION

Global public debt accumulation has increased significantly and extensively since 2008 in economies, advanced and emerging (Fournier & Bétin, 2018). In the past, the rise of public debt in advanced economies has been closely connected to wars and business cycle fluctuations (Abbas et al., 2011; Azzimonti et al., 2014).

The aggressive borrowing of countries in covering the financial costs of war has led to high levels of debt-to-GDP ratio. During peacetime, the primary deficit due to stock-flow adjustments has been the leading cause of debt rates surge. The rapid surge in global debt has drawn worldwide attention. Under certain circumstances, a large budget deficit or public debt may put the government at risk. The fiscal policies implemented during the sudden changes in the economic condition may be less significant when there is a large public debt (Hallerberg & Wolff, 2008). At the same time, high public debt could suppress a country's economic growth (Herndon & Pollin, 2014; Reinhart & Rogoff, 2010). A large shadow economy and high corruption will cause debt to rise in a country (Cooray et al., 2017; Elgin & Uras, 2013; González-Fernández & González-Velasco, 2014). Simultaneously, high inflation in a country is also one of the causes of high debt levels (Cooray et al., 2017; Reinhart & Rogoff, 2011). In summary of the mentioned literature, a high public debt country is more likely to have high corruption, high inflation, and high government efficiency. With the focus on government efficiency, the proposed study gives a new understanding of the mentioned literature by establishing empirical evidence on the effect of government efficiency on the public debt ratio in advanced economies and emerging economies.

Many countries likely depend on public debt to finance extra expenditures. Besides using public debt, the government finances the spending by reallocating private

resources for public use. The government collects tax as a form of government revenue. When evaluating the government finance system, efficiency is one of the criteria. It measures the minimal loss of resources during the reallocation process and the decision of government spending. This evidence shows that government efficiency affects the government's decision in spending. Hauner and Kyobe (2008) claimed that an inefficient government tends to have high expenditures relative to the country's GDP. Besides, Heylen et al. (2013) show that a highly efficient government is better at reducing the public debt ratio at a given fiscal consolidation program in advanced economies. As the public debt is related to government efficiency, a set of 40 countries (contain advanced countries and emerging countries) have been selected to be tested for various relationships based on the country's economic growth stages. An advanced economy is a term used by the International Monetary Fund (IMF) to describe the most developed countries globally. Meanwhile, the IMF uses the emerging economy to describe a fast GDP growth economy.

According to World Bank (2018), the government efficiency of a country is measured based on the performance in wastefulness of government expenditure, transparency of policymaker and regulatory burden. Table 1 shows ten countries with the highest government efficiency index, their public debt, and debt-to-GDP ratio in 2018. Public debt is often quoted as debt to gross domestic product (GDP) as public debt only

offers general information on how much a country owes. Debt-to-GDP provides an overview of debt sustainability, at which debt level to GDP is ideal for the country to

pay back the debt owed (Escolano, 2010). On the other hand, a high debt-to-GDP may increase the burden of a country to pay the debt.

Table 1
Government Efficiency Index Ranking, 2018

Rank	Country	Advanced Economies / Emerging Economies	Index ¹	Public Debt (billions of USD)	Public Debt (% of GDP)
1	Sierra Leone	Emerging	5.77	1.86	58.43
2	Ukraine	Emerging	5.59	79.33	75.60
3	Sweden	Advanced	5.51	207.62	40.93
4	Russia	Emerging	5.41	236.39	17.47
5	United Kingdom	Advanced	5.39	2301.44	87.03
7 ²	Netherlands	Advanced	5.37	469.76	56.66
8	Finland	Advanced	5.36	156.05	61.37
9	Puerto Rico	Emerging	5.34	53.92	54.57
10	Lithuania	Emerging	5.22	17.30	36.52
11	Germany	Advanced	5.20	2372.93	64.14

Note:

¹ Government Efficiency index, scale ranges from 1 to 7.

² The table is tabulated based on the availability of data.

Source: World Bank (2018) and IMF (2018)

As shown in Table 1, United Kingdom (UK) and Germany have about USD 2,300 billion of public debt accumulated in 2018, with 87.03% and 64.14% of debt-to-GDP, respectively. They are ranked as the 5th (Index = 5.39) and the 11th (Index = 5.20) respectively in the government efficiency index. The lower debt accumulation and debt-to-GDP would be Lithuania (USD

17.30 billion; 36.52%), Puerto Rico (USD 53.92 billion; 54.57%), Finland (USD 156.05 billion; 61.37%), and Netherlands (USD 469.76 billion; 56.66%). When all are compared with the UK, all of these countries show a lower government efficiency index. With an enormous debt accumulation, this raises a question: Does government efficiency reflect on the country's debt ratio?

There is minimal empirical literature on how the quality of government efficiency affects the public debt level. As such, this study aims to investigate empirically whether government efficiency affects the level of debt-to-GDP ratio in both advanced economies and emerging economies.

LITERATURE REVIEW

Previous research shows different theories to analyse the level of public debt. Barro (1979) explains that governments run a budget surplus and budget deficit to reduce the sharp fluctuation of tax rates on citizens by using the tax smoothing approach. In other words, to maintain an almost constant tax rate for the benefit of citizens, the government is benevolent to change the budget over time between surplus or deficit. The model is then extended with the changes in price levels. He finds that the unanticipated inflation rate affects the nominal debt growth but not the actual inflation rate. Concerned about political decisions, Alesina and Tabellini (1990) argue that Barro's theory cannot explain the rapid public debt accumulation of industrial countries in peacetime and the differences between debt policies of countries with similar economic conditions. They believe that policymaker uses public debt to influence citizens' willingness to vote, where the public debt is higher if there is a disagreement between different policymakers. Moreover, Battaglini and Coate (2008) suggest that the level of public debt varies by implementing different fiscal policies. For example, the revenues obtained

from tax income and borrowings provide public goods and pork-barrel spending. Therefore, the public debt level increases whenever there is an increase in the value of public goods or pork-barrel spending.

According to Escolano's (2010) public debt dynamics, public debt is determined based on the overall fiscal balances, primary balances, and interest bills. Debt at a point in time is equal to the difference between the interest of outstanding debt and primary deficit. The debt to GDP ratio is the summation of (i) the product of debt-lag and the differences between the effectiveness of the interest rate and nominal GDP; (ii) accumulation of primary deficit; and (iii) accumulation of residual stock-flow adjustment. He suggests that the debt ratio changes due to the real terms, such as real interest rate, real growth, and fiscal adjustment. The inflation rate also affects the debt ratio as it lowers the real interest rate. However, high inflation will cause a high nominal interest rate which offsets the decrease in the actual value of debt.

According to Pareto's Efficiency theory (Pareto, 1906), efficiency is the condition where any further reallocation of resources is impossible since it will always make one individual better off and another worse off. As far as government spending is concerned, the most favourable condition is that reallocating the fund from one project to another leaves the first project in the worst position. On the other hand, inefficiency in allocating budget may lead to higher spending since the initial budget is no longer enough. When the existing budget from the

revenue is insufficient to cover the higher spending, this causes a budget deficit which may contribute to debt accumulation.

Recently, many researchers study the government efficiency of countries by evaluating the socioeconomic indicators such as education spending of government, health spending of government, mortality, and fertility rate (Gupta & Verhoeven, 2001; Hauner & Kyobe, 2008; Tanzi & Schuknecht, 1997). One reason is that the spending on social expenditure in a country is deemed the largest category of government spending. Furthermore, spending on education and health is believed to boost the economic growth (Tanzi & Chu, 1998; Verhoeven et al., 1999). An efficient government spends or allocates the budgets in different public projects optimally in to maximise the output with minimal waste. These researchers suggest that a government with high spending is typically considered inefficient.

The empirical framework formulated in this study is based on prior research as follows. Government efficiency affects the public spending decision and fiscal policies in a country. The previous findings point out that high government efficiency is associated with a low debt ratio. However, if the country uses' policy to reduce the debt level, it is effective if the government efficiency is low. Using dynamic panel regression, Bergman et al. (2016) research the primary budget balance using the fiscal rule strength index and government efficiency index on 27 European Union (EU) countries from 1990-2012. They found

a higher government efficiency has lower public debt level. However, their estimate shows that as government efficiency increases, the implemented fiscal rules help reduce public debt to a certain threshold and become a substitute for or complement government efficiency. A similar conclusion was put forward by Heylen et al. (2013). They use least squares estimation on 21 Organisation for Economic Co-operation and Development (OECD) countries from 1981 to 2008 and suggests that government wage bill cut contributes to a lower debt ratio when government efficiency is low. Nevertheless, it is found that consolidation programs are used, the more efficient the government is at reducing the debt ratio. A highly efficient country is believed to be "clean" and transparent in country's wealth management and debt management with lesser corruption.

Corruption is believed to hamper government efficiency and effectiveness leading to wasteful public spending (Liu et al., 2017; Montes & Paschoal, 2016). The literature suggests the presence of corruption and shadow economy lead to a high level of debt ratio. González-Fernández and González-Velasco (2014) studies shadow economy, corruption, and public debt in Spain from 2000 to 2012 using a panel data approach. With corruption as the proxy of institutional quality, they state that corruption and shadow economy are the determinants of regional public debt accumulation in Spain. The government is forced to increase the debt level as a large shadow economy aggravates raising

revenues for government finance. Evidence was also provided by Tarek and Ahmed (2017) in a regression estimation of governance and public debt accumulation of the Middle East and North Africa (MENA) countries from 1996 to 2015.

Governance is measured by Worldwide Governance Indicators which are (i) Political Stability, (ii) Absence of Violence index, (iii) Regulatory Quality index, (iv) Rule of Law index, (v) Control of Corruption index, (vi) Government Effectiveness index, and (vii) Voice and Accountability index. They suggest that poor governance will have a high debt level supported by three indicators: Regulatory Quality index, Rule of Law index, and the Political Stability and Absence of Violence index. Cooray et al. (2017) find that the higher the level of corruption, the more enormous the public debt amount of the country. On the other hand, in a dynamic panel regression between corruption and the expansion of public debt in a sample of 25 American states, Liu et al. (2017) found that by curbing public sector corruption, local governments can reduce public debt due to an increase in public sector efficiency. Similarly, Benfratello et al. (2018), in a cross-country analysis on corruption and public debt from 1995 to 2015, suggests that corruption increases public debt in a country. It was concluded that the effect is more robust in advanced economies and weaker in less-developed countries.

In the research on inflation and public debt, interesting suggestions are provided in the literature. Researchers believe that

inflation will reduce the debt value in the actual term (Akitoby et. al., 2017). However, some argue that although the actual value of debt is reduced when there is high inflation, the interest payment is increased. Hence this causes the stock of debt to increase (Reinhart & Rogoff, 2010). Studying the debt level increase in 44 countries, including advanced and emerging economies, Reinhart and Rogoff (2010) find that the linkage between inflation and public debt across advanced and emerging economies is different. In emerging economies, the high public debt level is connected to high inflation. Nevertheless, there is no relationship between the two variables in advanced economies. Cooray et al. (2017) use the inflation rate as a control variable in their research on the effect of corruption on public debt in advanced and emerging economies. They suggest that a high inflation rate is associated with a high debt-to-GDP ratio.

Besides the relationship between inflation and public debt, many researchers also focus their studies on inflation on reducing debt. Using debt dynamics, Reinhart and Sbrancia (2011) examined the relationship between inflation and debt in some advanced and emerging economies throughout 1945 to 2009. They find that debt reduction using inflation is significant, particularly in advanced economies from 1945 to 1970. Akitoby et al. (2017) study the impact of inflation on the debt-to-GDP ratio in the Group of Seven (G7) countries with a series of regressions and concludes that a high inflation rate helps reduce public debt ratios in the case of

advanced economies. However, a prolonged high inflation rate cannot solve high debt accumulation since high inflation negatively affects the countries, including reducing economic growth and household income. Hall and Sargent (2011), in their studies of debt developments in the US between 1941 and 2008 using debt dynamics, conclude that inflation and public debt are less significantly related.

METHOD

Based on the literature review above, descriptive research determines the relationship between government efficiency and public debt. Annual data between 2002 and 2018 of 40 countries are used in this study. The countries are chosen based on the GDP of the countries as well as the availability of data. All the chosen countries are grouped into advanced economies and emerging economies based on the IMF classification. The list of countries selected for this study is enclosed in Appendix 1.

Measurement of Government Efficiency

Data Envelopment Analysis (DEA) is a tool developed by Charnes et al. (1978) to assess the efficiency of decision-making units (DMUs) that have multiple inputs and outputs. DEA is a technique used to measure the productive efficiency of individual DMUs empirically. While closely related to production theory in economics, DEA is also an operations management benchmark. It selects a set of input-output vectors to evaluate the performance of manufacturing and service operations,

particularly in the banking sector. In the situation of benchmarking, efficient DMUs, selected by DEA, may not essentially shape a “production frontier”, but to a certain extent, it forms a “best-practice frontier” (Cook et al., 2014).

The efficiency score is generated based on a frontier by developing all the observed input-output vectors. The firm’s efficiency is measured by the distance of its input-output vectors from the frontier. Thus, the virtual performance of all utilities in the sample can be compared. Subsequently, DEA will then be able to benchmark said firms against the best producers. This method assumes that if a firm can achieve a particular output level with a given input, another firm of the same size should achieve a similar output level.

Compared with other statistical methods, DEA has unique features that make it an excellent tool for evaluating firm efficiency. First, DEA does not require any assumptions on the relationships between inputs and outputs. Second, it is capable of managing multiple inputs and outputs, especially in performance measures. Third, it can be worked into a single mathematical model without specifications of trade-offs among multiple measures related to firm performance. The efficiency of government based on health expenditure has been investigated by a few researchers previously (Grigoli & Kapsoli, 2013; Gupta & Verhoeven, 2001; Hauner & Kyobe, 2008). They suggest that the health sector is an important indicator to boost the growth in the economy, where it also determines government spending. In

addition, corruption control in the health sector is also believed to be good due to lower spending (Mauro, 1998).

The notation is as follows:

x_{gj} = input g ($g = 1, \dots, m$), DMU j ($j = 1, \dots, n$)

y_{hj} = output h ($h = 1, \dots, s$)

a_j = no – negative weights attached to

DMU j 's inputs and outputs

An output orientation is employed in this study. The agency conflict and cost issues have caused the role of corporate cash holdings to be questioned by stakeholders. Under these circumstances, stakeholders must know how much output can be produced if a firm improves its technical efficiency, given a fixed amount of inputs. Thus, an output orientation is an appropriate choice (Coelli et al., 1998). This method employs $F_o(x_j, y_j)$ = maximum θ to represent the output-oriented Farrell efficiency score that indicates the maximum possible expansion of output for DMU j .

The output-oriented DEA model is assumed to be associated with a maximisation of θ the subject to:

$$\sum_{j=1}^n a_j y_{gj} \geq \theta y_{gj}, g = 1, \dots, s \quad (\text{Equation i})$$

$$\sum_{j=1}^n a_j x_{hj} \leq x_{hj}, h = 1, \dots, m \quad (\text{Equation ii})$$

$$a_j \geq 0, j = 1, \dots, n \quad (\text{Equation iii})$$

This model presumes a constant return to scale (CRS), as mentioned in the earlier

research work of Charnes et al. (1978). The assumption is only preferable when all DMUs function at an optimum scale. The linear programming required in the DEA model is fulfilled for every DMU in the selected sample to attain its relative performance. The efficiency measure is collected as the inverse of the maximum proportional output that it can produce with the input level remaining consistent. The firm efficiency evaluated in this method defines a technical efficiency score from zero to one.

Data and Analysis

To analyse the relationship between government efficiency and public debt, the empirical model used in this study is specified as follows:

$$Public\ Debt_{it} = \beta_0 + \beta_1 GE_{it} + \beta_2 Corr_{it} + \beta_3 Inf_{it} + \beta_3 DUM_{it} + \varepsilon_{it} \quad (1)$$

where *Public Debt* is the debt-to-GDP ratio; GE_{it} is the index of government efficiency; $Corr_{it}$ and Inf_{it} represent corruption and Inflation. The DUM_{it} represents the advance and emerging economy, which only appears in the pooled result. The ε_{it} is the random error term. Panel Data regression is used to examine the empirical model. The best regression model will be chosen from the Pooled Model, the Random Effects Model, or the Fixed Effects Model to determine the linear relationship between the public debt and efficiency. Breusch and Pagan Lagrangian multiplier (BP-LM) and Hausman Tests were performed, and the result is illustrated in Table 2.

Table 2

BP-LM Test and Hausman Test for the three models

		BP-LM Test	Hausman Test	Result
Model	I	2169.24*** (0.000)	2.630 (-0.453)	Random effect
Model	II	1217.89*** (0.000)	2.770 (-0.428)	Random Effect
Model	III	843.25*** (0.000)	1.480 (-0.688)	Random effect

Note: p-values are in parenthesis. *** denotes significant at 5%.

Since there is heterogeneity in the model, another test, the Hausman test is adopted to identify whether the fixed effects model or random-effects model is suitable.

H0: Random-effects model

H1: Fixed effects model

Decision: Rejects H0 if the p-value is less than 0.05 significant level. Otherwise, accept H0.

The dependent variable in this study is the country's debt-to-GDP ratio (Cooray et al., 2017; Heylen et al., 2013; Tarek & Ahmed, 2017). The time-series data on the historical public debt ratio for each country is provided in the IMF database. It is measured in the percentage of GDP of the country. IMF estimates several countries' public debt ratios throughout the year 2018.

The primary independent variable used in this study is government efficiency. Government efficiency is determined using DEA, with the score range between 0 to 1. Thus, a high index is indicating the greater efficiency of government. When a government is efficient, it is believed to have

lower spending and the least waste from the inputs bringing less debt to the country. Therefore, a negative coefficient is expected from the analysis.

Corruption Perceptions Index (CI) is another independent variable tested in this study. This index is collected from Transparency International. The data ranges from 1995 to 2018. It is often used as a proxy for analysis of cross-country analysis (Benfratello et al., 2018; Cooray et al., 2017). From 1995 to 2011, CI is measured from 0 to 10, where 0 ranked the country as highly corrupted, and 10 is without any corruption. Since 2012, the score scale has changed from 0 to 100, where 0 is ranked highly corrupted, and 100 is without any corruption. Therefore, the index is adjusted to a scale of 0-100 in this study. In addition, the original CI is inverted in this study for a direct indication, where 0 indicates a country without any corruption. In contrast, 100 indicates the country with the highest corruption. Corruption of government reflects the abuse of power in the public

sector for personal benefit. It comes in different forms, such as bribery and political corruption. An increase in corruption causes the original budget to be insufficient for government finance spending. Therefore, a positive coefficient for the relationship is expected from the analysis.

Based on previous research, the inflation calculated by percentage change of the Consumer Price Index (CPI) is selected as the next independent variable for this study (Benfratello et al., 2018; Cooray et al., 2017; González-Fernández & González-Velasco, 2014; Heylen et al., 2013; Wang et al., 2017). Inflation data is collected from the World Bank database. Mixed conclusions are suggested by previous researchers on the relationship between inflation and public debt. The rising price of tax collected during high inflation will help reduce the actual value of debt in a country. Indeed, inflation erodes the value of debt in the actual term. However, the value of interest payment is believed to increase, leading to a higher debt value. However, from the previous studies, the relationship between inflation and public debt remains unclear. It may also vary according to the country's income. Therefore, either a positive or negative coefficient is expected from the analysis.

The countries tested in this paper are categorised according to the dummy variable. Countries under advanced economies are labelled as 0; countries that are emerging economies are labelled as 1. Thus, some 20 advanced economies and 20 emerging economies are used in this study. Panel regression, either fixed or random

effect, has been employed for the second stage analysis to determine the relationship between all variables on the public debt.

RESULTS AND DISCUSSIONS

Descriptive Analysis

The analysis start with the regression between government efficiency and public debt across the sample (Model I), in all 40 countries, regardless of their identification as advanced or emerging economies. Then, the analysis is focused on the relationship between government efficiency and public debt based on the identification of each country, either advanced economies (Model II) or emerging economies (Model III).

Table 3 presents the descriptive statistics for the whole sample and two other samples, which are broken down by country identification, advanced economies, and emerging economies. The mean value of the debt-to-GDP ratio for the countries under investigation is 52.4150, where advanced economies have a higher mean value (64.4005) than emerging economies (40.3227). The maximum value of debt to GDP ratio of advanced economies is also higher than emerging economies. The standard deviation of the public debt ratio is higher in advanced economies (27.5409) than in emerging economies (20.9563), suggesting that the 20 advanced economies have a more diverse value of the debt-to-GDP ratio.

Government efficiency is the efficiency score calculated in this study using DEA, on a scale of 0 (least efficient) to 1 (most efficient). The mean value of government

efficiency for the 40 countries under investigation is 0.6132. One interesting feature from the descriptive statistics is that emerging economies have a higher government efficiency score (0.7271) than advanced economies (0.5201). The results are consistent with the previous studies (Hauner & Kyobe, 2008) on government efficiency using either data envelopment analysis (DEA), public sector performance (PSP), or public sector efficiency (PSE) methodology.

The mean value of corruption for the whole sample is 42.9263. The mean value is lower in advanced economies (22.3842) and higher in emerging economies (63.6512). Previously, researchers found that the

structure of the government is one of the determinants of corruption in a country (Kim et al., 2017; Shleifer & Vishny, 1993). A country with strong democracy that emphasises the participation of citizens, such as Switzerland or Australia, has low corruption. Moreover, non-democratic countries such as Singapore and Hong Kong are numerous countries with the lowest corruption due to the strong anti-corruption institution (Transparency International, 2019). Thus, this implies that advanced economies have better corruption control. Based on the standard deviation of corruption, the heterogeneity in corruption for advanced and emerging economies is similar.

Table 3

Descriptive statistics of Debt-to-GDP ratio, Government Efficiency, Corruption Perception Index and Inflation on selected countries between 2002 and 2018

Variables	N	Mean	SD	Min.	Max.
Whole Sample (Model I)					
Debt to GDP ratio	677	52.4150	27.2728	1.5620	132.0390
Government Efficiency	545	0.6132	0.2436	0.1610	1.0000
Corruption Perception Index	677	42.9263	24.3115	1.0000	90.0000
Inflation	680	4.0681	4.6835	-4.4781	54.4002
Advanced Economies (Model II)					
Debt to GDP ratio	340	64.4005	27.5409	9.7020	132.0390
Government Efficiency	300	0.5201	0.2163	0.1610	1.0000
Corruption Perception Index	340	22.3842	13.2947	1.0000	61.0000
Inflation	340	1.7787	1.3012	-4.4781	6.6280
Emerging Economies (Model III)					
Debt to GDP ratio	337	40.3227	20.9563	1.5620	96.3520
Government Efficiency	245	0.7271	0.2265	0.1780	1.0000
Corruption Perception Index	337	63.6512	12.3697	25.0000	90.0000
Inflation	340	6.3575	5.6329	-1.5448	54.4002

The mean value of inflation for all 40 countries is 4.0681. Advanced economies have lower inflation (1.7787) than emerging economies (6.3575). Keeping inflation low has been a significant macroeconomics challenge. It is generally believed that high and volatile inflation hurts economic growth. However, inflation is not solely determined by one factor. The source of inflation is also very diverse in different countries (Loungani & Swagel, 2001). Factors such as corruption, economic crisis, exchange rate regime, oil price crisis, monetary growth, and political instability could also affect the inflation rate differently. Based on collected data, in 2002, Turkey experienced

high inflation that is 54.4002% which is a generally high inflation rate in the group of emerging economies. In addition, there is a higher standard deviation in inflation in the group of emerging economies (5.6329). It suggests that inflation is more heterogeneous in emerging economies than in advanced economies.

Table 4 presents the Pearson correlation between all the variables of this study. The table reveals that government efficiency, corruption, and inflation are negatively correlated with the debt-to-GDP ratio, with the values of -0.2116, -0.2750, and -0.2527, respectively.

Table 4
Pearson correlations

Variables	Debt to GDP ratio	Government Efficiency	Corruption	Inflation
Debt to GDP ratio	1.0000	-	-	-
Government Efficiency	-0.2116*** (0.000)	1.0000	-	-
Corruption	-0.2750*** (0.000)	0.4024*** (0.000)	1.0000	-
Inflation	-0.2527*** (0.000)	0.2563*** (0.000)	0.5352*** (0.000)	1.0000

Note: p-values are in parenthesis. *** denotes significant at 5%.

The correlation between government efficiency and corruption is 0.4024, statistically significant at 0.05 significant level. The same goes for the correlation between government efficiency and inflation, a statistically significant correlation of

0.2563. Thus, both of the variables have a positive correlation with government efficiency. Inflation and corruption have the highest correlation values among all the variables, with 0.5352 of correlation, statistically significant at 0.05.

Regression Analysis

The regression analysis (Table 5) on the relationship between public debt and the independent variables (government efficiency, corruption, inflation, and dummy variable) is started by estimating the whole sample, as Model I. Then, the analysis focuses on the effect of independent variables (government efficiency, corruption, and inflation) on public debt in different sub-samples, according to the classification of the countries. A group of countries identified as advanced economies forming Model II; Model III is formed by emerging economies. Based on the BP-LM and Hausman Tests, random-effects regression is more suitable for all three models. A Driscoll-Kraay standard error (1998) panel random effects estimate the models due to

heteroscedasticity and autocorrelation in the data.

Table 5 reports the results of the regression on government efficiency and public debt. The model I shows that government efficiency negatively affects public debt, but the relationship is not significant. Although government efficiency is computed based on limited available data, its effect on the public debt ratio is expected despite the smaller sample size. For example, Model I suggest that a 1-unit increase in government efficiency decreases the public debt ratio by 0.5318. The insignificant result leads to a further investigation by focusing the analysis on different sub-samples, including advanced economies (Model II) and emerging economies (Model III).

Table 5

Regression results of the relationship between government efficiency and public debt on selected countries from 2002 to 2018

Variables	Dependent variable: Debt-to-GDP ratio		
	Model I (Whole Sample)	Model II (Advanced Economies)	Model III (Emerging Economies)
Government Efficiency	-0.5318 [-0.1000] (0.9200)	-7.9211 [-1.3700] (0.1900)	8.7459** [2.7400] (0.0150)
Corruption	0.7254*** [4.4800] (0.0000)	1.1730** [2.8100] (0.0130)	0.2699 [1.5900] (0.1340)
Inflation	0.0436 [0.1200] (0.9090)	-4.3819** [-2.8500] (0.0120)	0.3367 [1.6700] (0.1150)

Table 5 (Continued)

Dependent variable: Debt-to-GDP ratio			
Variables	Model I (Whole Sample)	Model II (Advanced Economies)	Model III (Emerging Economies)
Dummy	-54.9263** [-2.2500] (0.0390)	- - -	- - -
No of Countries	40	20	20
Observation	542	300	242
R ²	0.2035	0.1686	0.004
Wald chi-square	56.43	16.03	12.31
<i>p</i> -value	(0.0000***)	(0.0011***)	(0.0064***)

Note: Significant at 1% (***), 5% (**) and 10% (*); t-values are in square brackets, p-values are in parentheses.

Model II suggests that in advanced economies, as the government efficiency increased by 1-unit, the public debt ratio is reduced by 7.9211. Thus, government efficiency and public debt have a negative statistically insignificant relationship. It may be the reason for the insignificant relationship in Model I. However, the direction of the relationship between government efficiency and public debt remains unclear. The debt-to-GDP ratio in descriptive statistics (Table 3) shows that advanced economies have a much higher mean debt-to-GDP ratio than emerging economies, more than 24.0778.

Surprisingly, the results for emerging economies tested in Model III differ from expectation. Government efficiency has a positive and statistically significant relationship with public debt in emerging economies. A country with a high government efficiency has a high debt ratio. A 1-unit increase in government

efficiency increases public debt by 8.7459 in emerging economies, which is significant at 5%. This direction of the relationship is unaccepted. However, some possible explanations can be found in previous studies. Hauner and Kyobe (2008) suggest that emerging economies with a low GDP facing rapid growth increases their efficiency, which primarily affecting social-economic growth. This growth is also shown to be accompanied by an increase in the government's spending. Therefore, the country will have to increase the spending in the social sector to improve government efficiency. Another conclusion put forward by Bergman et al. (2016) is that the negative relationship between government efficiency and government spending is only valid before government efficiency reaches a minimum threshold level. Above that, they will become a 'complement' to each other. The relationship is further investigated by

Heylen et al. (2013). They find that to cut the debt in a country, reducing government spending is not effective if the government efficiency is high.

For corruption and public debt ratio, the relationship shown in Model I is in line with previous findings, which is positive and significant (Benfratello et al., 2017; Cooray et al., 2017; González-Fernández & González-Velasco, 2014; Liu et al., 2017). A similar result is shown in advanced economies, where corruption and public debt have a significant and positive relationship. The results clearly explain that corruption indeed contributes to the increase of public debt in all countries. The high spending in advanced economies may cause a substantial effect between corruption and public debt (Benfratello et al., 2017). However, for emerging economies, the positive relationship between corruption and public debt is not significant. Corruption may affect the public debt accumulation in emerging economies, but somehow it is not obvious. It is in line with the results provided by Benfratello et al. (2017), where the effect of corruption on public debt is weaker in emerging economies. The public debt in emerging economies may be caused by corruption, but other external factors can lead it to increase (Benfratello et al., 2017; Panizza, 2008).

The effect of inflation on the public debt ratio in Model I is negative and statistically insignificant. The relationship is reconfirmed in Model II and Model III. In advanced economies, the relationship between inflation and the public debt ratio

is negative and significant. As inflation increases in advanced economies, the debt accumulation is reduced. The real value of debt is reduced in a country when inflation is high, as the tax revenue collected by the government is higher due to inflation (Akitoby et al., 2017; Reinhart & Rogoff, 2011). Akitoby et al. (2017) conclude that high inflation is an effective tool to reduce debt in a country. Empirical evidence supported by Reinhart and Sbrancia (2011) that inflation effectively reduce debt, especially in advanced economies. As inflation increases in the current period, the original amount of debt owed in the previous period is worth lesser in the current period due to the lower absolute value of money.

Hence, the public debt ratio is lower with higher inflation. In emerging economies, the relationship between inflation and the public debt ratio is favourable and insignificant. Inflation reduces the actual value of debt in a country, yet different conclusions are putting forward in past studies. For instance, Reinhart and Rogoff (2011) suggested that inflation causes the interest payment on debt to increase, leading to higher debt in the country. On the other hand, some researchers found that inflation and public debt have no significant relationship (Giannitsarou & Scott, 2006; Hall & Sargent, 2011). Thus, inflation may affect the public debt accumulation in emerging economies, but the effect is not obvious.

CONCLUSION AND RECOMMENDATION

The main objective of this study is

to provide empirical evidence on the relationship of government efficiency, corruption, and inflation regarding public debt between advanced and emerging economies. The estimates suggest that government efficiency on public debt varies by country's classification. The relationship between government efficiency and public debt is statistically significant and positive in emerging economies. It implies that government efficiency contributes to increasing public debt in emerging economies. However, the relationship is unclear in advanced economies due to the insignificant coefficient. However, the results show that public debt in advanced economies is affected by corruption and inflation. High corruption will lead to high debt in advanced economies, while high inflation will reduce debt. Whereas in emerging economies, corruption and inflation have no relationship with public debt.

The following suggestions can be drawn from this study. First, governments should consider government efficiency in decreasing sizeable public debt, especially in emerging economies. An increase in government efficiency not only improves the quality of government by reducing the waste from spending, but it also helps in economic development. Hauner and Kyobe (2008) advise that government efficiency is essential for a country to be more prosperous. However, an increase in government efficiency, particularly in social expenditure, may, in turn, cause the public debt accumulation to increase in the

case of emerging economies. In advanced economies, although there are no significant results from this study between government efficiency and public debt, corruption and inflation seem to affect the considerable debt accumulation.

The statistics illustrated in Table 3 show that the overall advanced economy has a high corruption index, lower government efficiency, and lower inflation than the emerging economy. The IMF and reviews have investigated this serious corruption situation in the advanced economy. The advanced countries involved in bribery and other forms of corruption as part of a revised framework on governance around the world will be monitored based on the corruption. The results in Table 5 provide statistical evidence on the positive relationship between corruption and public debt for the advanced economy at a 5% significant level. It debates the findings in the existing literature, which show that in advanced economies, a high efficient government is not performing better in reducing the public debt ratio (Heylen et al., 2013). People always think that advanced economies should have lower corruption and high government efficiency. However, this fact is not supported by statistical evidence in this study. Nevertheless, this study is supporting findings in Cooray et al. (2017), Elgin and Uras (2013), and González-Fernández and González-Velasco (2014), which shows that high corruption will increase the public debt for a country. In summary, the relationship between public debt, corruption, and inflation will

vary according to a country's growth and development stage.

A considerable accumulation of public debt has been a significant macroeconomics issue. However, managing public debt is a challenging task for a country. Moreover, since reducing public debt takes a long time, different economic variables should be considered to reduce public debt effectively.

ACKNOWLEDGEMENT

The authors would like to thank their colleagues who have provided them with professional support. Nevertheless, the author would also like to thank friends, family members, and anyone else who supported them during the process.

REFERENCE

- Abbas, S. A., Belhocine, N., El-Ganainy, A., & Horton, M. (2011). Historical patterns and dynamics of public debt - Evidence from a new database. *IMF Economic Review*, 59(4), 717-742.
- Akitoby, B., Binder, A., & Komatsuzaki, T. (2017). Inflation and public debt reversals in the G7 countries. *Journal of Banking and Financial Economics*, 1(7), 28-50.
- Alesina, A., & Tabellini, G. (1990). A positive theory of fiscal deficits and government debt. *The Review of Economic Studies*, 57(3), 403-414. <https://doi.org/10.2307/2298021>
- Azzimonti, M., De Francisco, E., & Quadrini, V. (2014). Financial globalization, inequality, and the rising public debt. *American Economic Review*, 104(8), 2267-2302.
- Barro, R. J. (1979). On the determination of the public debt. *Journal of Political Economy*, 87(5), 940-971.
- Battaglini, M., & Coate, S. (2008). A dynamic theory of public spending, taxation, and debt. *American Economic Review*, 98(1), 201-236.
- Benfratello, L., Del Monte, A., & Pennacchio, L. (2018). Corruption and public debt: A cross-country analysis. *Applied Economics Letters*, 25(5), 340-344.
- Bergman, U. M., Hutchison, M. M., & Jensen, S. E. H. (2016). Promoting sustainable public finances in the European Union: The role of fiscal rules and government efficiency. *European Journal of Political Economy*, 44, 1-19. <https://doi.org/10.1016/j.ejpoleco.2016.04.005>
- Coelli, T. (1998). A multitage methodology for the solution of orientated DEA models. *Operations Research Letters*, 23, 143-149. [http://dx.doi.org/10.1016/S0167-6377\(98\)00036-4](http://dx.doi.org/10.1016/S0167-6377(98)00036-4)
- Cook W. D., & Joe Z. (2014). DEA for two-stage networks: Efficiency decompositions and modeling techniques. *Data Envelopment Analysis*, 1-29.
- Cooray, A., Dzhumashev, R., & Schneider, F. (2017). How does corruption affect public debt? An empirical analysis. *World development*, 90, 115-127. <https://doi.org/10.1016/j.worlddev.2016.08.020>
- Elgin, C., & Uras, B. R. (2013). Public debt, sovereign default risk and shadow economy. *Journal of Financial Stability*, 9(4), 628-640.
- Escolano, M. J. (2010). *A practical guide to public debt dynamics, fiscal sustainability, and cyclical adjustment of budgetary aggregates*. International Monetary Fund.
- Fournier, J. M., & Bétin, M. (2018). *Sovereign defaults: Evidence on the importance of government effectiveness* (No. 1494). OECD Publishing.
- Giannitsarou, C., & Scott, A. (2006). *Inflation implications of rising government debt* (No.

- w12654). National Bureau of Economic Research.
- González-Fernández, M., & González-Velasco, C. (2014). Shadow economy, corruption and public debt in Spain. *Journal of Policy Modeling*, 36(6), 1101-1117.
- Grigoli, F., & Kapsoli, M. J. (2013, August 28). *Waste not, want not: The efficiency of health expenditure in emerging and developing economies* (No. 13-187). International Monetary Fund. <https://www.imf.org/en/Publications/WP/Issues/2016/12/31/Waste-Not-Want-Not-The-Efficiency-of-Health-Expenditure-in-Emerging-and-Developing-Economies-40899>
- Gupta, S., & Verhoeven, M. (2001). The efficiency of government expenditure: Experiences from Africa. *Journal of policy modeling*, 23(4), 433-467.
- Hall, G. J., & Sargent, T. J. (2011). Interest rate risk and other determinants of post-WWII US government debt/GDP dynamics. *American Economic Journal: Macroeconomics*, 3(3), 192-214.
- Hallerberg, M., & Wolff, G. B. (2008). Fiscal institutions, fiscal policy and sovereign risk premia in EMU. *Public Choice*, 136(3-4), 379-396.
- Hauner, D., & Kyobe, A. (2008, September 1). *Determinants of government efficiency* (No. 2008-2228). International Monetary Fund. <https://www.imf.org/en/Publications/WP/Issues/2016/12/31/Determinants-of-Government-Efficiency-22296>
- Herndon, T., Ash, M., & Pollin, R. (2014). Does high public debt consistently stifle economic growth? A critique of Reinhart and Rogoff. *Cambridge Journal of Economics*, 38(2), 257-279.
- Heylen, F., Hoebeeck, A., & Buyse, T. (2013). Government efficiency, institutions, and the effects of fiscal consolidation on public debt. *European Journal of Political Economy*, 31, 40-59. <https://doi.org/10.1016/j.ejpolco.2013.03.001>
- IMF (2018). *Public debt*. <https://www.imf.org/en/Data>
- Liu, C., Moldogaziev, T. T., & Mikesell, J. L. (2017). Corruption and state and local government debt expansion. *Public Administration Review*, 77(5), 681-690.
- Loungani, M. P., & Swagel, M. P. (2001, December). *Sources of inflation in developing countries* (Working Paper No. 1-198). International Monetary Fund. <https://www.imf.org/external/pubs/ft/wp/2001/wp01198.pdf>
- Kim, E., Ha, Y., & Kim, S. (2017). Public debt, corruption and sustainable economic growth. *Sustainability*, 9(3), 433. <https://doi.org/10.3390/su9030433>
- Mauro, P. (1998). Corruption and the composition of government expenditure. *Journal of Public Economics*, 69(2), 263-279.
- Montes, G. C., & Paschoal, P. C. (2016). Corruption: What are the effects on government effectiveness? Empirical evidence considering developed and developing countries. *Applied Economics Letters*, 23(2), 146-150.
- Panizza, U. (2008). *Domestic and external public debt in developing countries* (Discussion Paper No 188). United Nations Conference on Trade and Development. <https://EconPapers.repec.org/RePEc:unc:disap:188>.
- Pareto, V. (1906). *Manual of political economy*. Milan.
- Reinhart, C. M., & Rogoff, K. S. (2010). Growth in a time of debt. *American Economic Review*, 100(2), 573-578.
- Reinhart, C. M., & Rogoff, K. S. (2011). From financial crash to debt crisis. *American Economic Review*, 101(5), 1676-1706.
- Reinhart, C. M., & Sbrancia, M. B. (2011, March). *The liquidation of government debt* (Working Paper

- 16893). National Bureau of Economic Research. <https://www.imf.org/external/np/seminars/eng/2011/res2/pdf/crbs.pdf>
- Shleifer, A., & Vishny, R. W. (1993). Corruption. *The Quarterly Journal of Economics*, 108(3), 599-617. <https://doi.org/10.2307/2118402>
- Tanzi, V., & Chu, K. Y. (Eds.). (1998). *Income distribution and high-quality growth*. Mit Press.
- Tanzi, V., & Schuknecht, L. (1997). Reforming government: An overview of recent experience. *European Journal of Political Economy*, 13(3), 395-417.
- Tarek, B. A., & Ahmed, Z. (2017). Institutional quality and public debt accumulation: An empirical analysis. *International Economic Journal*, 31(3), 415-435.
- Transparency International. (2019, January 29). *Asia Pacific: Little to no progress on anti-corruption*. https://www.transparency.org/news/feature/asia_pacific_makes_little_to_no_progress_on_anti_corruption
- Verhoeven, M., Gupta, M. S., & Tiongson, M. E. (1999, February 1). *Does higher government spending buy better results in education and health care?* International Monetary Fund. <https://www.imf.org/en/Publications/WP/Issues/2016/12/30/Does-Higher-Government-Spending-Buy-Better-Results-in-Education-and-Health-Care-2892#:~:text=Does%20Higher%20Government%20Spending%20Buy%20Better%20Results%20in%20Education%20and%20Health%20Care%3F,-Author%2FEditor%3A&text=Summary%3A,improves%20education%20and%20health%20indicators.>
- Wang, H., Huang, J., & Li, H. (2017). Local government debt risk, fiscal expenditure efficiency and economic growth. In *Proceedings of the Tenth International Conference on Management Science and Engineering Management* (pp. 1565-1576). Springer.
- World Bank. (2018). *Government efficiency*. <https://govdata360.worldbank.org/indicators/h5f135ad9>

APPENDIX

Appendix 1

List of advanced and emerging economics in this study

These are the 40 countries used in the study,

Advanced Economies:

Australia, Austria, Belgium, Canada, Denmark, France, Germany, Ireland, Israel, Italy, Japan, Netherland, Norway, Singapore, South Korea, Spain, Sweden, Switzerland, United Kingdom, United States.

Emerging Economies:

Brazil, Chile, China, Colombia, Egypt, India, Indonesia, Malaysia, Mexico, Nigeria, Pakistan, Philippines, Poland, Romania, Russian Federation, Saudi Arabia, South Africa, Thailand, Turkey, United Arab Emirates.

Online Learning during COVID-19 Pandemic. Are Malaysian High School Students Ready?

Nagaletchimee Annamalai

School of Distance Education, Universiti Sains Malaysia, Penang, 11800, Malaysia

ABSTRACT

The online learning environment is an integral part of activities conducted during the COVID-19 pandemic in schools. This study explored the Malaysian high school students' online learning perspectives using a mixed-methods study. The quantitative findings reported that students are not ready to go online. The qualitative analysis revealed several emerging themes related to students' dissatisfaction with the online learning environment. The issues are related to repository-based teaching, cognitive overload, social presence, technology comfort, and discipline. Students suggested that teachers should implement the use of standardised applications, fixed schedules, and interactive sessions. The study concluded that interactions are lacking during the online learning environment. However, the researcher hopes that once teachers are back from the COVID-19 pandemic, they will have a comprehensive understanding of technology tools to consider in their pedagogical practices. It is hoped that the post-pandemic will change the way schools and teachers perceive online learning. The sudden teaching practices during the COVID-19 pandemic will undoubtedly drive improvements in the use of technology in schools.

Keywords: COVID-19 pandemic, ICT tools, interaction, online learning

ARTICLE INFO

Article history:

Received: 5 January 2021

Accepted: 24 May 2021

Published: 13 September 2021

DOI: <https://doi.org/10.47836/pjssh.29.3.06>

E-mail address:

naga@usm.my

ISSN: 0128-7702
e-ISSN: 2231-8534

INTRODUCTION

As of 30th March 2020, it is estimated that 87% of the students around the world, which is 1.5 billion learners, have been affected by school closures during the COVID-19 pandemic (Winthrop, 2020). As a result, schools in more than 180 countries have been shut down worldwide (UNESCO,

2020). The global lockdown has caused a significant interruption in students' learning. To ensure that learning activities are not disrupted, UNESCO is trying to mitigate the impact of school closure and find ways to continue education for all through distance learning and education.

According to the Public Health Officials in Malaysia, flattening the curves of the COVID-19 pandemic requires months rather than weeks. To ensure limited interruptions in teaching and learning activities, former Prime Minister Tan Sri Muhyiddin Yassin has implemented home-based learning. Schools in Malaysia are encouraged to shift to the virtual learning environment. Teachers are to move to an online learning environment even if they are not familiar with technology tools. It is a responsibility that high school teachers have never imagined and something that they have never anticipated.

Integrating ICT in schools has its strengths and weaknesses, but trying to do it amid pandemics will be another problem. This reality forced students and teachers to take a crash course on technology tools, approaches, and teaching methods. The term 'panic-gogy' (Kamenetz, 2020) has been introduced when online teaching played a pivotal role during the pandemic. Teaching on a normal day during a normal week had its challenges. Sometimes a well-planned lesson can go wrong, even in the traditional classroom. In today's situation with the COVID-19 pandemic, a lot of thinking and planning is needed for effective pedagogical practices. A teacher with the

best-intended pedagogy with technology tools can still wonder about what went wrong during a well-planned lesson. In today's circumstances, the teachers have to re-think, re-plan and re-create a learning environment amid school closures and isolation.

It is not an easy endeavour as teachers have not done it before. Although several studies have been conducted on technology and education, people prefer being taught in the traditional classroom to which they are accustomed (Garba et al., 2015; Samuel & Zaiton, 2006). The pandemic has given a unique opportunity to high schools to experience fully online education. If not for the COVID-19 pandemic, such an experience would have been impossible. The students' experiences are valuable if we are looking to draw up a new education paradigm. Much effort is needed to address the potential concerns and issues that have emerged. Therefore, this study investigated the technology tools used in the online environment during the COVID-19 pandemic. The researchers also intend to identify the students' readiness and experiences in the online environment during the COVID-19 pandemic lockdown. It has been a real shock for teachers and students to uptake technology without proper planning. There is a need to take immediate action and adapt to novel techniques to ensure that students are experiencing high-quality education in this tragic time. The research questions addressed are:

1. How ready (in terms of continued online learning, interaction to complete

assignments, and homework completion) are students to go online during the COVID-19 pandemic?

2. What are the technology tools used during the COVID-19 online learning?

3. What are the students' experiences in the online environment during the COVID-19 pandemic?

4. What are the students' suggestions to improve the teaching and learning activities during the COVID-19 pandemic?

LITERATURE REVIEW

Community of Inquiry Model

The Community of Inquiry (CoI) model has been used widely to theorise online education by focusing on the nexus of pedagogy, technology, and learners' needs (Al-Smadi et al., 2019). CoI model is based on the work by Dewey (1938), Lipman (2003), and Pierce (1955). The model is adapted for e-learning by addressing the lens of cognitive, social, and teaching presences. Teaching presence illustrates the instructional activities for a particular course. Teachers facilitate discussion and give comments to clarify ideas to enhance learning (Garrison, 2017). The aspects related to teaching presence are Facilitating Discourse, Design and Organization, and Direct Instruction. Teaching presence also creates active and student-centred learning environments.

Meanwhile, cognitive presence reflects "a multivariate measure of critical and creative thinking that results from the cyclical process of practical inquiry within such a community of learners" (Shea et

al., 2012, p. 90). It describes the phases of practical inquiry: triggering event, exploration, integration and resolution (Garrison, 2017). During the triggering event, an issue or problem is identified. Teachers often express their expectations of the task. Nevertheless, students can also initiate the triggering event. The second phase is the exploration phase where. Search for ideas, information, and knowledge makes meaning to the task being discussed. At this phase, clarification occurs. The third phase is when students are reasonably relating information and knowledge. The final phase is the resolution of the problem where it involves the application of ideas. In summary, cognitive presence involves recognising problems, exploration, resolution, and confirmation of understanding via collaboration and reflection in a community of inquiry (Garrison et al., 2000).

Social presence refers to the "social environment that supports and encourages probing questions, scepticism and the contribution of explanatory ideas" (Garrison, 2017). It creates a "climate that supports, encourages probing questions, scepticism and the contributions to explanatory ideas" (Garrison, 2011). Such conditions are illustrated through effective, interactive, and cohesive responses in group interactions (Rourke et al., 2001). Studies have demonstrated that social interaction is positively linked with learning outcomes (Mayer, 2005) and students' satisfaction (Borup et al., 2013; Richardson & Swan, 2003). Smaller groups are said to be easily connected and promote a

sense of community (Rovai, 2002). When learners are placed into small discussion groups, information overload repetitiveness decrease, and students are willing to interact and collaborate with others (Lowry et al., 2006). The three presences are vital to creating a community of inquiry. Studies have documented that the CoI model positively impacts on learners' satisfaction and retention rates when online learning considers teaching, cognitive and social presences (Akyol & Garrison, 2011; Hoskins, 2012). In this study, the CoI model guides the online learning process.

Technology in Educational Context

Bringing technology into education offers various advantages, starting from offering easy access to various web materials, allowing interaction, and turning the learning environment from passive to active (Elmorshidy, 2013; Kale & Akcaoglu, 2018; Petko et al., 2015). Online learning environments can be categorised into a triad of asynchronous, synchronous, and blended learning environments (Perveen, 2016). Asynchronous learning provides delayed feedback and discussion, where this learning provides time for reflective thinking. At the time, synchronous tools allow immediate feedback, discussions, and comments (Bower et al., 2015).

The very recent studies on education and technologies are related to mobile learning. Mobile learning such as laptops and tablets are initiatives promoted by schools and governments around the globe (Fuhrman, 2014).

Studies have also focused on handheld devices to support seamless learning, which refers to the transition of learning between formal and informal learning spaces (Hedberg & Stevenson, 2014; Rushby, 2012). The extraordinary mobility, flexibility, and accessibility: 'Anyone, Anytime, Anywhere' offered by mobile learning has been attractive to adolescents (Annamalai & Kumar, 2020; Park et al., 2012). Google Classroom is a popular learning management system that integrates Google Drive, Google Docs, Gmail, and Calendar. Several studies have explored the use of Google Classroom and reported positive learning outcomes (Al-Marroof & Al-Emran, 2018; Shaharane et al., 2016).

While informal social media are trendy for students to communicate and maintain their social relationships, they can also be effectively interwoven into an online learning environment. Twitter, also known as micro-blogging, allows the short messages (Bower et al., 2010). YouTube is often used to provide a web-based platform for users to upload and view various information. It serves as a free teaching supplement to engage students in learning (Burke et al., 2009). Annamalai et al. (2016) explored the Malaysian students' interactions on Facebook. They reported that the interactions related to teaching presence encouraged students to improve their narrative writing and promote active learning.

Researchers are also looking at innovative instructional practices. Lately, more popularly known as gamification,

digital education has motivated and engaged students. Gamification is a well-established approach that uses game elements in a specific not-game context (Lopez & Tucker, 2019; Werbach & Hunter, 2012). In the educational context, it is generally observed that gamified lessons are often rivetingly engaging, motivating, and able to derive cognitive, emotional, and social benefits for learners (Chou & Ting, 2003; Hamari & Keronen, 2017). The 3-D virtual environments are also slowly gaining momentum. However, alongside advances in integrating ICT tools in education, schools often face challenges from various aspects. For example, Li and Ranieri (2010) discovered that students lack adequate technological skills that hinder teaching and learning activities.

At the same time, Ryan et al. (2010) discovered that techno-savvy students are ahead of the teachers and are well equipped with the latest tools, programs, and mobile technologies. Online interaction has been one of the essential aspects of meaningful experiences (Lin et al., 2017; Moore, 1989). Borup et al. (2013) highlighted that the lack of interaction in an online learning environment is considered not academically sound. Students face challenges to manage their time and take responsibility for independent learning when they use technology (Garcia et al., 2014). Studies on online readiness found that students' level of readiness can influence the level of success in online learning (Moftakhari, 2013). Machado and Chung (2015) discovered that teachers lack training and competency

to integrate technology in their lessons. Anderson (2008) asserts that ICT tools are not sufficient to create thriving learning communities when used as an instruction tool to deliver content solely.

There is a low level of technology integration in schools (Kementerian Pendidikan Malaysia, 2016). Merely using ICT tools such as PowerPoint slides and videos instead of the blackboard to transmit knowledge is insufficient to add value in teaching and learning activities. A study by Samuel and Zaiton (2006) found that technical difficulties and negative attitudes are why Malaysian teachers consider technology in their classrooms. In addition to this, Garba et al. (2015) found that teachers faced limited knowledge of technology, pedagogy, content, and knowledge (TPACK) and administration issues to integrate ICT in their lesson plans. Researchers and practitioners have called for a more comprehensive and rigorous investigation of high school students' online learning (Barbour & Reeves, 2009; Cavanaugh et al., 2009).

As illustrated, studies have indicated positive and negative experiences of using technology tools in the education context. However, there are limited studies that have been conducted during a pandemic where students experience remote and distance learning. Therefore, the study intends to fill the gap by investigating Malaysian students' readiness to go online, use ICT tools during this time, and their suggestions to improve online teaching during the COVID-19 pandemic.

METHOD

In this study, a mixed-methods design was employed. Creswell and Clark (2007) defined a mixed-method as utilising quantitative and qualitative strength to obtain the best outcome. These methods can complement each other. Surveys and interviews were used to collect in-depth information to discern the students' experiences and suggestions related to their online learning. Solely focusing on quantitative analysis may lead to a focus on generalisation rather than understanding the students' process in learning. Therefore, the quantitative findings indicate the readiness of the students to go online and their perception of their use of social media to conduct their online lessons. On the other hand, the value of the qualitative method is to provide a deeper understanding of the phenomenon under investigation (Creswell & Clark, 2007) and to unearth experiences that may be taken for granted (Laverty, 2003). Therefore, a qualitative study exploring the students' general practices of digital tools, online learning experience, and suggestions would be beneficial in addition to identifying the fundamental issues of concern to the high school students for their learning process during the COVID-19 pandemic.

Participants

The participants were 131 students from 5 schools in the northern region of Malaysia. Students were randomly selected to participate in this study using convenience sampling. The high school students were selected based on the researcher's

convenience of access to the students. When collecting the data, students have experienced eight weeks of online learning with their teachers. Students were aged from 13-17 years old. There were 71.8% female students and 28.2% male students. All the participants were from urban schools, and they had the facilities to go online. A total of 12 students volunteered to be interviewed for this study.

Questionnaire

The survey was a questionnaire that consisted of two sections. Section A solicited demographic information such as age, sex, and school. Section B comprised items requiring information on the tools used during their learning process and students' online experience during the COVID-19 pandemic. A 5 item Likert scale online survey was developed and administered using Google Forms. From the demographic data, frequency and percentage were used. For the description of the items, frequency and percentage were used to describe the students' readiness to go online during the COVID-19 pandemic. The inter-rater reliability was not conducted since the three questions were constructed based on the studies by Händel et al. (2020) and Rafique et al. (2021). Three independent experts conducted the questionnaire's face and content validity in the online learning environment.

- i. Are you ready to continue learning online during the COVID-19 pandemic?
- ii. Are you ready to interact online with your friends to complete your group

assignments during the COVID-19 pandemic?

iii. Are you ready to complete your homework online during the COVID-19 pandemic?

Quantitative data obtained were analysed using the descriptive statistics percentage (%) to indicate the participants' interactions, collaboration, and learning performance. Statistical analysis was carried out using IBM SPSS Statistics Version 24.0.

Interviews

Telephone interviews were conducted due to social distancing and lockdown. The interviews lasted for 20-30 minutes. Prior to the commencement of the interview, all participants were given the information sheet outlining the nature of the study (via mail). In addition, pseudonyms were given to all the participants. The interview questions were about their experiences in their online learning environment. Students' interviews were recorded and transcribed verbatim. The interview questions were:

- i. What are the tools used during the COVID-19 online teaching and learning activities?
- ii. What are your experiences during the COVID-19 online teaching and learning activities?
- iii. What are your suggestions to improve the teaching and learning activities during the COVID-19 pandemic?

Readers should note that the rich nature of qualitative data tends to indicate

more than one theme in specific excerpts. Thematic Analysis by Braun and Clarke (2006) was considered to identify, analyse, interpret and report the open-ended questions. It is based on the six steps of thematic analysis: 1) becoming familiar with the data and transcribing all data; 2) generating codes; 3) classifying codes into themes; 4) reviewing and refining themes; 5) concisely defining and naming themes; 6) producing a report from the emerging themes which is descriptive, analytical and argumentative narrative. Direct quotations from the participants were included to explain critical themes.

The interview transcripts were coded by two experts in qualitative research. Miles and Huberman's (1994) percentage was considered. Miles and Huberman state that there must be an agreement of 70% among the coders to ensure the findings are valid. The agreement for this study was 80% for the categorisation of the themes. Members checks and peer debriefing ensured the valid information of the qualitative data. Interview transcripts were sent to participants by mail, with a request for changes and additions if needed. Peer debriefing with the coders involved justification and verification of themes. The following section will be discussed based on the research objectives.

FINDINGS

Research Question 1: How ready are students to go online during the COVID-19 pandemic?

Table 1 illustrates the students' readiness to go online. When asked whether participants were ready to go online during the COVID-19 pandemic, 32.8 % of the participants agreed (18.3% completely agreed +14.5% mostly agreed). In addition, 29.8% moderately agreed, and 17.6% a little agreed. Thus, fewer than half (19.8%) of the participants indicated they were not ready to go online during the COVID-19 pandemic.

It is worth noting that 46.5% (22.1%+24.4%) of the participants were ready to interact online to complete their group assignment during the COVID-19

pandemic, 24.4% moderately agreed, and 15.3% with little agreement. A total of 13.7% of the students do not agree at all to interact online to complete their assignments. More than half of the participants were ready to complete their homework online, 55.7% (27.5%+ 28.2%). A total of 22.9% of the participants moderately agreed to complete their homework online. A small percentage (7.8%) of the participants agreed to little agree to complete their homework online, and 13.7 % of the participants did not agree at all to complete their homework online during the COVID-19 pandemic.

Table 1
Readiness to go online

Items	Completely		Mostly		Moderately		A Little		Not at all	
	N	%	N	%	N	%	N	%	N	%
Are you ready to continue learning online during the COVID-19 pandemic?	24	18.3	19	14.5	39	29.8	23	17.6	26	19.8
Are you ready to interact online with your friends to complete your group work assignments during the COVID-19 pandemic?	29	22.1	32	24.4	32	24.4	20	15.3	18	13.7

Table 1 (Continued)

Items	Completely		Mostly		Moderately		A Little		Not at all	
	N	%	N	%	N	%	N	%	N	%
Are you ready to complete your homework online during COVID -19 pandemic?	36	27.5	37	28.2	30	22.9	10	7.8	18	13.7

Research Question 2: What are the tools used during the COVID-19 online teaching and learning activities?

Asynchronous and Synchronous Tools.

The student (P1) indicated that her class has been experiencing asynchronous discussion. Teachers have been giving assignments, homework, and worksheets via Google Classroom and Telegram. According to P1, *“my Physics teacher has been using Zoom to have a face-to-face discussion in the virtual environment”*. However, P1 found it inconvenient to go synchronous because all the students were not fortunate to have an Internet connection. P1 is not in favour of synchronous discussion because *“it is inconvenient and the learning process is much slower. All students can be online at the same time. I rather have my assignments and notes uploaded in Google form or email and I can do it at my own pace.”*

P2 concurred with P1 in this respect and highlighted that Google classroom is helpful compared to WhatsApp and Telegram because *“Google Classroom has due dates and after the dates, you cannot*

submit the assignment.” With WhatsApp and Telegram, such a feature is not available. P2 also found that the *“Internet connection is weak and depends on the broadband.”* P5 highlighted that *“the teacher gives us homework via Google classroom and answers also provide the marking scheme and ask us to mark the exercises.”* Another teacher conducted a virtual face to face interaction by using Microsoft Teams. P6 said that *“the teacher puts on the slides and also links. I prefer the Microsoft team because you can send messages to the teachers.”* Students elaborated on the use of Microsoft Teams, and students found *“the video quality is better than Google Meet”* (P8). Teachers also sent *“online video links”* (P9). Some of the students appreciated it when the teacher recorded their teaching and uploaded the lessons on YouTube. P7 felt it was such an *“effective approach because they can go back to look at it”* and *“if there are any doubts.”* One of the students expressed her satisfaction since *“we can leave our message in the comments section and the teacher will get back to us”* (P6).

Research Question 3: What are the students' experiences during the COVID-19 online teaching and learning activities?

The following section presents the emerging themes based on the research questions.

Repository Based Nature

The participants found that the online learning environment was used for repository materials where teachers assigned "homework" (P1, P4, P5), "upload notes (P2, P3)" and "provide answers" (P1, P4, P9, P11). These online environments appeared to be an essential virtual platform to share materials and backup or historical records. Students have been passively receiving knowledge. P3 encapsulated these ideas:

"The teachers probably talk for one hour. They open the camera and start talking. They want to confirm whether students are attending their classes. It is better for teachers to give homework, and we can complete it". (P3)

Similarly, P11 highlighted that:

"The teaching is boring during online classes because only the teacher is explaining. If it is in the classroom, one of us will be called to explain. I prefer to have homework. I have a lot more time to refer to the books, but the teacher wants the homework the next day". (P11)

The teacher talks, and students exclusively listen. Students work alone, and there was no opportunity for interaction and collaboration. Students highlighted their

dissatisfaction when "the learning is not effective (P12)," "give homework and students will figure out themselves" (P5), "gives modules to do" (P7), and "monitor cannot reply" (P2). One of the participants suggested that "I would like the teachers to turn on the camera and ask us to show our answers. That will make us complete the exercises given" (P10).

They felt that the teachers were passive technology users. They stuck at a basic level and did not attempt to use advanced or sophisticated tools. One student pointed out, "some teachers are not good in technology" (P4). Therefore, another student suggested, "I think Discord app is good" and "very organised and can accommodate more than a thousand students, we can submit assignment chat group and we, can also draw." Another student emphasized that "online learning is not suitable for certain subjects. It is good for English, History but not for Science subjects" (P9). Teachers were teaching very fast, and students had difficulties coping with what is being taught. It is because teachers could not exactly "notice the students and students are not playing their part to ask questions. The teachers assume that everyone understands and they move on" (P11).

Cognitive Overload. Students were barraged with many ideas and concepts from teachers. Therefore, students had difficulties coping with the lessons taught. Much information was delivered on the same day. However, the students could not understand what was taught, and they had

difficulties recalling information for later use. The following statement is a typical comment from the interview:

"I feel teaching is not taking place. The teacher thinks they are teaching. All the subjects are planned for the same day, and I have no time to follow the lessons. We have been watching the screen for the whole day. There is sometimes 15 minutes' gap from one lesson to another. My tuition teachers are also using Zoom and WhatsApp to teach their lessons. I have to sleep late to finish my homework. No time to watch all the lessons". (P2)

Students were inundated and overwhelmed with homework. P11 revealed that *"In Google classroom, they gave a few assignments at once and every day you have to complete them. Each subject teachers give a few assignments with the same dateline."* Another student realised that *"the teacher has been giving more homework online than traditional classroom teaching. Besides, they give us a quiz and expect us to understand the topic". (P4)*

Social Presence. A significant difference between traditional classroom teaching and the online learning environment is in the area of social presence. The interviews revealed that the participants have relatively little interaction among peers. Apart from sharing the materials and worksheets, the students stated that the online learning environment had not allowed them to interact with class members. For example, *"I am missing my friends. I have to call them to maintain*

our friendship. I cannot wait to go back to school" (P5). The lack of face-to-face interaction minimises peer support which many students find helpful in their learning process. One student explained:

"School is not boring because there is always a conversation in the class. When you do not understand, you can ask your friends sitting beside you, but in recorded lessons, you have to watch the recorded lesson till the end". (P11)

They felt isolated, and the absence of support from peers made learning in the virtual environment a significant adjustment for some students. However, they realized that it is wise to go online till the lockdown is lifted. One student explained:

"I am very grateful to the school and teachers because they are sending us videos and notes. At least 50 % of the syllabus is covered. When the school starts, we hope the teachers will have extra classes to cover the syllabus". (P2)

Similarly, another student highlighted that: *"It is better to have something. We are having our SPM (Public examination). It is okay for other forms without exams. I want to pass my exam with flying colours. I am okay with any source that helps me until the school reopens". (P3)*

Technology Comfort. Online learning requires the teacher as well as the students to have technology comfort. The Internet downtime and technology glitches from the teachers and the students can prohibit effective teaching and learning activities.

Students expressed their frustration: “We have Wi-Fi problems, and for this reason, some of my friends’ skip classes” (P1). P1 prefers asynchronous discussions because the “Internet is slow and I do not find it convenient” and “sometimes the connection is bad, I cannot hear the teacher”. Another student lamented that “I do not have a printer at home. I have to print my worksheets.”

Furthermore, “the Internet packages are different, and I have difficulties following the lessons. Sometimes I use the smartphones, but it is inconvenient because any work related to Microsoft is difficult to do in the smartphone especially Excel sheet, very difficult to edit” (P11). In addition to this, “we also have teachers who asked us to use Pdf and Jpeg the pictures and send it to them. I have no idea what Jpeg is” (P7).

With lockdown and social distancing, all families were very dependent on computers and laptops. As a result, there has been an increased use of online services. One of the students shared her problem that “there is only one laptop and my mother is a teacher. She needs to use it to teach her students. Everybody will be fighting for it” (P4). (P8) claimed that her eyesight was getting worse “because I have been sitting in front of the laptop the whole day.” Meanwhile, (P12) stated that “my neck is painful because looking at the screen too often.”

Discipline. In the class, the teacher uses discipline to ensure that students are attentive, orderly and controlled. Students are quiet and able to retain complete control of the learning activities. However, being

online, students tended to wander and could be distracted at times. For example, “I wake up late. Rush to follow the online lessons. Our attendance is not monitored. I can switch off the camera and go to sleep again. No one is monitoring” (P2). Distraction at home, such as family and chores, could put students away from their online classes, and “I have to take care of my little brother who is five years old?” (P6). However, some students also felt that although they were not disciplined during this lockdown, they could “study even if they wake up late” (P9).

Research Question 4: What are students’ suggestions to improve the teaching and learning activities during the COVID-19 pandemic?

Standardised Application Use. They emphasised that there was a need to standardise the apps used. It is because students found it cumbersome to upload several applications. One of the students suggested that:

“Sometimes we use Google classroom, sometimes Zoom. We keep downloading different apps and tools”. So we have to switch to several apps. They need to standardize the use of apps.” (P8)

Similarly, P11 suggested that “different apps take up much storage in the phone or laptop. I find it difficult to switch apps for different classes.”

Fixed Schedule. Some of the students suggested a fixed schedule to avoid “classes that clashes” (P2). Therefore “students

need to choose which class they want to attend. All teachers give classes at the same time, so we are not able to attend all the classes” (P2). Furthermore, students wanted the teachers to “inform in advance” (P7) and “they should space out the lessons for a week” (P8). Also, students expected teachers to give notes and exercises much earlier so that they will be prepared. Further, too many students seem to attend online classes. One student explained:

“In Google meet, there are several classes in Form 5 (17-year-old), and the whole form is attending the lessons. Therefore, we need to follow our subject teachers. A fixed timetable like what has been implemented in school has to be considered”. (P6)

DISCUSSION AND PEDAGOGICAL IMPLICATIONS

It appears that the COVID-19 pandemic has enhanced the use of online learning in Malaysian schools. Previous studies have indicated the low use of technology in Malaysian schools. However, during these unprecedented times, teachers have flocked to the virtual environment to support their students. The quantitative findings indicate that most students are ready to go online, and only a tiny percentage of students do not agree to go online. The emerging themes from the interviews highlight their positive and negative experiences.

Students were exposed several asynchronous and synchronous tools. The findings revealed that teachers have used various technology tools. However, they are not fully prepared to integrate technology

effectively as the shift was sudden. The teachers seemed to ‘extend’ their online teacher-centeredness by providing content and answers. There are no constructive interactions as suggested by the CoI model. The transmission of knowledge from teacher to student is in a linear direction. The teacher speaks about specific content, and the lesson ends with homework and worksheets. The finding is in line with Annamalai et al. (2015), who found that although technology is available to interact and collaborate, the approach taken by the Malaysian teachers is still teacher-centred. If teachers wish to change the teaching and learning activities, the mere use of technology tools will not suffice. This finding also reinforces Garba et al. (2015) findings that Malaysian teachers lack TPACK to integrate ICT effectively in the classroom.

Therefore, the teacher’s role in this online learning can be seen as a medium “to complete a particular task, rather than an opportunity to engage in rich discussion and debate with their peers and instructors,” as proposed by Hara et al. (2000, p. 148). Borup et al. (2013) assert that the lack of interaction in an online learning environment is viewed as not academically sound. Studies have indicated that integrating technology tools in the teaching process is a difficult task. Although technology in isolation seems effective, the effect is not the same in natural education settings (Sivo et al., 2018).

Therefore, teachers need to encourage group activities and interaction as suggested by the CoI model. The CoI model is based on the social constructivism

theory, emphasising scaffolding and Zone of Proximal Development (ZPD) to guide students in their journey to acquire knowledge (Vygotsky, 1978). ZPD is the distance between students' ability to carry out a task under an adult or peer's interaction allowing the learners to be more conscious. Cognitive presence suggested by Garrison et al. (2000) for effective online learning involves recognizing problems, exploration, integration, and resolution phases. However, these phases are not evident in this study. Encouraging such phases in an online environment is essential for teachers to deliver their content more effectively.

We need to consider that teachers cannot be experts overnight. Trial and error must be the starting point for teachers and students to go online. This study shows that a mix of tools has been used in their learning process. By now, teachers would have discovered what works and what does not work based on the subject, content, and skills being taught. A mix and match of tools with appropriate pedagogical practices will lead to positive learning outcomes. As Netolicky (2020, p. 18) pointed out, "learning that shifts beliefs, and thereby behaviours, of professionals. It is tied to an individual's personal and professional identity". With the rapid change experienced by teachers, in situ learning occurs at their point of need. It can be a starting point as teachers are getting familiar with the appropriate online pedagogical practices.

Students have highlighted their dissatisfaction related to cognitive load. One of the essential aspects of any learning

is to ensure that the content is delivered effectively, understood, and recalled when necessary. As such, practical instructions should always consider the amount of knowledge instilled. The more information delivered at one time, the more likely students will not remember. According to Cognitive Load Theory (Sweller, 1988), students can only remember what has been taught if ideas and information do not overload their mental capacity. The theory highlighted that the working memory capacity is limited. Therefore, too much information presented simultaneously becomes overwhelming, and most of the information is lost. One of the ways to reduce cognitive load is to keep the lessons short. Sweller (2020) suggested that to reduce cognitive load teachers need to keep information simple and use various instructional techniques. For example, offer some information verbally and visually. Thus, it enables the students to absorb information with different processing methods and bite-size learning. Bite-size learning is another approach to convey information effectively. Annamalai (2019) found that students prefer ideas presented in short modules and chunks when WhatsApp was used to deliver information for students. In other words, students prefer bite-size learning.

The findings also suggest that students are not connected with their peers during online learning. Students engaged online need social and emotional support, particularly during the COVID-19 pandemic because students are being isolated from

friends. Social presence is an essential aspect of online learning. Learners are not only looking for information; they are also looking for affiliation, support, and affirmation” (Sproull & Faraj, 1997, p. 38). Similarly, online learning involves social aspects, and social interactions are at the heart of the learning process (Rovai, 2002; Sung & Mayer, 2012). According to Kreijns et al. (2004), online learners are expected to form friendships. Dialogic and constructive pedagogy activities such as Socratic questioning, gamification, and peer review might be some of the options to encourage social presence. It is pertinent for teachers to set a conducive environment from the beginning of the lessons. Probably ice-breaking sessions would be a good start. Students can share personal stories of what happened during the weekend. Students can also upload videos about a topic, which allows comments from peers and teachers. Off-topic, discussions could also take place to help students and teachers to maintain their relationships.

Technical problems have always been an issue in the online learning environment. The adequate support of tools is essential for learning to take place. Since the pandemic was not predicted, technology discomfort has been experienced, and this can be overcome once the lockdown is over. Doucet et al. (2020, p. 8) put forward the idea “Maslow before Bloom,” indicating that although teaching and learning activities are essential, health and safety need to be given the utmost priority during a crisis. This is because students are experiencing complexities

from home as well as mental, emotional, and physical strain. Once the pandemic is over, both the teachers and students will handle online learning exceptionally well. Self-discipline seems to be essential. However, this is not the school environment. Learners will struggle with motivation and engagement. Schools need to inform the parents about the online classes. Parents can help to check the disciplines of the students from home.

CONCLUSION

The global lockdown was never expected. COVID-19 is a global pandemic, and schools are trying to go online amid significant health and economic crises. There will be challenges from school, teachers, parents, and students. However, the qualitative and quantitative findings have indicated that students are ready to go online. The study points to students’ need for support in social, emotional, and pedagogical aspects. The findings should contribute to a better understanding of the sudden change to online learning in high schools and lead to conclusions for educational practice. It will guide teachers and students to discover their experiences and slowly overcome the weaknesses they experience. Due to the crisis, a great deal of flexibility is needed in the learning process. However, the findings are too significant to be ignored. Understanding the problems and considering the appropriate strategies is essential to maintaining quality, motivation, and engagement.

This study has several takeaways, but the primary conclusion is that teaching must be interactive and student-centred when students are engaged in the virtual environment. The current study has some limitations, which should be considered in future research. Longitudinal studies should also be considered for a more comprehensive understanding of the online environment in schools. In addition to this, the study was only conducted in high schools in the northern region of Malaysia. Future studies should consider other regions in Malaysia.

ACKNOWLEDGEMENT

The authors wish to acknowledge the USM Short term grant 304/PJJAUH/ 6315231 for the financial support.

REFERENCES

- Akyol, Z., & Garrison, D. R. (2011). Assessing metacognition in an online community of inquiry. *The Internet and Higher Education*, 14(3), 183-190. <https://doi.org/10.1016/j.iheduc.2011.01.005>
- Al-Marroof, R. A. S., & Al-Emran, M. (2018). Students acceptance of Google classroom: An exploratory study using PLS-SEM approach. *International Journal of Emerging Technologies in Learning*, 13(6), 112-123. <https://doi.org/10.3991/ijet.v13i06.8275>
- Al-Smadi, M., Talafha, B., Al-Ayyoub, M., & Jararweh, Y. (2019). Using long short-term memory deep neural networks for aspect-based sentiment analysis of Arabic reviews. *International Journal of Machine Learning and Cybernetics*, 10(8), 2163-2175. <https://doi.org/10.1007/s13042-018-0799-4>
- Anderson, T. (2008). *The theory and practice of online learning* (2nd ed.). Athabasca University (AU) Press.
- Annamalai, N. (2016). Exploring the writing approaches in the Facebook environment. *Teaching English with Technology*, 16(1), 71-87.
- Annamalai, N. (2019). Using WhatsApp to extend learning in a blended classroom environment. *Teaching English with Technology*, 19(1), 3-20.
- Annamalai, N., Tan, K. E., & Abdullah, A. (2016). Teaching presence in an online collaborative learning environment via Facebook. *Pertanika Journal of Social Sciences & Humanities*, 24(1), 197-212.
- Annamalai, N., & Kumar, J. A. (2020). Understanding smartphone use behavior among distance education students in completing their coursework in English: A Mixed-Method Approach. *The Reference Librarian*, 6(3) 199-215.
- Annamalai, N., Eng, T. K., Abdullah, A., & Sivagurunathan, S. (2015). Exploring the Interactions on an online narrative writing platform. *Malaysian Journal of Learning and Instruction*, 12, 103-129.
- Barbour, M. K., & Reeves, T. C. (2009). The reality of virtual schools: A review of the literature. *Computers & Education*, 52(2), 402-416. <https://doi.org/10.1016/j.compedu.2008.09.009>
- Borup, J., West, R. E., & Graham, C. R. (2013). The influence of asynchronous video communication on learner social presence: A narrative analysis of four cases. *Distance Education*, 34(1), 48-63. <https://doi.org/10.1080/01587919.2013.770427>
- Bower, M., Dalgarno, B., Kennedy, G. E., Lee, M. J., & Kenney, J. (2015). Design and implementation factors in blended synchronous learning environments: Outcomes from a cross-case analysis. *Computers & Education*, 86, 1-17. <https://doi.org/10.1016/j.compedu.2015.03.006>

- Bower, M., Hedberg, J. G., & Kuswara, A. (2010). A framework for Web 2.0 learning design. *Educational Media International*, 47(3), 177-198. doi:10.1080/09523987.2010.518811
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101. https://doi.org/10.1191/1478088706qp063oa
- Burke, S. C., Snyder, S., & Rager, R. C. (2009). An assessment of faculty usage of YouTube as a teaching resource. *Internet Journal of Allied Health Sciences and Practice*, 7(1), 8.
- Cavanaugh, W. J., Tocci, G. C., & Wilkes, J. A. (2009). *Architectural acoustics: Principles and practice*. John Wiley & Sons.
- Chou, T. J., & Ting, C. C. (2003). The role of flow experience in cyber-game addiction. *Cyber Psychology & Behavior*, 6(6), 663-675. https://doi.org/10.1089/109493103322725469
- Creswell, J. W., & Clark, V. L. (2007). *Designing and conducting mixed method research*. Sage.
- Dewey, J. (1938). *Experience and education*. Collier Books.
- Doucet, A., Netolicky, D., Timmers, K., & Tuscano, F. J. (2020). *Thinking about pedagogy in an unfolding pandemic*. https://www.saspa.com.au/wp-content/uploads/2020/04/2020_Research_COVID-19_2.0_ENG-Thinking-about-Pedagogy-in-an-Unfolding-Pandemic.pdf
- Elmorshidy, A. (2013). Applying the technology acceptance and service quality models to live customer support chat for e-commerce websites. *Journal of Applied Business Research*, 29(2), 589-596. https://doi.org/10.19030/jabr.v29i2.7659
- Fuhrman, T. (2014, March 20). *A mobile initiative that's more than just a tablet handout*. Campus Technology. http://campustechnology.com/articles/2014/03/20/a-mobile-initiative-thats-more-than-just-a-tablet-handout.aspx
- Garba, S. A., Byabazaire, Y., & Busthami, A. H. (2015). Toward the use of 21st century teaching-learning approaches: The trend of development in Malaysian schools within the context of Asia Pacific. *International Journal of Emerging Technologies in Learning*, 10(4), 72-79. http://dx.doi.org/10.3991/ijet.v10i4.4717
- Garcia, A., Abrego, J., & Calvillo, M. (2014). Study of the of hybrid instructional delivery for graduate students in an educational leadership course. *International Journal of E-Learning & Distance Education*, 29(1), 1-15.
- Garrison, D. R. (2017). *E-learning in the 21st century*. Routledge.
- Garrison, D. R., Anderson, T., & Archer, W. (2000). Critical thinking, cognitive presence, and computer conferencing in distance education. *American Journal of Distance Education*, 15(1), 7-23. https://doi.org/10.1080/08923640109527071
- Garrison, D. R. (2011). *E-learning in the 21st century: A framework for research and practice*. http://jofdl.nz/index.php/JOFDL/article/viewFile/133/98
- Hamari, J., & Keronen, L. (2017). Why do people play games? A meta-analysis. *International Journal of Information Management*, 37(3), 125-141. https://doi.org/10.1016/j.ijinfomgt.2017.01.006
- Händel, M., Stephan, M., Gläser-Zikuda, M., Kopp, B., Bedenlier, S., & Ziegler, A. (2020). Digital readiness and its effects on higher education students' socio-emotional perceptions in the context of the COVID-19 pandemic. *Journal of Research on Technology in Education*, Ahead-of-Print, 1-13. https://doi.org/10.1080/15391523.2020.1846147
- Hara, N., Bonk, C. J., & Angeli, C. (2000). Content analysis of online discussion in an applied educational psychology course. *Instructional Science*, 28(2), 115-152.

- Hedberg, J. G., & Stevenson, M. (2014). Breaking away from text, time and place. In M. G. D. Ifenthaler (Ed.), *Curriculum models for the 21st century* (pp. 17-33). Springer.
- Hoskins, B. J. (2012). Connections, engagement, and presence. *The Journal of Continuing Higher Education, 60*(1), 51-53. <https://doi.org/10.1080/007377363.2012.650573>
- Kale, U., & Akcaoglu, M. (2018). The role of relevance in future teachers' utility value and interest toward technology. *Educational Technology Research and Development, 66*(2), 283-311.
- Kamenetz, A. (2020). *Panic-gogy: Teaching online classes during the coronavirus pandemic*. OPB. Retrieved April 5, 2020, from <https://www.opb.org/news/article/npr-panic-gogy-teaching-online-classes-during-the-coronavirus-pandemic/>
- Kementerian Pendidikan Malaysia. (2016). *Malaysian education blue print 2013-2025*. <https://www.moe.gov.my/menunedia/media-cetak/penerbitan/dasar/1207-malaysia-education-blueprint-2013-2025/file>
- Kreijns, K., Kirschner, P. A., Jochems, W., & Van Buuren, H. (2004). Determining sociability, social space, and social presence in (a) synchronous collaborative groups. *CyberPsychology & Behavior, 7*(2), 155-172.
- Laverty, S. M. (2003). Hermeneutic phenomenology and phenomenology: A comparison of historical and methodological considerations. *International Journal of Qualitative methods, 2*(3), 21-35.
- Li, Y., & Ranieri, M. (2010). Are 'digital natives' really digitally competent?—A study on Chinese teenagers. *British Journal of Educational Technology, 41*(6), 1029-1042. <https://doi.org/10.1111/j.1467-8535.2009.01053.x>
- Lin, C.-H., Zheng, B., & Zhang, Y. (2017). Interactions and learning outcomes in online language courses. *British Journal of Educational Technology, 48*(3), 730-748. <https://doi.org/10.1111/bjjet.12457>
- Lipmann, M. (2003). *Thinking in education*. Cambridge University Press.
- Lopez, C. E., & Tucker, C. S. (2019). The effects of player type on performance: A gamification case study. *Computers in Human Behavior, 91*, 333-345. <https://doi.org/10.1016/j.chb.2018.10.005>
- Lowry, P. B., Roberts, T. L., Romano Jr, N. C., Cheney, P. D., & Hightower, R. T. (2006). The impact of group size and social presence on small-group communication: Does computer-mediated communication make a difference? *Small Group Research, 37*(6), 631-661. <https://doi.org/10.1177/1046496406294322>
- Machado, L. J., & Chung, C. J. (2015). Integrating technology: The principals' role and effect. *International Education Studies, 8*(5), 43-53.
- Mayer, R. E. (2005). *The Cambridge handbook of multimedia learning*. Cambridge University Press.
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook*. Sage.
- Moftakhari, M. M. (2013). *Evaluating e-learning readiness of faculty of letters of Hacettepe*. [Master's thesis]. Hacettepe University.
- Moore, M. G. (1989). Three types of interaction. *The American Journal of Distance Education, 3*(2), 1-6.
- Netolicky, D. M. (2020). Transformational professional learning: What, why and how? *Independent Education, 50*(1), 32-33.
- Park, S.Y., Nam, M.-W., & Cha, S.-B. (2012). University students' behavioral intention to use mobile learning: Evaluating the technology acceptance model. *British Journal of Educational Technology, 43*(4), 592-605. <https://doi.org/10.1111/j.1467-8535.2011.01229.x>

- Perveen, A. (2016). Synchronous and asynchronous e-language learning: A case study of virtual university of Pakistan. *Open Praxis*, 8(1), 21-39.
- Petko, D., Egger, N., Cantieni, A., & Wespi, B. (2015). Digital media adoption in schools: Bottom-up, top-down, complementary or optional? *Computers & Education*, 84, 49-61.
- Pierce, C. S. (1955). The fixation of belief. In J. Buchler (Ed.), *Philosophical writings of Pierce* (pp. 5-22). Dover.
- Rafique, G. M., Mahmood, K., Warraich, N. F., & Rehman, S. U. (2021). Readiness for online learning during COVID-19 pandemic: A survey of Pakistani LIS students. *The Journal of Academic Librarianship*, 47(3), 102346.
- Richardson, J. C., & Swan, K. (2003). Examining social presence in online courses in relation to students' perceived learning and satisfaction. *Journal of Asynchronous Learning Networks*, 7(1), 119-130. <http://hdl.handle.net/2142/18713>
- Rourke, L., Anderson, T., Garrison, D. R., & Archer, W. (2001). Methodological issues in the content analysis of computer conference transcripts. *International Journal of Artificial Intelligence in Education*, 12(1), 89-107.
- Rovai, A. P. (2002). Development of an instrument to measure classroom community. *Internet and Higher Education*, 5(3), 197-211. [https://doi.org/10.1016/S1096-7516\(02\)00102-1](https://doi.org/10.1016/S1096-7516(02)00102-1)
- Rushby, N. (2012). Editorial: An agenda for mobile learning. *British Journal of Educational Technology*, 43(3), 355-356. <https://doi.org/10.1111/j.1467-8535.2012.01313.x>
- Ryan, J., Scott, A., & Walsh, M. (2010). Pedagogy in the multimodal classroom: An analysis of the challenges and opportunities for teachers. *Teachers and Teaching: Theory and Practice*, 16(4), 477-489. <https://doi.org/10.1080/13540601003754871>
- Samuel, R., & Bakar, Z. (2006). The utilization and integration of ICT tools in promoting English language teaching and learning: Reflections from English option teachers in Kuala Langat District, Malaysia. *International Journal of Education and Development using ICT*, 2(2), 4-14.
- Shaharane, I. N. M., Jamil, J. M., & Rodzi, S. S. M. (2016, August). Google classroom as a tool for active learning. *AIP Conference Proceedings*, 1761(1), 020069.
- Shea, P., Hayes, S., Smith, S. U., Vickers, J., Bidjerano, T., Pickett, A., & Jian, S. (2012). Learning presence: Additional research on a new conceptual element within the Community of Inquiry (CoI) framework. *The Internet and Higher Education*, 15(2), 89-95. <https://doi.org/10.1016/j.iheduc.2011.08.002>
- Sivo, S. A., Ku, C. H., & Acharya, P. (2018). Understanding how university student perceptions of resources affect technology acceptance in online learning courses. *Australasian Journal of Educational Technology*, 34(4), 72-91. <https://doi.org/10.14742/ajet.2806>
- Sproull, L., & Faraj, S. (1997). Atheism, sex, and databases: The net as a social technology. *Culture of the Internet*, 16(3), 35-51.
- Sung, E., & Mayer, R. E. (2012). Five facets of social presence in online distance education. *Computers in Human Behavior*, 28(5), 1738-1747. <https://doi.org/10.1016/j.chb.2012.04.014>
- Sweller, J. (1988). Cognitive load during problem solving: Effects on learning. *Cognitive Science*, 12(2), 257-285.
- Sweller, J. (2020). Cognitive load theory and educational technology. *Educational Technology Research and Development*, 68(1), 1-16. [https://doi.org/10.1016/0364-0213\(88\)90023-7](https://doi.org/10.1016/0364-0213(88)90023-7)
- UNESCO. (2020). *COVID-19. Education disruption and response*. <https://en.unesco.org/covid19/educationresponse>

- Vygotsky, L. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.
- Werbach, K., & Hunter, D. (2012). *For the win: How game thinking can revolutionize your business*. Wharton Digital Press.
- Winthrop, R. (2020, March 31). *COVID-19 & school closure: Why can countries from past emergencies*. Brookings. <https://www.brookings.edu/research/covid-19-and-school-closures-what-can-countries-learn-from-past-emergencies/>

Characteristics and Success Factors of Rural Community Leadership in Malaysia: A Focus Group Analysis

Ahmad Aizuddin Md Rami*, Mohd Faiq Abd Aziz, Nurfazreen Aina Muhamad Nasharudin and Roziah Mohd Rasdi

Faculty of Educational Studies, Universiti Putra Malaysia, 43400 UPM Serdang, Malaysia

ABSTRACT

The leadership aspects of rural leaders in Malaysia are still unclear, and a consensus of the characteristics of credible rural community leaders has not been achieved. In addition, there is still a lack of specific and in-depth research on community leadership in rural areas in Malaysia. Therefore, a study was conducted to deepen understanding of leadership, specifically in the rural community leadership characteristics and success factors. The current study used a qualitative approach via a focus group discussion method involving 15 informants from the Village Development and Security Committee (JPKK) to gain in-depth information. The major themes that emerged from findings include inborn leadership, leadership quality, leadership characteristics, leadership motivation, and leadership training, referred to as leaders' success factors. The current study hopes that the government can provide focused and comprehensive leadership training programs to ensure leaders perform their duties effectively and efficiently.

Keywords: Community development, community leadership, leadership development, rural community

ARTICLE INFO

Article history:

Received: 4 February 2021

Accepted: 24 May 2021

Published: 13 September 2021

DOI: <https://doi.org/10.47836/pjssh.29.3.07>

E-mail addresses:

ahmadaizuddin@upm.edu.my (Ahmad Aizuddin Md Rami)

mohdfaiq@upm.edu.my (Mohd Faiq Abd Aziz)

nurfazreen@upm.edu.my (Nurfazreen Aina Muhamad Nasharudin)

roziah_m@upm.edu.my (Roziah Mohd Rasdi)

*Corresponding author

INTRODUCTION

Today's society is continuously confronted with demanding a leader develop strategies for achieving structured goals (Podsakoff et al., 2018). A leader is a person who controls or commands a group, organisation, or country. Leadership is the art of influencing and directing people to their obedience, confidence, and loyal cooperation in achieving common objectives (Gandolfi &

Stone, 2016; Northouse, 2012). Researchers have increasingly moved beyond simple interpretations of leaders as “born” or “special breed.” Certain degrees of context-specific and always more complicated than monolithic appeal to personal attributes (Aziz et al., 2020; Kniffin & Patterson, 2019).

Successful societies are often associated with a leadership style and pattern that enables them to carry out their tasks towards achieving the goals (Xu et al., 2017). Successful leadership strongly influences followers (Rami et al., 2020b). In this context, leaders use influence to ensure their followers carry out tasks with dedication, sincerity, and commitment (Erdurmazlı, 2019). Leaders can also use their wisdom and authority to influence their followers to make positive changes and develop human resources to achieve organisational goals (Smith et al., 2004). Marion and Uhl-Bien (2001) stated that leaders and communities were near related and that management’s effectiveness was often related to the leadership effectiveness. Northouse (2012) argued that a leader’s effectiveness depends mainly on the wisdom to clearly define the mission and vision of the organisation, training, responsibilities, communication, initiatives, insights into the situations, collaboration, and being able to improve situations.

The success of leadership has been discussed in several previous studies. Among them are Yukl et al. (2009) and Rami et al. (2016). Researchers have reviewed the current information related to the best

leadership practices and success factors and the impact of focusing on other leadership programs. Studies in community-based leadership believe that successful leadership prioritizes three stakeholders: the individuals and their families; the community; and organizations that strengthen the community (Edwards, 2015). Besides that, the public should understand that leaders are born and honed despite coming from many different backgrounds. Naturally, effective leadership programs must be applied to each leader to understand the community’s needs and bring about changes (Rami et al., 2020a). Leadership programs should also identify, evaluate, and consider cultural issues and understand the impact on learning, communication, relationships, and other leadership development issues.

According to Beer (2014), effective community leadership programs typically have a strong community base, are prepared according to the particular needs of the community or agency, and are focused on leadership development efforts according to community needs. Besides that, community leaders and members support each other to bring about change at the three levels of individuals, families, and communities (Prummer & Siedlarek, 2017).

Ricketts and Ladewig (2008) mentioned that effective communication was fundamental to any well-functioning community. In every community and leaders’ commands, being honest with their community members is essential. The success of a leader of a rural community depends on their ability to disseminate

information through proper channels, and at the same time, maintain confidential information as necessary (Rami et al., 2020a). The best way to build effective communication channels is to provide social media facilities and community websites, distribute information, hold regular meetings, and communicate with other community organisations.

Wilson (2012) argued that an effective leader must be visionary and capable of leading their followers transparently while creating an environment that allows the community to follow them willingly (hanging sentence). This process includes expressing shared vision, power, principles, relationships and beliefs, cooperation, networks, understanding, charisma, and team spirit (Boyatzis et al., 2015). Another idea of leadership among community leaders was emphasized by Lowndes (2004), who explained that networks and strategies of understanding and sharing related to shared vision were essential in this process.

Some experts and researchers related to community leadership emphasise cooperation, persistence, and influence processes based on the relationships between specific parties (Guay & Choi, 2015). When defining a relationship, all stakeholders are engaged in which the aspects of leadership are based on cooperation. A community leader's success depends on the situation and the leader's ability to solve the problem. Contemporary views on community leadership emphasise the importance of people or communities to voice their ideas in the decision-making process and policies that can impact their lives (Argent, 2011).

In Malaysia, rural community development is essential for rural people's well-being, as rural areas in Malaysia are still characterised by weak infrastructure, low population density, and limited access to public services (OECD, 2019). According to Samah et al. (2009), it is crucial that rural community leadership overcomes conventional obstacles and promotes development in new challenges. Furthermore, due to the tremendous pace at which development occurs, leadership is vital to ensure that rural residents are not left behind and compete with urban residents, particularly in development challenges. Therefore, an effective rural leader must guarantee creative and innovative responses to help achieve sustainable rural development. In this regard, local communities must pay attention to the success factors of village leaders in Malaysia, followed by establishing the suitable characteristics of a proper rural leader to discover one.

Many recent studies have focused on local community leadership and empowerment for rural community strengths (Charoenwiriyaikul, 2016; Rami et al., 2017; Setokoe et al., 2019; Xu et al., 2017). However, in particular, the study in leadership paid little attention to leadership in rural community development that explicitly considers the unique success factors of the Malaysian rural leader while discussing the characteristics of a community leader. The previous studies were only conducted to determine the level of knowledge and perception of rural community leaders in

Malaysia (e.g., Masso & Man, 2016; Ngah et al., 2010). The actual features and success elements of rural community leaders need to be explicitly addressed. The two main questions that the present study tries to answer are: (a) What are the characteristics of a community leader in a rural area? (b) What are the features of a successful leader in a rural community? Therefore, this study aimed to deepen leadership knowledge, specifically understanding rural community leadership characteristics and success factors in Malaysia.

LITERATURE REVIEW

Rural Leadership and Rural Community Development

Since the pre-independence of Malaysia, western and local researchers have seriously looked into rural leadership and community development issues (e.g., Rogers, 1975; Wall Jr & Callister, 1999). The literature review first highlights the importance of local leaders' capability and commitment - two necessary qualities that ensure substantial and meaningful local participation and support to push ground activities forward (Abas & Abd Halim, 2018). Therefore, it is indicative that leadership and community development are two closely related constructs. Freddie et al. (2013) posited that the key factor of successful rural community development is an effective leader who consistently avails him/herself. To date, several approaches to leadership styles have been developed to demonstrate how their concepts can be used together to create community stability

through the development of effectively functioning leaders and sustainable leadership interactions.

As such, trait leadership as one of the first approaches to leadership theory was introduced as early as 1948 to define leadership. According to Northouse (2012), trait leadership is defined as naturally distinctive leadership qualities—displayed since birth—that propel specific individuals into great leaders. In the 1960s, the prominence of trait leadership re-emerged where discussions were robust in explaining how traits play a leadership role. However, it was due to the general perspective that focused on the dynamics of social influence, relationships, and leadership styles. The fundamental focus areas when examining leadership styles were a leader's actions and disposition. This era also saw a shift in leadership theory; trait leadership moved towards the dynamism of transformational leadership (Palalic, 2020), which delivers a higher level of complexity and potency. This leadership style is based on leader-follower exchanges. Between the 1980s and '90s, transformational leadership evolved as a process where the leader's purposeful engagement with others closes the leader-follower gap. It results in enhanced motivation and morality in both parties. The leader, he/she demonstrates a leadership style that exudes an inspiring vision and charisma. At the same time, the follower develops into their full potential.

In the recent decade, leadership discourse has undergone another shift—towards the servant leadership approach.

Several studies have discussed leadership, commitment to communities, and leaders' sense of obligation to their people as the core contributors to achieving community goals and outcomes (Yahaya & Ebrahim, 2016). For example, Greenleaf's (1996) concept of servant leadership is based on the leader's ultimate service goal instead of traditional leadership, focusing on community growth. In contemporary communities, it is crucial to look at how these varied approaches contribute towards leader-community engagements in a rural context. Therefore, ground activities spearheaded by local leaders and associations should orient less towards fulfilling individual interests and more towards meeting the encompassing needs and concerns of communities they serve.

Study Context

Malaysia is often cited as one of the front-runners in implementing rural development programs among the developing nations. Evolution and transformation in rural areas started in 1957 with the Pre-new Economic Policy to reduce poverty among the poor and the marginalised. In the Eleventh Malaysia Plan (*Rancangan Malaysia ke-11*) 2016–2020, the focus is on further developing the rural areas to balance the economic growth in rural and urban areas. In line with the establishment of the Malaysian Vision Policy, drives the nation towards achieving an equitable society.

Post-independence (31st August 1957), the Village Development and Security Committee advisory, locally

known as *Jawatankuasa Pembangunan dan Keselamatan Kampung* (JPKK), was established to develop local leaders to stimulate development at the grassroots. It required leaders to work at the forefront of development and place themselves at the heart of project delivery, amenity provisions, day-to-day interactions of individuals, families, and the community's life in the village context. The JPKK unit performs the role of an intermediary, extending the services of the district office administration (Rami et al., 2020b). In essence, it carries out the liaison function between the village and the government agencies mandated to roll out programmes for community development. Another responsibility is to provide leadership and coordination of village resources to ensure that the community achieves development goals as intended. Also, JPKK works towards sustaining a stable safe ecosystem and protecting itself from social threats. In terms of membership, JPKK is chaired by the village headman, elected village leaders, and representatives of organisations in the village (Rami et al., 2021). However, village leaders share a similar reputation with district officers because both are the intended beneficiaries of development policies, especially when the former are political appointees.

In the current study, the JPKK leadership in the grassroots context was chosen because little is known about local leadership perspectives in Malaysian rural communities. Furthermore, it is imperative to recognise the quintessential roles of

village leaders and associations throughout community development programmes. Otherwise, we disregard social change agents who make decisions, provide leadership, and instigate community action, thereby missing the mark of community development itself.

MATERIAL AND METHODS

Most past research on rural community leadership characteristics used quantitative methods (e.g., Islam et al., 2020; Liu et al., 2016). Therefore, we attempted to understand the rural community leadership experience through a detailed inquiry into the individuals' experiences rather than proving or refuting predetermined hypotheses. Therefore, this research method was deemed qualitatively more appropriate (Taylor et al., 2015). Furthermore, Taylor provides direct access to the subjective knowledge of rural people's leadership experiences, which focuses on achieving the research aim of this study.

Study Design

This study took a qualitative approach. The present study is a case study. In this case study, JPKK leaders were asked to participate in this research via focus group discussion (FGD) to collect data. FGDs are considered a form of planned discussion. The ideal number of informants is at least four and not exceeding 20 (Creswell, 2018). FGDs can vary from highly structured to unstructured, depending on the purpose of the study. A team consisting of a professional facilitator and an assistant needs focus group

discussion. Through the management of existing partnerships and establishing a relaxed and pleasant atmosphere for inexperienced participants, the facilitator is central to the conversation. Likewise, the assistant's role involves observing non-verbal interactions and the influence of group dynamics and recording the general content of the debate, supplementing the details (Nyumba et al., 2018; Rami et al., 2018). In this study, semi-structured questions were provided to facilitate discussions. The questions were about the informants' understanding of the meaning and characteristics of leadership, and the definition and requirements of a successful leader in a rural community, especially at the grassroots level. We then validate the interview questions through three steps: (1) a review of the literature, (2) verify the validity of the interview questions with both the target population and field experts, and (3) arrange the preparation of a provisional interview schedule or protocol.

Setting

With an estimated 31.5 million people population, Malaysia is one of the world's youngest populations (Statistics Department Public, 2020). In 2018, approximately 24 per cent of Malaysia's population resided in rural areas. The state of Terengganu is located in the east of Peninsular Malaysia. According to the statistical report published by the Terengganu State Economic Planning Unit (UPEN, 2012), the total population for the state of Terengganu in urban and rural areas was approximately 1,011,363 people.

Terengganu is one of Malaysia's most homogeneous states, along with Kelantan. More than 95% of the population is ethnically Malay. However, other ethnic groups live in the state as well, including Chinese (mostly Hoklo), Indians (predominantly Tamils), Siamese, and *Orang Asli* (Indigenous people of Batek and Semaq Beri).

Participant and Procedure

All participants were purposively selected. The sample of the FGD for this study involved a group of 15 JPKK leaders. All informants were members of the JPKK committee representing the local communities in a rural area in the state of Terengganu. The committee consisted of three groups: youth, women, and men. Besides being actively involved in the community or grassroots development programs, some informants worked in the government, private, and entrepreneurial sectors. Others run their businesses or become full-time housewives. In the interests of privacy and confidentiality of informants, pseudonyms were used.

All FGDs were conducted at the locations where the fifteen participants and JPKK leaders were recruited. The same person served as a moderator for all focus groups, accompanied by two assistant moderators. The interviews were audiotaped. Each participant was given a booklet containing an overview of the study, a consent form, and a background questionnaire for reference.

The moderator continued asking about the questions until roughly twenty minutes before the scheduled end of the session.

Then, the moderator discontinued the individual areas of discussion and began to ask the final summary questions to ensure that there would be enough time to conclude the discussions. Each session lasted approximately 2 hours.

Data Collection

To obtain the necessary data, a set of FGD guidelines, known as the FGD protocol, was used as the basis for this analysis (Krueger, 1997). The study was arranged based on three phases of FGD protocol: (i) Preparation before the focus group, (ii) Conduct the focus group, and (iii) Interpreting and reporting the results. The FGD questions were formulated based on past researches and the aims of the study. Ethically, the informants were given a consent form to ensure that they agreed to engage in the study. They were assured of anonymity and informed that all details would only be used for research purposes. The review of the data started as soon as the FGD was finished. Based on the interpretation of the FGD verbatim theme known as thematic analysis, data analysis was conducted. The versatile nature of thematic analysis allowed the researcher to define themes and prevalence in various ways.

Data Analysis

The qualitative analysis of the focus group data used a set procedure (Basch, 1987; Kitzinger, 1995; Stewart et al., 1990). The combination of interviews increases the trustworthiness of the information, making

the findings more robust. The interviews provided a wide variety of integrated care views, providing a realistic impression of views across the sector (Green & Thorogood, 2018). The audiotapes of the sessions were transcribed. The coding categories were

developed through several iterations of analysing transcripts, generating categories, reviewing the proposed categories, and using the revised categories to code transcripts (Table 1).

Table 1
Demographic profile of participants

No.	Pseudonym	Employment	Years of leadership experience
1	Yusof	Self-employed	15
2	Hamid	Public officer	10
3	Halimi	Public officer	5
4	Rahmah	Entrepreneur	7
5	Maznah	Housewife	7
6	Roslan	Government Officer	7
7	Mohd	Government pensioner	3
8	Akmal	Entrepreneur	3
9	Jusoh	Farmer	8
10	Zaid	Self-employed	3
11	Zakuan	Private sector workers	3
12	Malik	Self-employed	3
13	Rashid	Self-employed	3
14	Wan	Private sector workers	3
15	Muhd	Entrepreneur	2

RESULTS

The data analysis revealed four major themes capturing the participants' rural community leadership characteristics and success factors. These themes were classified through data analysis, as shown in Table 2.

Background of Informants

The FGD consisted of 15 informants, comprising the chairman, secretary, and chair of the JPKK committee. The informants were typically in their 30s and 60s. All informants had experience in being leaders in their area. Each presided over a subcommittee of the JPKK, including

Table 2
Summary of findings

No.	Theme	Sub-themes
1	Inborn Leadership	<ul style="list-style-type: none"> • a natural-born leader • smart leader
2	Leadership quality	<ul style="list-style-type: none"> • Confidence extensive knowledge extensive experience accountability communication skills Physical and personal characteristics
3	Leadership motivation	<ul style="list-style-type: none"> • Family motivation • leadership position • Desire to help rural communities
4	Leadership training	<ul style="list-style-type: none"> • Listening skills • Organisational management skill

Note: (i) self-confidence, (ii) extensive knowledge, (iii) extensive experience, (iv) accountability, (v) communication skills, and (vi) physical and personal characteristics

the safety committee, youth development committee, infrastructure committee, women development committee, welfare committee, and economic development committee. The establishment of the JP KK followed the government’s recommendation in areas with a population of over 2000. Its primary purpose was to mobilise community activities to improve the management and welfare of the population. Activities included organising health awareness programs, family welfare, entrepreneurship skills training, working with the private sector, and ensuring safety in their respective areas. Each JP KK was paid an allowance by the government and received a yearly financial grant from the government and local authorities. The elected JP KK leaders were expected to enhance the community’s capacity and eventually become the catalysts

for changing the rural community’s well-being.

Emerging Themes

Inborn Leadership. The views of natural-born leaders and wise leaders were reflected in the FGD. Some informants claimed that some leaders were born with innate qualities, and some were born with natural talents. For example, Yusof thought:

“...today, many of us consider those who are highly educated and qualified to lead. Nevertheless, a person’s leadership style is born with that trait, born with their natural talent. Even if a person has a great educational background, he cannot lead well if he is not gifted with the spirit and leadership qualities. Some people look like ordinary people, but

because of the 'aura' of their leadership, they have many followers, and this is a leader....". (Yusof)

For example, Halimi stated that

"...To be a leader, one has to be smart. If one does not have the confidence to speak, he will not see himself as a leader. A leader must be able to convey ideas and instructions clearly for his subordinates to understand....". (Halimi)

Leadership Quality. Interviews with informants identified six leadership qualities that make rural leaders successful leaders: (i) self-confidence, (ii) extensive knowledge, (iii) a person with extensive experience, (iv) accountability, (v) communication skills, and (vi) physical and personal characteristics.

Self-confidence is the key to successful leadership. When there is ambiguity, making choices is unavoidable, and successful leaders take responsibility for choosing an unpredictable outcome. Roslan said:

"It is important to the rural leader to have that confidence.... Community leaders must have a certain degree of confidence in their ability to carry out various tasks for the community". (Roslan)

Besides, the findings revealed that high-quality leaders must draw from both knowledge and experience.

"...a leader must always want to learn and equip himself with the latest

knowledge in his field. A leader must be aware of the current developments and be able to handle any situation related to it....". (Zaid)

"...in my opinion, a leader needs to have extensive experience in his or her family institution. If this is seen as beautiful, then the leader can carry out his duties as a good leader for the community....". (Roslan)

The results also indicated that the essential qualities of a good leader include accountability.

"Usually, if there is a dispute or dispute over land or pet ownership, the leader should resolve it wisely without making a biased decision. This accountability personality trait is essential to maintaining communal harmony". (Malik)

Based on the findings, excellent leaders need to have communication skills, especially speaking in public. Besides that, communication skills are also essential in carrying out a leader's daily tasks, such as directing, conducting meetings, and building networks with external parties. Communication skills are also seen as necessary in carrying out tasks at the grassroots level, as illustrated by Maznah:

"...leaders should not be arrogant. For example, when meeting with subordinates, they should always admonish people, whether at work or outside. As a chairman, what I always practice is too often go out to the

community to hear the news and visit them in the event of an accident...". (Maznah)

Finally, the findings displayed the physical and personal characteristics that made up an ideal leader, as explained by the following excerpts:

"...I think he (mentions the name of a leader admired) is different from other high-ranking leaders because he does not have too much control or protocol with the common people. Besides that, he can joke and, at the same time, maintain his manners and ethics...". (Wan)

In addition to noble personality matters, physical characteristics also played an essential role for a leader. Among the things that the informants mentioned in their physical features included energetic and proactive actions, attractive external appearance, and know-how to dress appropriately for the occasion. Good-looking and attractive looks were also seen as a bonus that can enhance a leader's physical attractiveness.

Leadership Motivation. In short, three themes made the informants feel they were motivated to become leaders: (1) family motivation, (2) leadership position, and (3) desire to help rural communities. The influence of the family that drove the informant to become a leader was explained in the statements by Rahmah and Maznah as follows:

"...My dad used to be a youth chairman, and we are a family involved in youth activities, such as organising programs, having dinner at home, and following dad to the program....". (Rahmah)

"...I have a family background of leaders, including myself. I think an early exposure since the early age is important...". (Maznah)

In addition to family influence, informants also stated that their leadership position motivated them to become active members of society and leaders. Among them was the habit of not sitting still and hanging out with people.

"...I have been the Chairman for 15 years, and no other candidate wants me. This year I am 60 years old, and I have been in the community for a long time, from a young age. In the past, my father was the Chairman of the village JP KK. I was active in a youth association in this village....". (Yusof)

"...Because I like to mix with people, and when I hold the position, the organisation and department are happy to work with me. After all, I am also a cleric of this mosque so it is easy for people to get used to us. I am the JP KK secretary here....". (Halimi)

The final theme that drove the engagement as leaders were to help the community themselves. It was particularly emphasised by the focus group interviews consisting of top and middle leaders. For example, Maznah stated:

“... I think the most important thing is the confidence in carrying out our responsibilities as leaders. Our presence in the organization can help the others in this area be together with the stream of development so that we do not miss out...”. (Maznah)

Other informants agreed that local people must be confident about their ability to be leaders. Although they do not work in the public or private sector, the local people's roles and services are essential for a successful program at the community level. Previously, these groups were only associated as managers and leaders in households.

“...If we think we have leadership qualities, then we can be leaders because we lead the small communities. The principle is that if a small group can accept us as leaders, then we can certainly lead others...”. (Rahmah)

Finally, leadership is also viewed from the standpoint of the leader-follower relationship and the leader's ability to mobilise the followers:

“...Leaders must be aware of the intricacies of leadership and be able to motivate their followers. Besides that, leaders must have exceptional ideas that can be applied in various situations and motivating their followers. The friendly attitude towards the people on the field regularly, in terms of time and commitment is also important for leaders...”. (Hamid)

Leadership Training. The focus group interviews for the JPKK leaders also raised questions about informational leadership training. All informants stated that they were used to leadership training. Programs organised by the Ministry of Rural Development, Rural Development Institute (INFRA), Terengganu State Government Office, Jabatan Kemajuan Masyarakat (KEMAS), and District Offices provided extensive training on organisational management activities, paper preparation and presentation, and protocol and ethics training. Most informants agreed on the importance of leading, managing, communicating, and carrying out leadership tasks such as conducting meetings and giving helpful directions. Besides that, public speaking skills and the proper use of body language were also considered elements of communication skills. A small number of participants named listening skills as one of the training requirements. For example:

“...Maybe listening skills are not needed by community leaders, but leaders of an organization or company need this skill. The subordinates will be concerned about my ability to speak when a leader does not have good listening skills...”. (Muhd)

DISCUSSION AND CONCLUSIONS

In Malaysian society, community leaders are regarded as catalysts for improving and enhancing the rural community's living conditions. Moreover, there was then a great deal of government in Malaysia's

rural community about community leaders. Therefore, it can be said that qualitative research has helped researchers to deeply find answers concerning the community leaders in profound ways (Parry et al., 2014). Based on the shared experiences of the authors in conducting focus group interviews with JPKK leaders, it can be concluded that key characteristics and success factors of rural community leadership include four themes and thirteen sub-themes emerged from findings, including inborn leadership (i.e., a natural-born leader and smart leader), leadership quality (i.e., self-confidence, extensive knowledge, extensive experience, accountability, communication skills, and physical and personal characteristics), leadership motivation (i.e., family motivation and motivation position, and desire to help rural communities), and leadership training (i.e., listening skills and organizational management skills).

Since traits theory stated that only people with distinct characteristics could be leaders, results have shown that the unique personality traits of JPKK leaders may give them with a greater propensity to be leaders. In addition, the findings validated previous findings that born leaders have an unprecedented ability to inspire and empower community members to achieve their goals (Nichols, 2016). Besides, the essential qualities of a good leader mentioned in this study include confidence, extensive knowledge, extensive experience, accountability, communication skills, and physical and personal characteristics.

In addition, the results demonstrated that JPKK leaders are respectable community leaders as they are confident enough to serve and lead, knowing that their plan and goal are realistic for local people and the absolute best possible decision. In this study, community leadership was conceptually provided for through servant leadership theory. Using Greenleaf's (1996) Theory of Servant Leadership, JPKK leaders need to serve first- to give something back to their community. It is due to this desire that one invariably takes a leadership role within the community. Leadership with both of the study communities is very strongly aligned with our designation of leadership. Many even expressed how it was a part of their job to serve the community that has given them so much; others wanted to leave it a better place than when they were there.

Furthermore, the results highlighted that community leaders need to identify a plan as part of the decision-making process. In particular, the ability to suggest procedures and set expectations to achieve a shared vision has been correlated with successful leadership. Community leaders need to use their experiences (Cajete, 2016) and knowledge (e.g., Eva et al., 2019) to suggest successful strategies throughout the process. Our findings thus confirm that a successful JPKK leader needs comprehensive professional leadership experience and knowledge to develop an effective strategy in the community. Therefore, the need for a more noble leadership aspiration—one of community

vision and improvement—is important for future community development. It is one of the aspects of transformational leadership, as outlined by Kouzes and Posner (1993). Transformational leadership's role within these rural communities involves having an appropriate vision for the community and revitalising the community in times of need.

One specific area of communication that is especially relevant for high-quality leaders is the ability to reassure and influence others. Therefore, strong communication skills for JPKK leaders are utterly critical in terms of leadership quality. Communication is a primary function of leadership and a core attribute of a successful leader (Hackman & Johnson, 2013). Good leaders are always seen as first-class communicators, have a strong set of principles, and always believe in cultivating and inculcating those principles in others. It is why their community respect them and obey them as a leader. In the meantime, leadership communication inspires and encourages the community through a systematic and constructive exchange of knowledge through outstanding communication skills (Mayfield & Mayfield, 2017). With an increase in the portfolio of community leaders, there is a need to adapt communication skills to navigate the wide horizon and make all possible circumstances far more successful.

When it comes to accountability, many reports show that the degree of community participation has decreased over the last two decades of the twentieth century (Gibson et al., 2005). The decrease in participation and trust is partly due to programmatic problems

and the accountability of decision-makers and individuals for results and actions. It will no longer be sufficient for leaders to demonstrate efficiency. They must continue to demonstrate their responsibility for the relevant and appropriate use of resources. Results from our research confirmed that the high-quality community leaders would take responsibility for the work of local people and their own. They applaud when things go well. Besides, JPKK leaders need to be accountable for what they do. If they are doing well, give them a pat on the back, but if they are struggling, help them think about their mistakes and work together to make things better. Keeping them accountable for their decisions will build a sense of responsibility among these leaders and lead the community more seriously.

Lastly, physical and personal characteristics are a couple of leadership qualities that make up great community leaders (Grunberg et al., 2019). Based on the results, JPKK leaders need to be individually and physically organised and inspired. They have to become more effective, *must* learn how to influence others. Thus, these characteristics differentiate *leaders* from subordinates. There is no doubt that some individuals are more attracted to leadership positions than others. Even so, it would be absurd to suggest—though it has been said in the past—that only individuals with specific physical or personal attributes could lead. That is, few people are born leaders, but luckily leadership can be learned. Leadership motivation also is one of the processes of leading. The findings displayed

that the motivation to be a leader is an essential success factor in Malaysia's rural community leadership. Our findings are consistent with the previous research, which indicates that leadership motivation can be deemed a proximal variable of a leader's emergence. It appears that different dimensions of motivation to lead different offer levels of predictive value in community settings (Hong et al., 2011). It appears that various forms of driving motivation, such as motivation from family motivation, leadership position, and desire to help rural communities provide different degrees of predictive value in community settings.

Leadership training can include a degree of communication guidance as well as opportunities for practice in low-risk settings. Indeed, JPKK, as a local leader, had an understanding of the functions and characteristics of an effective leader. Moreover, the appointees were very dedicated and inspired to adopt programs in their respective communities. However, JPKK, as a local leadership group, also hoped that the government would be able to offer leadership training services that were more focused and thorough to ensure that they could fulfil their duties more effectively and efficiently.

IMPLICATIONS

Efficient rural leadership is essential to the growth of rural communities. This study indicates that rural leadership can be either innate or learned. Indeed, rural leadership's origins are partly due to inborn ability, making choosing an excellent rural

leader easy. However, rural community leadership's success factors can be gained through formal and informal schooling, self-motivated, and on-the-job learning. A thriving rural leader is, in other words, a combination of both long-life learning and innateness. This issue has important implications for the rural community in developing rural leaders in Malaysia. Recruiting rural community members with leadership potential is just the first stage. The following significant stages provide opportunities for these leaders to build leadership skills by presenting them with significant challenges early in their careers, enabling them to continually improve, and presenting comprehensive training in a wide variety of leadership skills and perspectives.

Discovering that community leadership focuses on serving the community and its members brings up another important implication—leadership training. By providing practical leadership training using community leadership as a foundation, with cases specific to the problems and issues unique to that area, rural community leaders can more effectively learn how to lead and more effectively serve their community. An excellent way to market appropriate community leadership training is to appeal to those already in leadership positions, particularly those with especially public roles or younger leaders looking to take over responsibilities. By appealing to some of these influential individuals within the community, effectual leadership training may become the standard rather than the exception.

LIMITATIONS AND FUTURE RESEARCH

There were two limitations to this study. First, we only gained the rural community leaders' perspective on the rural community leadership's characteristics and success factors. Future researches should also consider the rural people's perspectives on rural leaders' characteristics and success factors. Second, it coincided with the Covid-19 pandemic. Future studies are encouraged to research how rural leaders can help manage their communities to deal with COVID-19.

ACKNOWLEDGEMENT

The authors would like to express their deepest gratitude to the informants willing to participate and provide full cooperation in this study and funding from Universiti Putra Malaysia: GP-IPM/2020/9695000 research grant.

REFERENCES

- Abas, S. A., & Abd Halim, N. (2018). The role of local leadership in community-based rural homestay in Malaysia. *Asia Proceedings of Social Sciences*, 2(4), 65-71. <https://doi.org/10.31580/apss.v2i4.307>
- Argent, N. (2011). What's new about rural governance? Australian perspectives and introduction to the special issue. *Australian Geographer*, 42(2), 95-103. <https://doi.org/10.1080/00049182.2011.569982>
- Aziz, F., Md Rami, A., Razali, F., & Mahadi, N. (2020). The influence of leadership style towards technology acceptance in organization. *International Journal of Advanced Science and Technology*, 29(7s), 218-225.
- Basch, C. E. (1987). Focus group interview: An underutilized research technique for improving theory and practice in health education. *Health Education Quarterly*, 14(4), 411-448. <https://doi.org/10.1177/109019818701400404>
- Beer, A. (2014). Leadership and the governance of rural communities. *Journal of Rural Studies*, 34, 254-262. <https://doi.org/10.1016/j.jrurstud.2014.01.007>
- Boyatzis, R. E., Rochford, K., & Taylor, S. N. (2015). The role of the positive emotional attractor in vision and shared vision: Toward effective leadership, relationships, and engagement. *Frontiers in Psychology*, 6, 1-13. <https://doi.org/10.3389/fpsyg.2015.00670>
- Cajete, G. A. (2016). Indigenous education and the development of indigenous community leaders. *Leadership*, 12(3), 364-376. <https://doi.org/10.1177/1742715015610412>
- Charoenwiriyaikul, C. (2016). Local community leadership and empowerment for rural community strengths. *International Journal of Management and Applied Science*, 2(11), 215-218.
- Creswell, J. W. (2018). *Research design: Qualitative and quantitative approaches* (5th ed.). Sage.
- Edwards, G. (2015). *Community as leadership*. Edward Elgar Publishing.
- Erdurmazlı, E. (2019). On the servant leadership behaviors perceived in voluntary settings: The influences on volunteers' motivation and organizational commitment. *SAGE Open*, 9(3), 1-17.
- Eva, N., Robin, M., Sendjaya, S., van Dierendonck, D., & Liden, R. C. (2019). Servant leadership: A systematic review and call for future research. *The Leadership Quarterly*, 30(1), 111-132. <https://doi.org/10.1016/j.leaqua.2018.07.004>

- Freddie, A., Kim, R. C., & Copeland, S. (2013). Leadership and rural communities. *International Journal of Business, Humanities and Technology*, 3(8), 53-59.
- Gandolfi, F., & Stone, S. (2016). Clarifying leadership: High-impact leaders in a time of leadership crisis. *Revista de Management Comparat International*, 17(3), 212-224.
- Gibson, P. D., Lacy, D. P., & Dougherty, M. J. (2005). Improving performance and accountability in local government with citizen participation. *The Innovation Journal: The Public Sector Innovation Journal*, 10(1), 1-12.
- Green, J., & Thorogood, N. (2018). *Qualitative methods for health research* (4th ed.). Sage.
- Greenleaf, R. (1996). *On becoming a servant-leader*. Jossey-Bass Publishers.
- Grunberg, N. E., Barry, E. S., Callahan, C. W., Kleber, H. G., McManigle, J. E., & Schoemaker, E. B. (2019). A conceptual framework for leader and leadership education and development. *International Journal of Leadership in Education*, 22(5), 644-650. <https://doi.org/10.1080/13603124.2018.1492026>
- Guay, R. P., & Choi, D. (2015). To whom does transformational leadership matter more? An examination of neurotic and introverted followers and their organizational citizenship behavior. *The Leadership Quarterly*, 26(5), 851-862.
- Hackman, M. Z., & Johnson, C. E. (2013). *Leadership: A communication perspective*. Waveland press.
- Hong, Y., Catano, V. M., & Liao, H. (2011). Leader emergence: The role of emotional intelligence and motivation to lead. *Leadership & Organization Development Journal*, 32(4), 320-343.
- Islam, M. R., Abd Wahab, H., & Anggum, L. A. (2020). The influence of leadership quality towards community cohesion in Iban community in Malaysia. *Heliyon*, 6(2), 1-6.
- Kitzinger, J. (1995). Qualitative research: Introducing focus groups. *British Medical Journal*, 311(7000), 299-302. <https://doi.org/10.1136/bmj.311.7000.299>
- Kniffin, L. E., & Patterson, R. M. (2019). Re-imagining community leadership development in the post-industrial era. *Journal of Leadership Education*, 18(4), 188-205.
- Kouzes, J. M., & Posner, B. Z. (1993). *Credibility: How leaders gain and lose it, why people demand it*. Jossey-Bass Inc.
- Krueger, R. A. (1997). *Analyzing and reporting focus group results* (Vol. 6). Sage publications.
- Liu, Z., Müller, M., Rommel, J., & Feng, S. (2016). Community-based agricultural land consolidation and local elites: Survey evidence from China. *Journal of Rural Studies*, 47, 449-458. <https://doi.org/10.1016/j.jrurstud.2016.06.021>
- Lowndes, V. (2004). Reformers or recidivists: Has local government really changed? In G. Stoker & D. Wilson (Eds.), *British local government in the 21st century*. Palgrave.
- Marion, R., & Uhl-Bien, M. (2001). Leadership in complex organizations. *The Leadership Quarterly*, 12(4), 389-418. [https://doi.org/10.1016/s1048-9843\(01\)00092-3](https://doi.org/10.1016/s1048-9843(01)00092-3)
- Masso, W. Y. A., & Man, N. (2016). Identify the knowledge level of rural leaders towards paddy farming technologies in Muda Agriculture Development Authority. *Indian Journal of Science and Technology*, 9, 15-26. <https://doi.org/10.17485/ijst/2016/v9i15/86726>
- Mayfield, J., & Mayfield, M. (2017). *Leadership communication: Reflecting, engaging, and innovating*. SAGE Publications.
- Ngah, I., Preston, D., & Asman, N. (2010). *Current planning priorities in rural villages in Malaysia learning from the new Malaysian Village Action Plans*. ISDA 2010.

- Northouse, P. G. (2012). *Leadership theory and practice*. SAGE.
- Nyumba, T., Wilson, K., Derrick, C. J., & Mukherjee, N. (2018). The use of focus group discussion methodology: Insights from two decades of application in conservation. *Methods in Ecology and Evolution*, 9(1), 20-32.
- OECD. (2019). *OECD economic surveys: Malaysia 2019*. OECD Publishing. <https://doi.org/10.1787/ea4a4190-cn>
- Palalic, R. (2020). Transformational leadership and MNCs: Evidence from Morocco community. *Journal of Enterprising Communities: People and Places in the Global Economy*, 14(2), 201-230.
- Parry, K., Mumford, M. D., Bower, I., & Watts, L. L. (2014). Qualitative and historiometric methods in leadership research: A review of the first 25 years of The Leadership Quarterly. *The Leadership Quarterly*, 25(1), 132-151.
- Podsakoff, P. M., MacKenzie, S. B., & Podsakoff, N. P. (2018). *The Oxford handbook of organizational citizenship behavior*. Oxford University Press.
- Prummer, A., & Siedlarek, J.-P. (2017). Community leaders and the preservation of cultural traits. *Journal of Economic Theory*, 168, 143-176. <https://doi.org/10.1016/j.jet.2016.12.007>
- Rami, A. M., Abdullah, R., & Ariffin, W. J. (2018). Strengthening social capital: Local leader's strategy toward developing rural community. *International Journal of Academic Research in Business and Social Sciences*, 8(1), 765-774.
- Rami, A. A. M., Abdullah, R., & Ibrahim, A. (2016). The community leaders as a catalyst for rural community development in the state of Terengganu. *International Journal of Academic Research in Business and Social Sciences*, 6(12), 222-233.
- Rami, A. A. M., Abdullah, R., & Simin, M. H. A. (2017). Influence of leadership in rural community development in the state of Terengganu, Malaysia. *Asian Journal For Poverty Studies*, 3(1), 47-52.
- Rami, A. M., Aziz, F., Zaremohzzabieh, Z., & Ibrahim, A. (2021). Assessing the challenges of local leaders in rural community development: A qualitative study in Malaysia. *Pertanika Journal of Social Sciences & Humanities*, 29, 1-18 <https://doi.org/10.47836/pjssh.29.S1.01>
- Rami, A. M., Aziz, F., Razali, F., & Abdullah, I. (2020a). Effective local leadership to a successful council in the state of Terengganu, Malaysia. *International Journal of Advanced Science and Technology*, 29(7), 205-210.
- Rami, A. A. M., Aziz, F., Razali, F., & Yusof, M. R. (2020b). Leadership and ICTs implementation for rural development. *International Journal of Advanced Science and Technology*, 29(7), 531-535.
- Ricketts, K. G., & Ladewig, H. (2008). A path analysis of community leadership within viable rural communities in Florida. *Leadership*, 4(2), 137-157.
- Rogers, D. L. (1975). *An Annotated bibliography of rural development research in the North Central Region*. North Central Regional Center for Rural Development. <https://files.eric.ed.gov/fulltext/ED108839.pdf>
- Samah, B. A., D'Silva, J. L., & Shaffril, H. A. M. (2009). Determinants of sustainable development dimension among leaders of rural community: A case study of Malaysia. *Journal of Agricultural Extension and Rural Development*, 1(1), 18-26. <https://doi.org/10.5539/cis.v5n2p98>
- Setokoe, T. J., Ramukumba, T., & Ferreira, I. W. (2019). Community participation in the development of rural areas: A leaders' perspective of tourism. *African Journal of Hospitality, Tourism and Leisure*, 8(2), 1-15.
- Smith, B. N., Montagno, R. V., & Kuzmenko, T. N. (2004). Transformational and servant

- leadership: Content and contextual comparisons. *Journal of Leadership & Organizational Studies*, 10(4), 80-91. <https://doi.org/10.1177/107179190401000406>
- Statistics Department Public. (2020). *Mycensus*. Department of statistics. <https://www.mycensus.gov.my/index.php/media-2/newsletter-infographics>
- Stewart, D. W., Shamdasani, P. N., & Rook, D. (1990). *Focus groups: Theory and practice*. Sage.
- Taylor, S. J., Bogdan, R., & DeVault, M. (2015). *Introduction to qualitative research methods: A guidebook and resource*. John Wiley & Sons.
- UPEN. (2012). *Terengganu state economic planning unit primary data*. Terengganu State Economic Planning Unit. <http://upen.terengganu.gov.my/index.php/download-data-asas-2012>
- Wall Jr, J. A., & Callister, R. R. (1999). Malaysian community mediation. *Journal of Conflict Resolution*, 43(3), 343-365.
- Wilson, G. A. (2012). Community resilience, globalization, and transitional pathways of decision-making. *Geoforum*, 43(6), 1218-1231. <https://doi.org/10.1016/j.geoforum.2012.03.008>
- Xu, K., Zhang, J., & Tian, F. (2017). Community leadership in rural tourism development: A tale of two ancient Chinese villages. *Sustainability*, 9(12), 1-22. <https://doi.org/10.3390/su9122344>
- Yahaya, R., & Ebrahim, F. (2016). Leadership styles and organizational commitment: Literature review. *Journal of Management Development*, 35(2), 190-216.
- Yukl, G., O'Donnell, M., & Taber, T. (2009). Influence of leader behaviors on the leader-member exchange relationship. *Journal of Managerial Psychology*, 24(4), 289-299. <https://doi.org/10.1108/02683940910952697>



Newspaper Exposure, Efficacy Feeling and Political Apathy among Youths in South-East Nigeria

Joshua Aghogho Erubami¹, Paul Bebenimibo¹ and Edith Ugochi Ohaja^{2*}

¹*Department of Mass Communication, Delta State University, P.M.B. 1, Abraka, Delta State, Nigeria*

²*Department of Mass Communication, University of Nigeria, Nsukka, Enugu State 410001, Nigeria*

ABSTRACT

The spate of youths' political apathy in Nigeria remains a constant source of worry to stakeholders. Nevertheless, efforts to stem the tide have been largely unsuccessful. Studies indicate that many youths rely on newspapers and other mass media for political information, and such reliance may influence their general political behaviour. This study examines the influence of newspaper reports on the extent of political apathy among young people in Southeast Nigeria using a sample of 384 respondents selected through a multistage sampling technique. It also evaluates the roles played by political efficacy and news perception in youths' extent of political involvement. Findings show that obtaining political news from newspaper is positively associated with an increased feeling of political efficacy ($r_s(379) = .567^{**}$, $p < .05$) but negatively related to reduced political apathy among youths ($r_s(379) = -.525^{**}$, $p < .05$). Also, many young people tend to perceive newspaper political reports to lack depth, objectivity, and accuracy. This perception tends to be negatively associated with their extent of political apathy ($r_s(379) = -.427^*$, $p < .05$). Therefore, newspaper coverage must pay more attention to reporting on important political issues that will enable the public to take self-determined action consistent with the social responsibility of the press.

Keywords: Media malaise, media mobilisation, newspaper news, political apathy, political cynicism, political efficacy, youth inclusion

ARTICLE INFO

Article history:

Received: 05 February 2021

Accepted: 24 May 2021

Published: 15 September 2021

DOI: <https://doi.org/10.47836/pjssh.29.3.08>

E-mail addresses:

erubami26@gmail.com (Joshua Aghogho Erubami)

paulbebenimibo@yahoo.com (Paul Bebenimibo)

ohaja.edithu@gmail.com (Edith Ugochi Ohaja)

* Corresponding author

INTRODUCTION

The level of political participation among young people in Africa is disturbingly low. Despite accounting for more than 70% of the region's population (Gyimah-Brempong & Kimenyi, 2013; YIAGA Africa, 2019), many African youths have been neglected from the political arena and are, therefore,

showing less interest in active political participation (Mengistu, 2017). In the wake of the 2011/2012 Arab Spring that ousted several dictatorial regimes in African countries, there was the hope of increasing recognition of youths' creative skills and innovative ideas across the continent (Ufuophu-Biri & Ojoboh, 2017). However, this recognition does not seem to have translated into greater political participation among young people, as evidenced by voters turnout, joining or forming youths' political parties, and running for formal political leadership positions (United Nations Youth [UNY], 2013).

Nigeria is a clear reflection of the African situation. Young Nigerians are not adequately represented in formal political institutions and processes, such as parliaments, political parties, elections, and public administration (Omede & Ojibara, 2017). Studies indicate that young people are less politically active than older adults (Mengistu, 2017). Where a considerable number of youths seem to participate in political activities, they seldom rise to prominent positions but often end up as cannon fodder to older politicians who use them to perpetrate electoral violence (Chiweshe, 2017; Saka, 2010) and organise short-lived protest movements like the EndSARS campaign of 2020.

Although it may seem fashionable to see many Nigerian youths showing support for democracy, most of them tend to be less enthusiastic about how democracy works. Hence, the worrisome level of political apathy among them (Agu et al., 2013).

This negative development continues to adversely affect the outcome of Nigeria's democratic processes, given that young people constitute more than half of the country's entire voting population. For instance, besides the 2003 general elections in which voters' turnout rose to 69.08% from the 52.26% recorded in 1999, there has been a progressive drop in interest towards voting, with only 57.49% casting votes in 2007, 53.58% in 2011, 43.65% in 2015, and 34.75% in 2019 (Agu et al., 2013; Independent National Electoral Commission [INEC] & Friedrich-Ebert-Stiftung [FES], 2011; Yakubu, 2012).

Arguably, newspapers are one of the significant contributors to political discourses in Nigeria, especially in electioneering campaigns and political marketing, during which political parties and their candidates keenly deploy various mass media platforms to project their interests and goals. Previous research has shown that Nigerian political actors frequently use the newspaper medium to advance their political aspirations, particularly in their quest to appeal to public sentiments, legitimise their stands on burning political issues, and identify with the youth culture (Ademilokun & Taiwo, 2013). Political discourse constitutes a significant proportion of issues reflected in virtually all Nigerian newspapers. However, some national dailies, such as *The Punch*, *Vanguard*, *The Sun*, *Daily Independence*, *The Nation*, *The Guardian*, and *Nigerian Tribune*, are widely considered the major contributors to political debates and issues in the country (Ademilokun & Taiwo, 2013;

Ikpegbu & Ihejirika, 2020; Oboh, 2016). Research indicates that how newspapers reflect political issues can significantly influence public perception and response towards such issues (Asiru et al., 2018). For instance, a Nigerian national survey showed that due to media tendency to misrepresent crucial political issues, about 57% of Nigerian adults included in the survey perceive that political campaigns and other political contents published by newspapers seldom focus on the country's current challenges. Hence, the tendency for political cynicism among the electorates (NOI polls, 2015).

Research indicates that the mainstream newspaper remains a steady source of political information to many Nigerian youths despite the growing internet penetration and popularity of online media among young people in Nigeria (Erubami, 2020). Besides, Edogoh et al. (2015) assert that many Nigerian youths regularly read newspaper political reports on the Internet despite the global decline in newspaper readership. Generally, such readership of newspaper political contents by youths may sway their perception about politics and influence their extent of involvement or apathy towards the governance and government of their locale (Moreno et al., 2013; Waqas, 2017).

In the past, research investigating the possible influence of the media on civic engagement and political apathy tended to focus principally on the electronic media and Internet. However, little attention was devoted to empirical inquiry into the

interplay between newspaper use, political efficacy, and political apathy among young people, especially within media studies in Nigeria. Besides, studies on newspaper and political behaviour in Nigeria seem limited to the coverage of elections and political statements (Ikpegbu & Ihejirika, 2020; Oboh, 2016), newspaper campaign discursive strategies (Ademilokun & Taiwo, 2013), representation of political actors (Asiru et al., 2018) and gender bias in the coverage of politics (Ojebuyi & Chukwunwike, 2018). Thus, our study seeks to extend the frontiers of empirical knowledge on media use and civic engagement by providing precise insights into the interaction between young people's consumption of newspaper political news and their overall civic engagement. Specifically, the study seeks to ascertain the level of political apathy among youths in Nigeria and examine the relationship between exposure to newspaper political news, perception of newspaper political news, perceived political efficacy, and political apathy among young people in Nigeria.

Political Apathy and Media Use

Political apathy is a general state of indifference towards the affairs and governance of one's political locale. Such indifference usually reflects in the attitudes of the citizens of a state towards political activities, such as elections, public opinions, and civic responsibilities (Yakubu, 2012; Tan, 2012). Hence, a politically apathetic individual lacks interest in the social and political affairs of his or her country and

will likely decline to register as a voter, refuse to cast a vote during public elections, and fail to participate in protests against systemic failures. Such an individual would also lack enthusiasm in socio-political debates, be unwilling to assist security agents with useful information, and generally become indifferent to government policies and programmes irrespective of the consequences of such government's actions (Yakubu, 2012; Idike, 2014).

People's level of political involvement is significantly influenced by the twin factors of political efficacy and situational political involvement (Diemer & Rapa, 2016; Kushin & Yamamoto, 2010). While political efficacy denotes an individual's belief in the effectiveness of his or her participation in a democratic process, situational political involvement borders on the perceived relevance of an issue and its degree of contribution to political outcomes (Ejiofor, 2007; Kushin & Yamamoto, 2010; Morrell, 2003). Considering that both factors tend to be strongly influenced by the availability of accurate information and increased civic education (Ejiofor, 2007; Ha et al., 2012; Levy, 2013), the mass media remain indispensable to a functional democracy.

Generally, the media play the critical role of informing and mobilising people for democratic processes. Consequently, their reports tend to hold a considerable level of influence on people's political behaviour. Moreover, the capacity of the media to tweak public opinion by providing the content and context of political discourse

has severe implications for democracy (Aghamelu, 2013). This is because, like a double-edged sword, the media can either increase the extent of political participation or increase the level of political apathy. In this regard, proponents of the media mobilisation theory contend a positive correlation between media use and political participation (Moreno et al., 2013 and Scheufele & Nisbet, 2003). In comparison, advocates of the media malaise school of thought argue that media use is associated with increased public political cynicism and negative political behaviour (Ha et al., 2012; Kenski & Stroud, 2006; Lee, 2006; Strömbäck & Shehata, 2010; Waqas, 2017).

As the watchdog of society, the mass media focus public attention and direct citizens' interests to governance affairs and public issues. By providing accurate and in-depth coverage of political activities, policies, and programmes, it is assumed that the media may stimulate political consciousness, renaissance, and interest among citizens, including the youths (Ejiofor, 2007). Such political awakening would, in turn, raise the bar of public political participation and deflate political apathy, especially among young people.

The newspaper is one of the media platforms devoted to disseminating information on diverse areas, including politics. Consequently, obtaining news from newspaper is one of the strongest predictors of political participation (Ha et al., 2012; Scheufele & Nisbet, 2003). It is, therefore, likely that youths' exposure to media-political content will influence their level

of involvement or apathy towards politics (Pasek et al., 2006). Research has shown that individuals with heavy reliance on the mass media, especially television, are likely to have lower levels of subjective efficacy and, consequently, increased political apathy (Loveless, 2010). Similarly, the way young people perceive media-political content may influence their political behaviour, given the overlapping relationship between perception and people's behaviour (Erubami, 2020; Seggaard, 2015). In light of earlier theoretical and empirical findings, we assumed that newspaper exposure would interact significantly with youths' political apathy and their general perception of newspaper content on politics. Hence, the study proposed the following hypotheses:

H1: Exposure to newspaper political news will be negatively associated with political apathy among youths.

H2: Political apathy will be negatively related to youths' perception of newspaper political reports.

Political Efficacy, Political Apathy, and Media Use

The feeling of efficacy is arguably the fulcrum upon which human agency rests. People tend to be less motivated to act when they feel that their action may not yield the desired results (Bandura, 2001; Henson, 2002). Previous studies have shown that political efficacy is a strong predictor of political participation, and it is an essential mediator between general self-efficacy and political participation (Ardèvol-Abreu et al., 2017; Diemer & Rapa, 2016; Gastil &

Xenos, 2010; Kushin & Yamamoto, 2010). Political efficacy refers to an individual's conviction that their action can influence the overall political process. Such assurances usually include the internal feeling that individuals hold the capacity and political competence to act (internal efficacy) and that their actions will be appropriately responded to by the government (external efficacy) (Ejiofor, 2007; Loveless, 2010; Morrell, 2003).

In extending the frontiers of efficacy as a determinant of political involvement, Ejiofor (2007) asserts that individuals become less likely to participate in politics if they place a low valuation on the rewards gained in political involvement relative to the rewards expected from other kinds of human activities. Accordingly, individuals are less likely to engage in politics if they feel that the alternative they face will not make a significant difference (unchallenged alternatives) if they doubt that their action can bring about significant changes in the outcome of political processes (self-deprivation), or if they feel that their knowledge is too limited for effective political engagement (relative ignorance).

Debates on the possible influence of the media on political efficacy and political involvement easily lend themselves to two schools of thought: the media form reliance bloc and the specific media use bloc (Loveless, 2010). Generally, dependence on certain media forms (such as television or newspaper) tends to manifest variations in people's world views and political orientations; hence, studies have

demonstrated that people may be politically immobilised by television viewing due to the peculiar form (rather than content) of television that promotes more entertainment than information and education (Hooghe, 2002). Similarly, Pasek et al. (2006) found that although total time spent watching television was negatively related to civic activity, specific forms of television, such as national news programmes, promoted knowledge acquisition and civic engagement.

Conversely, the opposing school of thought contends that it is not the form of the media but the content that influences people's political behaviour considering that deliberate use of the media can serve as a bulwark or potential mechanism for mitigating the demobilising effect of the media. In their study, Bakker and de Vreese (2011) argue that specific media usage is a stronger predictor of political participation/apathy than the time spent with a medium. Other studies have also shown that the Internet is a powerful tool for promoting political participation due to the peculiar nature of online technologies, and the Internet is a stronger predictor of newer forms of political participation, such as participating in online polls, compared to traditional forms of political participation, such as participation in public political debates (Johnson & Kaye, 2003; Jung et al., 2011; Ha et al., 2012). Based on these debates, we proposed that young people's exposure to political news in the newspaper is significantly related to their perceived efficacy, which interacts with their level of

political apathy. Therefore, we formulated the following hypotheses:

H3: Exposure to newspaper political news will be positively related to perceived political efficacy among youths.

H4: Political apathy will be negatively related to perceived political efficacy among youths.

MATERIALS AND METHODS

Design and Sampling Procedure

The study adopted the survey research approach, which seeks to determine why people behave in specific ways (Asemah et al., 2017). This approach also allows researchers to examine many variables, including people's opinion, attitude, motive, and intention towards societal problems (Wimmer & Dominick, 2011). The population of the study comprised all residents of Nigeria's southeast geopolitical zone. The zone consists of five states covering about 41,440km², with a population of 21,955,414 people (National Bureau of Statistics [NBS], 2018).

A sample of 384 respondents was drawn using the sample size determination formula advanced by Cochran in 1963. The Cochran formula allows researchers to calculate an ideal sample size with a desired level of precision, confidence level, and estimated proportion of the attribute present in the population of the study (Asemah et al., 2017). Next, the participants were selected using a multistage sampling technique. In the first stage, the Southeast geopolitical zone was stratified based on states—Abia,

Anambra, Ebonyi, Enugu, and Imo. A simple random sampling technique was used to select Enugu and Anambra States in the second stage through a lucky dip. In the third stage, the purposive sampling technique was used to select the capitals of these states, Enugu and Awka cities, as the study locations. Considering the broad-based nature of both cities, we assumed that they would have a significantly higher literacy rate and level of newspaper usage when compared to the other parts of the states. Hence, their purposeful selection for the study. The fourth stage involved the selection of individual respondents from the study areas using the convenience sampling technique.

Like online surveys, scholars contend that the convenience sampling technique has the problem of bias and generalisability; hence, study samples obtained through this technique should be compared with the stratification of the general population to determine their extent of distortion (Baltar & Brunet, 2012; Sadler et al., 2010). Compared with the general Nigerian population, our collected sample presented in the results section did not differ much from the stratification of the Nigerian population (NBS, 2018). Only young Nigerians aged 18 to 35 years were considered youths and included as respondents in the final sample (National Youth Policy, 2009; Oji & Erubami, 2020). Copies of the questionnaire were distributed to individuals in selected households within the studied areas through four research assistants who were university graduates of Mass Communication.

Instrument and Measures

A 5-point Likert scale questionnaire was used as an instrument for data collection. The questionnaire instrument is generally considered suitable for studies involving many participants because it enables researchers to collect data on respondents' peculiar feelings, perceptions, and knowledge in a quantifiable form (Akpoghiran, 2014). The instrument's measures were drawn from previous studies on media use and political participation/apathy. Respondents were asked to value items with responses ranging from strongly disagree (1) to strongly agree (5). Prior to the actual data collection exercise, the instrument was subjected to content validation by two experts in research and media studies who affirmed the appropriate operationalisation of the instrument against the relevant content domain of the construct. Also nuanced as logical or rational validity, content validity is an important research method that estimates how well a test measures its intended behaviour (Asemah et al., 2017). For the initial reliability test of the instrument, we conducted a pilot survey involving 20 residents of Nsukka, a relatively fast-growing town in Enugu State. The result yielded acceptable Cronbach's Alpha for all the variables—newspaper exposure (0.91), political apathy (0.78), perception of newspaper political reports (0.82), perceived newspaper influence (0.88), and political efficacy (0.89).

Newspaper Exposure

Drawing on previous studies on general media exposure (Donaldson et al., 2017; Lompo & Bago, 2018), we measured newspaper exposure with a single item on a 5-point scale using the question, “What is your frequency of reading newspaper reports on the political happenings in Nigeria?” Possible responses ranged from Never (1) to Always (5) ($\alpha = 0.81$).

Political Apathy

Relying on previous studies (Busse, et al. 2015; Madueke, et al., 2017; Omede & Ojibara, 2017), youths’ political apathy was measured with four items on a 5-point Likert scale, ranging from 1 = “strongly disagree” to 5 = “strongly agree”. (1) “I have signed a public petition this year”, (2) “I have been involved in a protest against socio-political ills this year”, (3) “I have participated in a political discussion this year”, (4) “I will vote if elections were tomorrow”. Higher scores represented lower level of political apathy and vice versa ($\alpha = 0.89$, $X = 3.01$, $SD = 1.33$).

Perception of Newspaper Political Reports

Based on previous studies on general public perception of the media (Apuke & Apollos, 2017; Erubami, 2020; Karamat & Farooq, 2016), perception of newspaper political reports was assessed with four questions on a 5-point Likert scale, with possible responses ranging from 1 = strongly disagree to 5 = strongly agree. The questions were: (1) “The depth of newspaper political reports do not

compel participation in Nigerian politics”, (2) “Newspaper reports are often filled with too many news of scandals, corruption and crime”, (3) “Newspaper political reports don’t focus on important issues of the society”, (4) “Newspaper political stories are not objective and accurate”, ($\alpha = 0.84$, $X = 3.55$, $SD = 1.32$).

Newspaper Influence

Relying on previous studies (Ha et al., 2012; Kenski & Stroud, 2006; Lee, 2006; Strömbäck & Shehata, 2010; Waqas, 2017), we constructed a 5-point Likert scale of newspaper influence with four items, ranging from “strongly disagree” (1) to “strongly agree” (5). The questions were: (1) “I feel cynical and alienated from Nigerian political affairs after reading newspaper political reports”, (2) “Newspaper political reports motivate me to take an active part in Nigeria’s political affairs”, (3) “Based on newspaper political reports, I think voting is a waste of time”, (4) “Based on newspaper political reports, I think the masses have a say over what happens in the Nigerian political system”. The two negative questions (items 1 and 3) were reverse coded so that higher scores denote the positive perception of newspaper political news ($\alpha = 0.79$, $X = 2.87$, $SD = 1.26$).

Political Efficacy

This measure was adapted from the internal and external political efficacy scale developed by Niemi et al. (1991) with slight modification. The scale has a high reliability and validity value, and it is

least affected by question order (Ha et al., 2012). It comprised four items, with possible responses ranging from “strongly disagree” (1) to “strongly agree” (5). The questions were: (1) “I consider myself to be well qualified to participate in politics”, (2) “I feel that I could do as good a job in public office as most other people”, (3) “I feel that if I join a protest or sign a petition against political incompetence, the government might listen”, and (4) “I think I am better informed about politics and government than most people” ($\alpha = 0.86$, $X = 3.39$, $SD = 1.26$).

Data Analysis

The data were analysed using Mean (\bar{X}) and Standard Deviation (SD), which had the benchmarks of 3.00 and 1.41, respectively. Any item with a mean score below 3.00 was rejected, while items with mean scores above 3.00 were accepted (Nworgu, 2006; Oji & Erubami, 2020; Syam & Nurrahmi, 2020). For standard deviation, a high mean and low or moderate standard deviation indicated that the responses are marked different (high variability). In contrast, a low mean and a low or moderate standard deviation indicated a low variability among the responses. Finally, the formulated hypotheses were tested using the Spearman Rank Correlation Analysis conducted with SPSS Version 23.

RESULTS

The analyses were based on 371 copies of the completed and returned questionnaire, representing a 96.4% response rate. Female

respondents amounted to 45.3% of the sample, while 54.7% consisted of males; the least possible age of the respondents was 18 years, and the highest was 35 years; the modal age range was 25-30 years. 10.8% of the respondents have had primary education, 48% have had secondary education. The remaining 41.2% have received various levels of tertiary education. In addition, 52.3% of the respondents had various forms of active employment, while 47.7% were unemployed. The NBS (2018) data show slightly more males than females in Nigeria (at least 1.04 males per every female Nigerian).

Frequency of Obtaining Political News from Newspaper

Data presented in Table 1 show that most respondents are exposed to newspaper reports on political developments in Nigeria. About 18.1% of the respondents admitted reading newspaper political news, 19.4% do so often, 23.7% sometimes read newspaper political news, and 19.1% rarely do so. Only 19.7% of the respondents claimed they do not read newspaper political stories at all.

Table 1
Frequency of obtaining political news from newspaper

Response	Frequency	Percentage
Always	67	18.1
Often	72	19.4
Sometimes	88	23.7
Rarely	71	19.1
Never	73	19.7
Total	371	100

The Extent of Youth Political Apathy

The results presented in Table 2 indicate a high level of political apathy among the respondents, particularly on issues relating to active political involvement, given that many of them have neither signed any public petition against poor governance ($X = 2.67, SD = 1.42$) nor participated in physical protests against social ills ($X = 2.57, SD = 1.29$). Nevertheless, the respondents tend to display a lower level of political apathy on issues concerning passive political involvement, such as taking part in political discussions ($X = 3.35, SD = 1.30$) and showing intentions to vote in future elections ($X = 3.45, SD = 1.32$).

Youths' Perception of Newspaper Political News

Our results presented in Table 3 show that the respondents have a negative perception towards newspaper political reports as many

of them perceived that newspaper reports are often filled with too much news of scandals, corruption and crime, ($X = 3.88, SD = 1.34$), seldom focus on important issues of the society ($X = 3.32, SD = 1.35$), and lack objectivity and accuracy ($X = 3.25, SD = 1.34$); hence, newspaper political reports do not compel political participation among young people in Nigeria ($X = 3.75, SD = 1.26$).

Influence of Newspaper Political Reports on Nigerian Youths

On the influence of newspaper political reports on Nigerian youths, Table 4 show that reading newspaper political news neither creates the feeling of political cynicism or alienation among Nigerian youths ($X = 2.45, SD = 1.24$) nor make young people think that casting votes during elections is a waste of time ($\bar{X} = 2.64, SD = 1.40$). Instead, obtaining political

Table 2
Extent of youth political participation

S/N	ITEM	X	SD
1	I have signed a public petition this year	2.67	1.42
2	I have been involved in a protest against socio-political ills this year	2.57	1.29
3	I have participated in a political discussion this year	3.35	1.30
4	I will vote if elections were tomorrow	3.45	1.32

Table 3
Perception of newspaper political news

S/N	ITEM	X	SD
1	The depth of newspaper political reports do not compel participation in Nigerian politics	3.75	1.26
2	Newspaper reports are often filled with too much news of scandals, corruption and crime	3.88	1.34
3	Newspaper political reports don't focus on important issues of the society	3.32	1.35
4	Newspapers political stories are not objective and accurate	3.25	1.34

Table 4
Influence of newspaper political reports on Nigerian youths

	ITEM	X	SD
1	I feel cynical and alienated from Nigerian political affairs after reading newspaper political reports.	2.45	1.24
2	Newspaper political reports motivate me to take active part in Nigeria's political affairs	3.24	1.22
3	Based on newspaper political reports, I think voting is a waste of time	2.64	1.40
4	Based on newspaper political reports, I think the masses have a say over what happens in the Nigerian political system	3.14	1.19

Table 5
Perceived political efficacy among Nigerian youths

	ITEM	X	SD
1	I feel that I have a pretty good understanding of the important political issues facing our country	3.35	1.34
2	I feel that I could do as good a job in public office as most other people	3.54	1.19
3	I feel that if I join a protest or sign a petition against political incompetence, the government might listen	2.98	1.28
4	I consider myself to be well qualified to actively participate in politics	3.67	1.24

news from newspaper tends to motivate young Nigerians to take an active part in the country's political affairs ($\bar{X} = 3.24$, $SD = 1.22$), and increases their confidence in the power of the masses to influence the political system ($\bar{X} = 3.14$, $SD = 1.19$).

Youths' Political Efficacy

According to the results in Table 5, there is a high feeling of political efficacy among the respondents, given that the majority of them are convinced that they have a very good understanding of the important political issues facing the country ($X = 3.35$, $SD = 1.22$), feel they can do as good a job in public office as most other people ($X = 3.54$, $SD = 1.19$), and feel they are well qualified to participate in politics actively ($X = 3.67$, $SD = 1.24$). However, many respondents feel that joining a protest or signing a

petition against political incompetence will not attract necessary government attention ($X = 2.98$, $SD = 1.28$).

Hypotheses Testing

The Spearman Rank Correlation Analysis was used to test our hypotheses. The results in Table 6 show that obtaining political news from newspaper is negatively associated with political apathy among youths in Nigeria ($r_s(369) = -.525^{**}$, $p = <.05$), suggesting that an increase in the frequency of obtaining political news from newspaper by young people may actuate a decrease in their level of political apathy. Consequently, we accepted our first hypothesis, which states that exposure to newspaper political news will be negatively associated with political apathy among youths. It suggests that political apathy among young Nigerians

may decrease with a significant increase in their exposure to newspaper political news. Similarly, we found a significant negative relationship between political apathy and youths' perception of political news ($r_s(369) = -.427^*$, $p < .05$), supporting our second hypothesis, which states that political apathy among youths will be negatively related to their perception of newspaper political reports. The results, therefore, indicate that the level of political apathy among Nigerian youths would likely increase as their negative perception of newspaper political news increases and vice versa.

However, the study results indicate that obtaining political news from the newspaper is significantly and positively associated with political efficacy ($r_s(369) = .567^{**}$, $p < .05$). Hence, we accepted our third hypothesis, which states that there is a significant positive relationship between youths' exposure to newspaper political news and their level of perceived political efficacy. Furthermore, it indicates that an increase in youths' exposure to newspaper reports on political issues in Nigeria may tend to actuate a corollary increase in their level of perceived political efficacy. Accordingly, political apathy among youths

was found to be negatively related to their perceived political efficacy ($r_s(369) = -.404^{**}$, $p < .05$), supporting our fourth hypothesis, which states that political apathy among youths will be negatively associated with their perceived political efficacy.

DISCUSSIONS

Analysing data collected from youths in Nigeria's southeast geopolitical zone, this study explores how exposure to newspaper political reports influences the extent of active political involvement among young people in Nigeria. On the whole, the study has established that most Nigerian youths in the study area are exposed to newspaper political news, given that about 61.2% of the respondents claimed that they read newspaper political stories at relatively frequent intervals (always, often, or sometimes). Moreover, it suggests that about three in every five respondents were exposed to online or offline newspaper political news. Further analysis shows that a combined total of 37.5% of the respondents read newspaper political news regularly (either always or often) in contrast to the 19.7% who do not read newspaper political stories at all. Such a considerable high level

Table 6
Correlation matrix for variables

	1	2	3	4
1 Newspaper Exposure				
2 News Perception	.082			
3 Political Efficacy	.567**	.084		
4 Political Apathy	-.525**	-.427*	-.404**	
5 Newspaper Influence	.124*	.098	.199**	-.270**

Note: **Correlation is significant at $<.01$ and $<.05$

of exposure to political news may have been essentially made possible by modern digital tools that enable users to quickly and conveniently access the contents of many Nigerian newspapers, which now maintain a visible online presence (Edogoh et al., 2015).

The extent of political apathy among young Nigerians tends to be high on issues relating to active political involvement, such as initiating/joining public protests against societal ills or signing public petitions against poor governance. Conversely, on issues relating to passive involvement, such as engagement in political discussions or intention to vote in future elections, the youths tend to have a higher level of political participation and a lower political apathy. It contradicts previous research suggesting that young people neglect traditional approaches to political participation, such as voting or party membership, in preference of unconventional forms of political participation, such as protesting (Busse et al., 2015). The present findings suggest a reversal of such a trend. They indicate that the youths are more likely to engage in the so-called conventional forms of political participation, such as voting, engaging in political debates, and joining political parties, than being involved in a public protest or signing a public petition. Our results lend credence to the findings of Omede and Ojibara (2017). They found that 75.5% of youths showed intention to vote by actively participating in voters' registration exercises, and 18.5% were

active political party members. However, only a paltry 8.5% admitted to participating in a public demonstration against perceived poor governance.

Undoubtedly, the Nigerian political terrain exhibits a sturdy opposition to public protest- be it legitimate or otherwise. Like the 2020 #EndSARS protests, many attempted protests have been forcefully quashed by security agents and their proponents arrested, detained, and sometimes charged for sedition and/or treason. Such a hostile stance towards civil disobedience might have also influenced the feeling of political efficacy among youths. Thus, the youths feel that they have an excellent understanding of the country's important political issues and can offer effective leadership like most other people. However, they are not persuaded that initiating/joining public protests or signing public petitions against poor governance will positively change the government.

Such acts of forceful containment against civil disobedience are also extended to the media. The media profession in Nigeria is encumbered by various legal and illegal constraints aimed at gagging the press and suppressing the inalienable right to free speech. A fallout of this is that many of the legacy newspapers in the country now turn a blind eye to societal ills as part of their precautionary measures. At the same time, only a few have damned the consequences of living up to their societal expectations. This partly explains why many Nigerian youths hold a negative perception of newspaper political reports. The responses showed

that most of them believe that newspaper political stories are neither objective nor accurate and do not focus on the important issues of the society. In addition, they are often filled with too much news of scandals, corruption, and crime. Hence, they seldom compel political participation and inadvertently increase political apathy among young people in Nigeria.

One of the overarching objectives of the study was to ascertain the influence of exposure to newspaper political reports on political apathy among young people in Southeast Nigeria. Responses to the question probing this objective showed that political news tends to influence youths positively in terms of their involvement in politics. Despite of the reported negative perception, the results showed that newspaper political news neither creates cynicism nor results in political alienation among youths in Nigeria, unlike the broadcast/entertainment media found to generate cynicism in politics (Ha et al., 2012). Furthermore, reading political news was identified as a motivator for active political participation ($\bar{X} = 3.23 > 3.00$) and belief in the power of the electorates to have a say in the Nigerian political system, primarily through the ballots ($\bar{X} = 3.14 > 3.00$). Overall, there is a significant positive relationship between reading newspaper political reports and the feeling of political efficacy among Nigerian youths ($r_s(369) = .467^{**}$, $p = <.05$). Accordingly, obtaining political news from newspaper is negatively associated with youth political apathy ($r_s(369) = -.525^{**}$, $p = <.05$).

On the flip side, however, the relatively high feeling of political efficacy among youths is negatively associated with their extent of political involvement. Our results showed that political apathy among the respondents tends to decrease as their political efficacy increases and vice versa ($r_s(369) = -.404^{**}$, $p = <.05$). This finding supports earlier research which indicates that political efficacy is a predictor of political participation/apathy (Ardèvol-Abreu et al., 2017; Diemer & Rapa, 2016; Gastil & Xenos, 2010; Kushin & Yamamoto, 2010). Arguably, the feeling of political efficacy among youths is important. People are more likely to participate in politics if they value the rewards gained in political involvement relative to the rewards expected from political apathy (Ejiofor, 2007). The observed overall significant relationship among political efficacy, political apathy, and newspaper exposure also agree with earlier findings which indicate that the media is a significant contributor to people's level of political involvement, and obtaining news from newspaper is a predictor of political participation (Loveless, 2010; Ha et al., 2012). Such association affirms the assumption of the media mobilisation theory, and is explained by the fact that reading newspaper increases voters' ability to assess political candidates, parties, and their manifestoes adequately, thereby increasing their overall confidence in voting decisions (Scheufele & Nisbet, 2003; Moreno et al., 2013).

CONCLUSIONS AND RECOMMENDATIONS

The study has shown that the newspaper medium remains a significant source of political information to many Nigerian youths. However, many young people in the country hold a negative perception towards newspaper political reports because they feel such stories are not objective enough, inaccurate, filled with irrelevant content, and seldom motivate political participation. However, reading newspaper political stories neither causes political alienation nor cynicism but tends to stimulate interest in politics and stir up the belief in the power of the masses to cause consequential political changes. More so, the study extends the frontiers of current knowledge on youths' civic engagement by demonstrating a relatively low level of political apathy among youths on issues relating to passive political involvement, such as engagement in political discussions or intention to vote in future elections. However, their apathy on issues concerning active political involvement, such as joining a public protest or signing a public petition against poor governance, is high. Overall, obtaining political news from newspaper is positively related to a higher political efficacy but negatively associated with political apathy among youths. Similarly, a negative association exists between political apathy and youths' perception of newspaper political news. By implication, the study indicates that people's valuation and opinion on media products may influence how they relate with the larger society.

The results of the current study hold several implications for media research and practice. First, the findings underscore the imperative for the Nigerian mass media, particularly the newspaper, to focus more on reporting the most crucial political issues that will inform the public to enable it to take self-determined action in line with the social responsibility principles of the press. Second, there is the need for the government and its agencies to fully recognise the constitutional and social functions of the press as the true conscience of society. The press is constitutionally charged with upholding the fundamental objectives and directive principles of the Nigerian state. Thus, the society should create an enabling environment for the press to hold the government and its agencies accountable to the people. Similarly, the government should be more receptive to legitimate civil disobedience and respond to protesters' demands within the ambits of democratic rules and constitutional provisions.

Furthermore, young people in Nigeria should make deliberate efforts to stir up their interest and involvement in politics to significantly increase their visibility in governance and abort the endless deferment of their leadership opportunities couched in the unpopular phrase, "the youths are leaders of tomorrow". Also, INEC, political parties, Non-Governmental Organisations, Community-Based Organisations, Faith-Based Organisations, and similar bodies should make it a point of duty to sensitise young Nigerians to take an active part in the determination of Nigeria's political

future. Importantly, electioneering activities across Nigeria should be peacefully, fairly and credibly conducted. This will ensure that elections will genuinely count, and the masses will have their say through the ballots. Arguably, the flagrant disregard for electoral laws and high-level impunity and corruption during polls constitute decisive factors militating against youths' political participation.

ACKNOWLEDGEMENTS

The authors appreciate the respondents' participation and cooperation throughout the research.

REFERENCES

- Ademilokun, M., & Taiwo, R. (2013). Discursive strategies in newspaper campaign advertisements for Nigeria's 2011 elections. *Discourse & Communication, 7*(4), 435-455. <https://doi.org/10.1177/1750481313494501>
- Aghamelu, F. C. (2013). The role of the mass media in the Nigerian electoral process. *Unizik Journal of Arts and Humanities, 14*(2), 154-172. <https://doi.org/10.4314/ujah.v14i2.8>
- Agu, S. U., Okeke, V. O. S., & Idike, A. N. (2013). Voters' apathy and revival of genuine political participation in Nigeria. *Mediterranean Journal of Social Sciences, 4*(3), 439-448. <https://doi.org/10.5901/mjss.2013.v4n3p439>
- Akpoghiran, I. P. (2014). *A simple guide to project research writing*. Eke Graphics Publishers.
- Apuke, O. D., & Apollos, I. N. (2017). Public perception of the role of Facebook usage in political campaigns in Nigeria. *International Journal of Community Development and Management Studies, 1*, 85-102.
- Ardèvol-Abreu, A., Diehl, T., & Gil de Zúñiga, H. (2017). Antecedents of internal political efficacy incidental news exposure online and the mediating role of political discussion. *Politics, 39*(1), 82-100. <https://doi.org/10.1177/0263395717693251>
- Asemah, E. S., Gujbawu, M., Ekharefo, D. O., & Okpanachi, R. A. (2017). *Research methods and procedures in mass communication* (2nd ed). Matkol Press.
- Asiru, H. T., Ogutu, E. A., & Orwenjo, D. O. (2018). Events and actors representation in selected Nigerian daily newspapers. *Ghana Journal of Linguistics, 7*(1), 84-104. <https://doi.org/10.4314/gjl.v7i1.4>
- Bakker, T. P., & de Vreese, C. H. (2011). Good news for the future? Young people, internet use, and political participation. *Communication Research, 38*(4), 451-470. <https://doi.org/10.1177/0093650210381738>
- Baltar, F., & Brunet, I. (2012). Social research 2.0: Virtual snowball sampling method using Facebook. *Internet Research, 22*(1), 57-74. <https://doi.org/10.1108/10662241211199960>
- Bandura, A. (2001). Social cognitive theory: An agentic perspective. *Annual Review of Psychology, 52*, 1-26. <https://doi.org/10.1146/annurev.psych.52.1.1>
- Busse, B., Hashem-Wangler, A., & Tholen, J. (2015). Two worlds of participation: Young people and politics in Germany. *The Sociological Review, 63*, 118-140. <https://doi.org/10.1111/1467-954X.12265>
- Chiweshe, M. K. (2017). Social networks as anti-revolutionary forces: Facebook and political apathy among youth in urban Harare, Zimbabwe. *Africa Development, 42*(2), 129-147.
- Diemer, M. A., & Rapa, L. J. (2016). Unraveling the complexity of critical consciousness, political efficacy, and political action among marginalized adolescents. *Child Development, 87*(1), 221-238. <https://doi.org/10.1111/cdev.12446>

- Donaldson, E. A., Hoffman, A. C., Zandberg, I., & Blake, K. (2017). Media exposure and tobacco product addiction beliefs: Findings from the 2015 health information national trends survey (hints-fda 2015). *Addictive Behaviours*, 72, 106-113.
- Edogoh, L. O. N., Ezeh, N. C., & Samson, A. C. (2015). Evaluation of newspaper reading habits of youths in Anambra State, Nigeria. *New Media and Mass Communication*, 37, 63-71.
- Ejiofor, L. U. (2007). *Politics and mobilisation: A handbook of practical political behaviour*. Willy Rose & Appleseed Publishing.
- Erubami, A. J. (2020). Public perception of social media contributions to political participation processes in Delta State, Nigeria. *Acta Universitatis Danubius. Communicatio*, 14(1), 110-126.
- Gastil, J., & Xenos, M. (2010). Of attitudes and engagement: Clarifying the reciprocal relationship between civic attitudes and political participation. *Journal of Communication*, 60(2), 318-343.
- Gyimah-Brempong, M., & Kimenyi, K. (2013). *Youth policy and the future of African development* (Working Paper No. 9.). Brookings Institution. http://www.brookings.edu/~media/research/files/reports/2013/04/youth%20policy%20african%20development%20kimenyi/04_youth_policy_african_development_kimenyi.pdf
- Ha, L., Wang, F., Fang, L., Yang, C., Hu, X., Yang, L., Yang, F., & Xu, Y. (2012). Political efficacy and the use of local and national news media among undecided voters in a swing state: A study of general population voters and first-timer college student voters. *School of Media and Communication Faculty Publications*, 4. <https://doi.org/10.1177/1931243113515678>
- Henson, R. (2002). From adolescent angst to adulthood: Substantive implication and measurement dilemmas in the development of teacher efficacy research. *Educational Psychologist*, 37(3), 137-150.
- Hooghe, M. (2002). Watching television and civic engagement: Disentangling the effects of time, programs, and stations. *The Harvard International Journal of Press/Politics*, 7(2), 84-104.
- Idike, A. N. (2014). Political parties, political apathy and democracy in Nigeria: Contending issues and the way forward. *Arabian Journal of Business and Management Review*, 4(3), 2-10.
- Ikpegbu, E., & Ihejirika, W. (2020). Newspaper coverage of issue-based political statements and campaigns in Nigeria's election process (November 2018 – February 2019). *Galactica Media: Journal of Media Studies*, 2(2), 66-86. <https://doi.org/10.46539/gmd.v2i1.77>
- Independent National Electoral Commission & Friedrich-Ebert-Stiftung (2011). *Voter apathy and the 2011 election in Nigeria: A research report*. Muhamsaid Commercial Press.
- Johnson, T. J. & Kaye, B. K. (2003). A boost or bust for democracy? How the web influenced political attitudes and behaviours in the 1996 and 2000 presidential elections. *Harvard International Journal of Press/Politics*, 8(3), 9-34.
- Jung, N., Kim, Y., & Gil de Zúñiga, H. (2011). The mediating role of knowledge and efficacy in the effects of communication on political participation. *Mass Communication & Society* 14(4), 407-430. <https://doi.org/10.1080/15205436.2010.496135>
- Karamat, A., & Farooq, A. (2016). Emerging role of social media in political activism: Perceptions and practices. *Journal of South Asian Studies*, 31(1), 381-396.
- Kenski, K., & Stroud, N. J. (2006). Connections between internet use and political efficacy, knowledge, and participation. *Journal of Broadcasting & Electronic Media*, 50(2), 173-192. https://doi.org/10.1207/s15506878jobem5002_1

- Kushin, M. J., & Yamamoto, M. (2010). Did social media really matter? College students' use of online media and political decision making in the 2008 Election. *Mass Communication & Society*, 13(5), 608-630. <https://doi.org/10.1080/15205436.2010.516863>
- Lee, K. M. (2006). Effects of internet use on college students' political efficacy. *Cyber Psychology & Behavior*, 9(4), 415-422. <https://doi.org/10.1089/cpb.2006.9.415>
- Levy, B. L. M. (2013). An empirical exploration of factors related to adolescents' political efficacy. *Educational Psychology*, 33(3), 357-390. <https://doi.org/10.1080/01443410.2013.772774>
- Lompo, M. L., & Bago, J.-L. (2018). How does exposure to mass media affect HIV testing and HIV-related knowledge among adolescents? Evidence from Uganda. *Global Journal of Health Science*, 10(9), 1-10.
- Loveless, M. (2010). Understanding media socialization in democratizing countries: Mobilization and malaise in Central and Eastern Europe. *Comparative Politics*, 42(4), 457-474.
- Madueke, O., Nwosu, C., Ogbonnaya, C. Anumadu, A., & Okeke, V. O. S. (2017). The role of social media in enhancing political participation in Nigeria. *Journal of Arts and Management*, 2(3), 44-54.
- Mengistu, M. M. (2017). The quest for youth inclusion in the African politics: Trends, challenges and prospects. *Journal of Socialomics*, 6(1), 1-5. <https://doi.org/10.417212167-0358.1000189>
- Moreno, R. R., Molina, M. C., & Moreno, R. M. (2013). Cognitive mobilization and political blogs. *International Network of Business and Management*, 1, 48-67. <https://doi.org/10.10071540196-012-0009-9>
- Morrell, M. E. (2003). Survey and experimental evidence for a reliable and valid measure of internal political efficacy. *Public Opinion Quarterly*, 67(4), 589-602.
- National Bureau of Statistics. (2018). *Demographic statistics bulletin*. <http://www.nigerianstat.gov.ng/download/775>
- National Youth Policy. (2009). *Second national youth policy document of the Federal Republic of Nigeria 2009*. https://www.youthpolicy.org/national/Nigeria_2009_National_Youth_Policy.pdf
- Niemi, R. G., Craig, S. C., & Mattei, F. (1991). Measuring internal political efficacy in the 1988 National Election Study. *The American Political Science Review*, 85(4), 1407-1413.
- NOI Polls (2015, January 27). *Nigerians claim that political campaigns are not addressing key issues in the country: Countdown to 2015 election poll series*. <https://noi-polls.com/nigerians-claim-that-political-campaigns-are-not-addressing-key-issues-in-the-country/>
- Nworgu, B. G. (2006). *Educational research: Basic issues and methods* (3rd ed). University Trust Publishers.
- Oboh, G. E. (2016). Reflecting on the Nigerian media, elections, and the African democracy. *Sage Open*, 6(3), 1-10. <https://doi.org/10.1177/2158244016666886>
- Ojebuyi, B. R., & Chukwunwike, A. C. (2018). Gender bias in media representation of political actors: Examples from Nigeria's 2015 presidential election. *Legon Journal of the Humanities*, 5(2), 251-260.
- Oji, M. & Erubami, A. J. (2020). Discourse on social media use and reading culture of Nigerian youths. *Academic Journal of Interdisciplinary Studies*, 9(6), 105-113. <https://doi.org/10.36941/ajis-2020-0115>
- Omede, A. J., & Ojibara, I. I. (2017). Youth and political participation in Kwara state, Nigeria. *Afro Asian Journal of Social Sciences*, 8(3), 1-39.
- Pasek, J., Kenski, K., & Romer, D. (2006). America's youth and community engagement: How use

- of mass media is related to civic activity and political awareness in 14- to 22-year-olds. *Communication Research*, 33(3), 115-135. <https://doi.org/10.1177/0093650206287073>
- Sadler, G. R., Lee, H. C., Lim, R.-S., & Fullerton, J. (2010). Research article: Recruitment of hard-to-reach population subgroups via adaptations of the snowball sampling strategy. *Nursing & Health Sciences*, 12(3), 369-374. <http://doi.org/10.1111/j.1442-2018.2010.00541.x>
- Saka, L., (2010) Agent of destruction: Youth and the politics of violence in Kwara State, Nigeria. *Journal of Sustainable Development in Africa*, 12(8), 10-22.
- Scheufele, D. A., & Nisbet, M. C. (2003). Being a citizen online: New opportunities and dead ends. *Harvard International Journal of Press/Politics*, 7(3), 55-75.
- Segaard, S. B. (2015). Perceptions of social media: A joint arena for voters and politicians? *Nordicom Review*, 36(2), 65-78. <https://doi.org/10.1515/nor-2015-0017>
- Strömbäck, J., & Shehata, A. (2010). Media malaise or a virtuous circle? Exploring the causal relationships between news media exposure, political news attention and political interest. *European Journal of Political Research*, 49(5), 575-597.
- Syam, H. M., & Nurrahmi, F. (2020). "I don't know if it is fake or real news" How little Indonesian University students understand social media literacy. *Jurnal Komunikasi: Malaysian Journal of Communication*, 36(2), 92-105. <https://doi.org/10.17576/JKMJC-2020-3602-06>
- Tan, K. (2012). *Political apathy is harmful*. The Oracle. <http://gunnoracle.com/2012/11/07/political-apathy-is-harmful/>
- Ufuophu-Biri, E., & Ojoboh, L. O. (2017). Social media as a tool for political resistance: Lessons from the Arab spring and the Nigerian protests. *Academic Journal of Interdisciplinary Studies*, 6(1), 61-66. <https://doi.org/10.5901/ajis.2017.v6n1p61>
- United Nations Youth. (2013). *Youth, political participation and decision-making*. <http://undesadspd.org/Youth.aspx>
- Waqas, E. (2017). Analysing malaise and mobilization: The effects of media on political support and European identity in old and new member states. *Politics in Central Europe*, 13(2/3), 33-51.
- Wimmer, R. D., & Dominick, J. R. (2011). *Mass media research: An introduction* (9th ed.). Wadsworth.
- Yakubu, Y. A. (2012). Democracy and political apathy in Nigeria (1999-2011). *European Scientific Journal*, 8(20), 38-48.
- YIAGA Africa. (2019). *Factsheet on youth and the 2019 elections in Nigeria*. <http://www.yiaga.org/factsheet-on-youth-and-the-2019-elections-in-Nigeria.pdf>



Driving Factors of Continuity for Kano Emir Palace towards Safeguarding its Cultural Heritage

Bashir Umar Salim^{1,2*}, Ismail Said³, Lee Yoke Lai³ and Raja Nafida Raja Shahminan¹

¹*Architecture Program, Faculty of Built Environment and Surveying, Universiti Teknologi Malaysia, Skudai 81310, Johor Bahru, Malaysia*

²*Department of Architecture, Faculty of Earth and Environmental Sciences, Bayero University Kano, 700241, Nigeria*

³*Landscape Architecture Program, Faculty of Built Environment and Surveying, Universiti Teknologi Malaysia, Skudai 81310, Johor Bahru, Malaysia*

ABSTRACT

Preservation and safeguarding cultural heritage juxtaposed with a living dimension have become a global concern in heritage studies. Traditional palaces in the Hausaland of northern Nigeria are conceived in earthen form, featured with continuity of tradition, and embodied with a living community. Thus, its conservation intervention prompts the Palace to renewal, reconstruction or expansion, to facilitate current needs. The interventions contravene the Eurocentric principles of conservation that oblige the prevention of changes on monuments' materialism and the spaces it occupies. In contrast, the contemporary approach is a more socially inclusive approach that embraces community engagement. Despite the richness of living heritage sites in the country, research aiming to conceptualise conservation approaches in Nigeria is deficient. Hence, this paper aimed to explore the driving factors of continuity for Kano Emir Palace towards safeguarding its cultural heritage. A semi-structured interview was conducted with 12 traditional builders and analysed with NVIVO 12. It is found that driving factors are embodied with mediating,

deteriorating, and reviving dimensions that prompt the Palace transformation whilst safeguarding its cultural heritage. The paper concludes that the heritagisation of Kano Emir Palace entails assigning values unto spiritual content and decreed spaces of its monuments for the continuity of the inherent function, regardless of material lost and transformation. Besides, a 'location-based conservation approach' is suggested

ARTICLE INFO

Article history:

Received: 08 March 2021

Accepted: 25 June 2021

Published: 15 September 2021

DOI: <https://doi.org/10.47836/pjssh.29.3.09>

E-mail addresses:

s.umar-1981@graduate.utm.my (Bashir Umar Salim)

ismailbinsaid@gmail.com (Ismail Said)

lylai@utm.my (Lee Yoke Lai)

b-nafida@utm.my (Raja Nafida Raja Shaminan)

* Corresponding author

as a supplementary paradigm of heritage studies. The framework can be designated in heritage policy for living heritage sites, including functioning traditional palaces in Africa.

Keywords: Community-conservation approach, cultural heritage, driving factors, Kano Emir Palace, living heritage

INTRODUCTION

Conservation conceptions in heritage studies are continuously becoming distinct and changing due to varying values evolving from particular cultures and contexts (Vecco, 2018). Therefore, a particular heritage's interpretations and preservation treatment may not suffice the same treatment for a diverse heritage (Baird, 2013). Besides, heritage values cannot be generalised because local situations and the management of notions change with changing contexts (Chirikure et al., 2010). Thus, heritage conservation is a devised social means of understanding the reality of people's contemporary lives and their relationship with the condition of their environment (Smith, 2006). Therefore, heritage conservation remains a dynamic phenomenon that should be treated with distinct evaluation outcomes of a particular heritage context to avoid conflict of notion.

For the reasons mentioned earlier, Vecco (2018) emphasises the concept of genius loci as the denomination in determining a place's cultural significance and heritage-making. The loci concept will explore a holistic entity and the reality of tangible

and intangible identity and experiences a particular community evokes towards safeguarding its heritage (Vecco, 2020). Sinamai (2020) posits that the Eurocentric heritage discourse is an inverted notion of African heritage practices. For this reason, Ugwuanyi (2020) African heritage scholars, including Nigeria, should conceptualise their heritage-making, emphasising place-based conception towards suiting African-loci. Thus, Bwasiri (2011) contends that African heritage scholars need to delineate the meaning of heritage conservation from their indigenous living spaces. Therefore, there is a need to explore what parameters define and suits the African cultural framework.

Meanwhile, conservation conceptions in sub-Saharan African countries are featured with cultural expressions and continuity of traditions to ensure their cultural heritage's survival. Their heritage inheritance is attributed to the complex religious, traditional, and spiritual beliefs enriched with diverse tangible and intangible heritage (Ndoro & Wijesuriya, 2015). Thus, African communities need continuity to sustain their heritage in time and space, whilst the monuments respond to the reality of the communities' living traditions. It is folklore that monuments in Africa are treated momentarily in a cyclical phenomenon, ensuring the continuity of spiritual traditions and little concern about physical conservation (Graham, 2002). Likewise, Ugwuanyi (2020) asserts that the heritage historicity in Nigeria is cyclical, imbued with values and myths according to their contemporary lives. However, architectural heritage conservation in Nigeria is still in its

infancy when ascertained in heritage studies (Osasona, 2015). Nonetheless, few studies have been conducted on historical buildings.

In the southern part of Nigeria, colonial offices and houses encroaching deterioration are suggested to be reused as tourist sites (see Olagoke, 2014). Kolo (2015) suggested that the British post office colonial buildings be reused as commercial banks or museums. It is also found that the communities of Calabar metropolis in Cross Rivers state are converting their residential building for commercial uses (see Ojikpong et al., 2016). At the same time, the deteriorating Afro-Brazilian residential buildings in use are called upon for maintenance with recommendations (see Osasona, 2015, 2017). Then the colonial religious buildings, including churches and mosques, are subjected to physical modifications of fabric and facelifts intervention. Consequently, they are reconstructed to accommodate the growing congregation and neglecting the architectural and artistic values. Thus, spiritual values are prioritised over the material fabric (see Sabri & Olagoke, 2019a, 2019b, 2020, 2021).

While conservation studies in northern Nigeria, particularly in the Hausaland, is bounded on investigating its indigenous architectural characteristics, building materials, structural components, elements, and motif designs (Agboola & Zango, 2014; Dmochowski, 1990; Saad, 1981). Others studied the spatial configuration, organisation, and planning of functions and spaces in Hausa traditional architecture (see Auwalu, 2019; Muhammad-Oumar,

1997; Umar et al., 2019). While due to the fragile earthen structures in the north, the factors that influence their sustainability were studied (for example, Danja et al., 2017; Sodangi et al., 2011). For example, Umar (2017) asserts that economic status and environmental factors embodied with rainfall influence, poor roads, and drainages led to the transformation of mud houses to a modern look in the Kano metropolis. Thus, recommendations have suggested the deterioration and collapse occurrences of earthen structures due to the rainfall influences (see Eneh & Ati, 2010).

The conception of heritage conservation studies in Nigeria implies that it will study colonial buildings embodied with international styles. However, there is a lack of improvising what constitutes the meaning of conservation in its local communities. Notably, a study on Nigerian communities imbued with their culture, values, and myths is found scanty. Despite the richness of living heritage sites in the country, research aiming to conceptualise such conservation approaches in Nigeria is deficient. Thus, studies in living heritage sites with people, places, and cultures imbued with values receive less attention in Nigerian academia. This study contextualises its research-based place in Kano Emir Palace, functioning with a perpetual community embodied with culture, myths, and spiritual values. Hence, the study aims to explore the driving factors of continuity that mediate changes towards safeguarding the cultural heritage of Kano Emir Palace.

THE CONCEPTION OF LIVING HERITAGE SITES

The conception of living heritage aims (1) to develop a community-based approach as a conservation and management tool and (2) to promote traditional knowledge systems in conservation practices (Wijesuriya, 2018). Indeed, communities with a living dimension need both the monument and the continuity of their practice, including Kano Emir Palace. Thus, there is a need to scale both the tangible and intangible features of a community's heritage, exploring and determining which features carry more weight values (Pocock et al., 2015). Aikawa (2004) asserts that both features remain interdependent. In the same vein, intangible heritage constitutes meanings, knowledge skills, and values that portray the understanding of people's tangible heritage in their context (Smith & Akagawa, 2009).

Living heritage sites are imbued with the concept of continuity (Wijesuriya, 2018). At the same time, continuity is embodied with serving heritage's original function (Poulios, 2014). The additional elements of continuity include (1) connectedness of original community to the heritage, (2) caring for the heritage expressed through traditional knowledge and management system, and (3) cultural expression through evolving tangible and intangible heritage expression responding to changing circumstances (Poulios, 2014; Wijesuriya, 2018). Wijesuriya (2005) added that continuity is embodied with changes. Hence, as continuity is the crucial dimension of living heritage, thus changes remain

inevitable. For example, Poulios (2014, p. 23) asserts that "conservation in the context of living heritage approach does not aim at preserving the fabric but maintaining continuity, even if the fabric might be harmed in certain occasions". Moreover, the community embraces changes/evolution suitable to their present condition for their continuity (Poulios, 2010). In the ongoing continuity, Foster and Jones (2019) postulate that heritage materialism can be created and recreated through the replica of the materiality and craft practices, recognisable to the expectations of materiality, setting, and place. Moreover, Boccardi added that replicating craftsmanship by the living heirs is negotiable since the craftsmanship is revived in the blood and spirit of the master builders attributes (Boccardi, 2018).

THE KANO EMIR PALACE

The Kano Emir Palace was built in the 15th century from 1479-1482 by Muhammadu Rumfa (Barau, 2014). The Palace is located in the Hausaland of the northern part of Nigeria and situated within the city wall of the Kano metropolis, as seen in Figure 1a (Liman & Adamu, 2003). It is clichéd as a town with numerous wards and 4000 residents (Barau, 2014). To the present day, the Palace is functioning as a living space, dwelled permanently by perpetual community within the Palace fortified fixed boundary, as seen in Figure 1b. The Palace function is still in use, the core community remains perpetual, and the community persistently safeguards its intangible and tangible heritage continuity.

The intangible functions include socio-cultural, administrative, and religious, including durbar festivals, court sessions, and Islamic congregation activities. The intangible function of daily practices sides with the conception of continuity as the key phenomenon of living heritage sites (Poulios, 2014; Wijesuriya, 2018).

The Palace is conceived in earthen form and built by the master masons, embodied in Hausa traditional architecture (Bilyaminu, 2017; Nura, 2014). Figures 2a, b, and c displays the local building materials, including building bricks *tubali* (see Figure 2a), local plaster *makuba* (see Figure 2c), and the wooden rafters *azara* (see Figure 2b) (Dmochowski, 1990). One of the Palace’s fascinating architecture is the exaggerating ceiling design of the Hausa vault, called Bakan Gizo, literally, the bow

of a spider, as seen in Figure 3. Concisely, the master masons attributed the spider’s web as genius creativity and conceptualised it in the early 19th century (Saad, 1981). The Hausa vault spans eight meters high without intermediate support, as seen in Figure 3 (Denham et al.,1985; Last, 1980; Saad, 1981).

However, the Kano Emir Palace being in earthen form and is influenced by the heavy annual rainfall scourge (Liman et al., 2014). Meanwhile, earthen structures tend to be the fastest heritage to encroach decay than any other heritage site property due to rainfall influence and the fragile material it embodies (Correia, 2016). Thus, the Palace has undergone severe alterations and rehabilitations responding to modernity (Dmochowski, 1990). How did the Palace change over time, responding to continuity

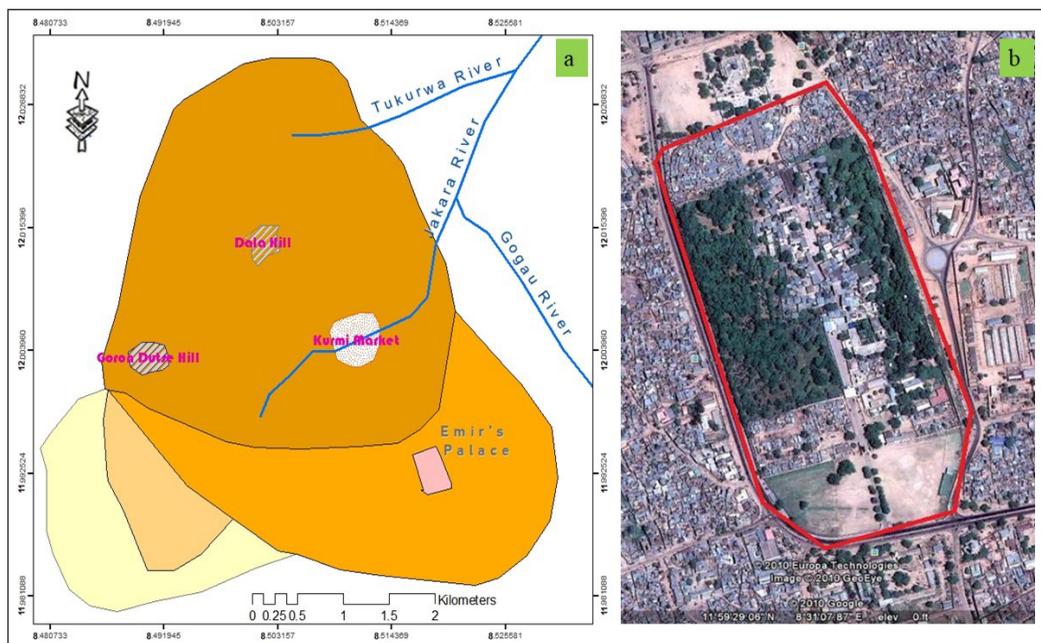


Figure 1. (a) The developments of walls around Kano City wall showing the Kano Emir Palace (Liman & Adamu, 2003); (b) Google earth image of Kano Emir Palace (Barau, 2014)

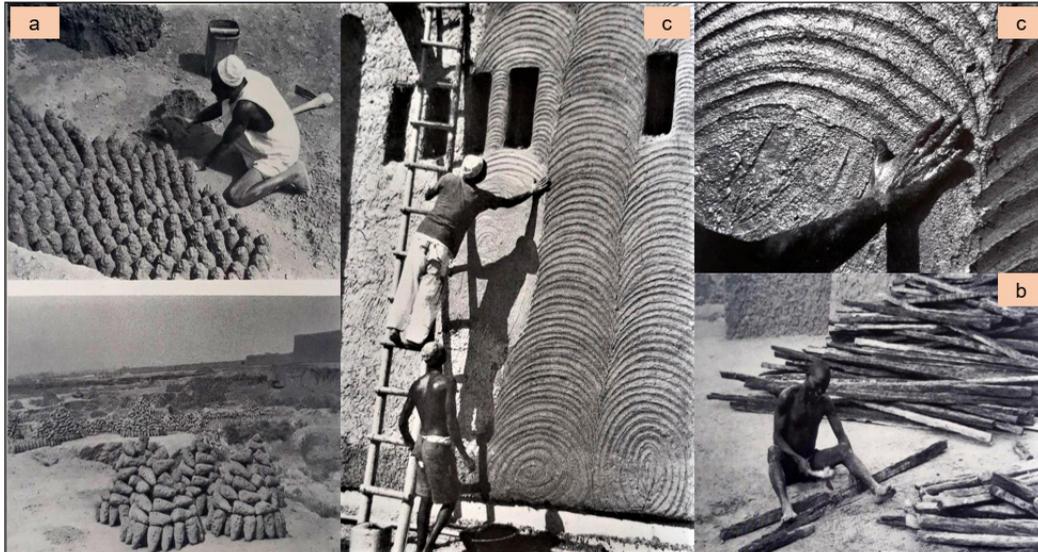


Figure 2. The locally sourced building materials preparation and traditional construction technique (courtesy of Nigerian Commission for Museums and Monuments; Dmochowski, 1990)



Figure 3. Kano Palace Emir's court chamber *Soron Bello* displaying the Hausa Vault *Bakan Gizo* in its earthen form

and modernity within time and space? In the meantime, Sully (2007) postulates the need for heritage evaluation by addressing key questions such as heritage, how it is used and cared for, and whom. Besides, Vecco (2018) added and for how long? Hence, this study will explore the key questions during the evaluation of Kano Emir Palace heritage-making.

RESEARCH METHOD

The traditional builders associated with the Palace are the unit of analysis for this paper. They are the closest ally to the Emir towards conceiving and maintaining his structures, reflecting his needs and requirements. Moreover, they know every nook and cranny of the Palace (Nura, 2014; Saad, 1981). Thus, they are the respondents towards delivering information on the driving factors of continuity imbued with changes for Kano Palace. The in-depth interview involved 12 participants. The 12 participants were coded from TB-1 to TB-12 to remain anonymous (see Figure 8). A smart recording device was used for recording the interview sessions. Thematic analysis was employed to explore the driving factors using Nvivo 12. Similarly, the retrieved archival photos and fieldwork photos were also analysed. The methodological framework is illustrated in Figure 4.

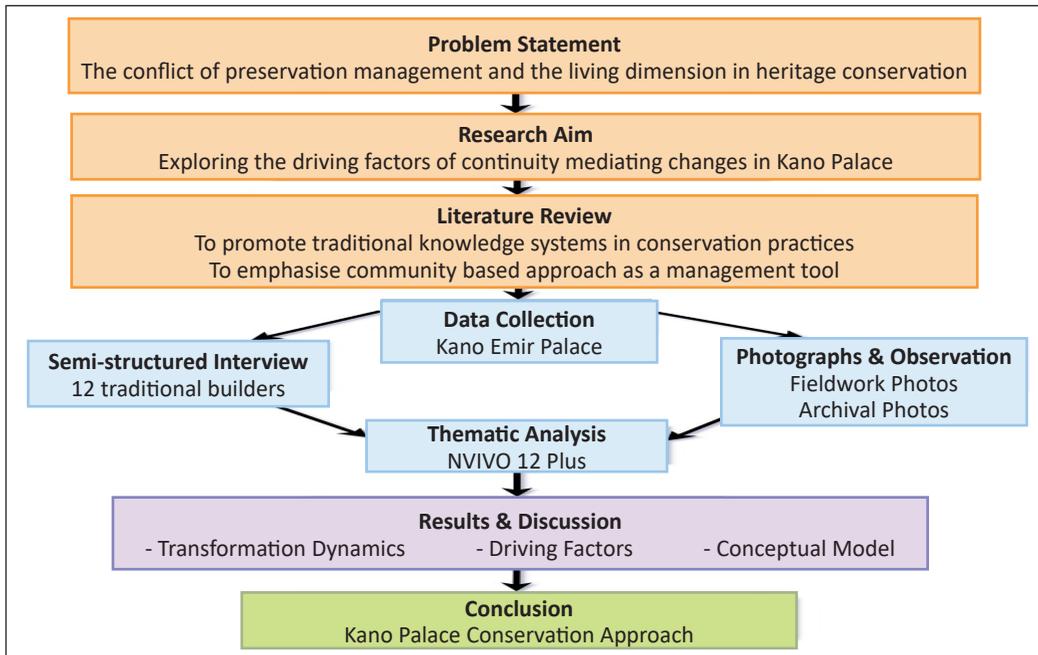


Figure 4. Research methodology flow chart

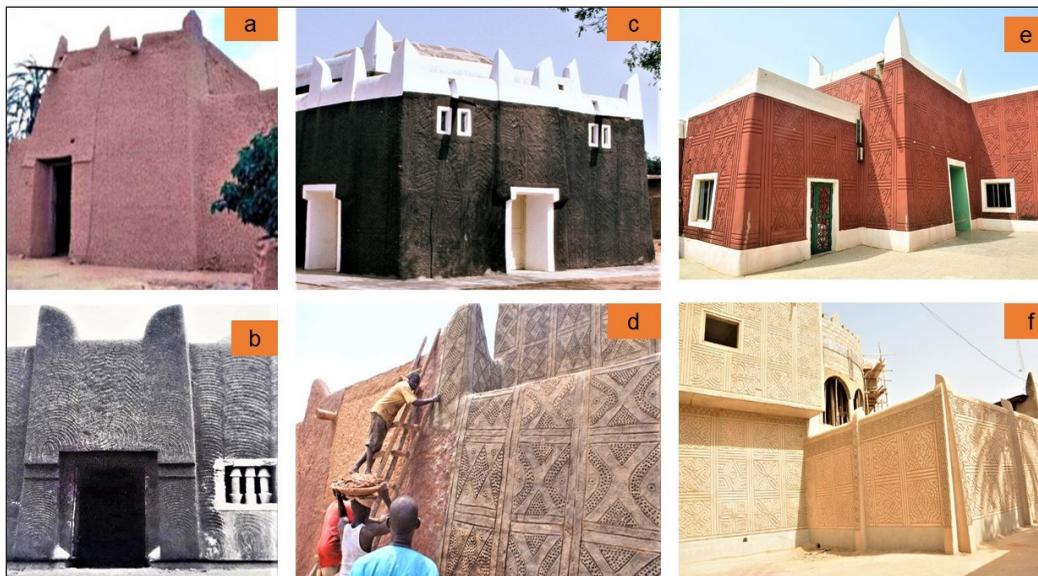


Figure 5. The transition of the Kano Palace monument's earthen fabric according to Skills and technological advancement. (a) Kano Emir Palace Northern gate, Kofar Fatalwa (courtesy of Oluibukunola F. Esuruoso collections #9360); (b) An entrance foyer façade (courtesy of Nigerian Commission for Museums and Monuments; Dmochowski, 1990); (c) The Crown Chamber; (d) Replacement of Makuba with cement reviving the design motif (NCMM report 2013, courtesy of Nigerian Commission for Museums and Monuments); Dmochowski, 1990); (e) Cladding of palace guest-chamber Soron Giwa in masonry wall construction; (f) Reconstruction of Emir's wing in modern block form reviving the cultural elements and identity. (R. Keith Rowan collection, courtesy of Aga Khan Documentation Centre, MIT Libraries # 168924)



Figure 6. The Kano Palace crowning chamber (left) and part of the royal cemetery fence (right): (a) shows the Crowning chamber and all structures in an earthen form and the floor paving in bare sand (R. Keith Rowan collection, courtesy of Aga Khan Documentation Centre, MIT Libraries # 168942); Then (b) shows the Crowning chamber and the wall on the right-hand side is reconstructed based on spirituality and place attachment notion. Also, the pavement is modernised to concrete interlocking from the bare sand flooring



Figure 7. (a) Aerial view of the monumental guest-chamber *Soron Giwa*, showing the zinc roof sealing the mud roof and then cladded with the masonry wall; (b) The preserved interior of soron Giwa in its earthen form



Figure 8. The Emir's wing self-collapse and demolition process after attaining ageing and limit of repair



Figure 9. Kano Palace Emir's wing reconstruction based on spirituality and place attachment notion

DATA ANALYSIS AND RESULTS

The 12 interviewed audio recording files were transcribed. During data collection, each respondents' interview was transcribed before proceeding to the next respondent. It is to ascertain the level of exhaustiveness and data saturation. After every transcription process, each respondent was revisited for the member checks procedure to acquire the credibility and validity of the data before analysis (Birt et al., 2016). All the respondents were satisfied with their transcription because the interview was cautiously transcribed by listening to the recording device (Gibson & O'Connor, 2017). Henceforth, the 12 transcripts

were analysed using Nvivo 12 plus to explore the recurring themes using thematic analysis. Various phrases were highlighted during the open coding, according to each respondents' transcript's response, as seen in Table 1, displaying the frequency of coding references.

Hence, during the opening coding, meanings were assigned against each transcript and subsequently across the 12 transcripts. Next, the generated codes were collated and scrutinised through revisiting, revising, reorganising, and reinterpreting (Braun & Clarke, 2019). Finally, similar codes were condensed to form a theme, while less recurring unclear codes were

Table 1

Coding references of the traditional builders on the driving factors of continuity themes

S/N	Fabric Loss Influential Factors Themes	Frequency of coding references	Traditional Builders Responses
1	Building Adaptability	25	7
2	Change of use	27	12
3	Decline of Master Masons	54	12
4	Material Ageing	35	9
5	Evolving of Building Materials	27	12
6	Rainfall	66	12
7	Repair Limitation	45	10
8	Spirituality & Place Attachment	51	12

discarded (Braun & Clarke, 2019). Hence, eight themes were determined and concisely renamed in a succinct meaning, as seen in figure 10. Accordingly, Figure 11 portrays the responses of how the traditional builders emphasised in the theme-making. While Figure 12 reflects the pattern of how each traditional builder responded during the interview. Then Table 1 shows the frequencies of coding references ranking order against each traditional builder response on a particular theme.

DISCUSSION

The paper determined eight (8) driving factors of continuity embodied with Kano Emir Palace's changes, evoked by the Kano Palace community. The eight driving factors are repair limitation, rainfall, material ageing, the decline of master masons, building adaptability, change of use, evolving of building materials, spirituality and place attachment.

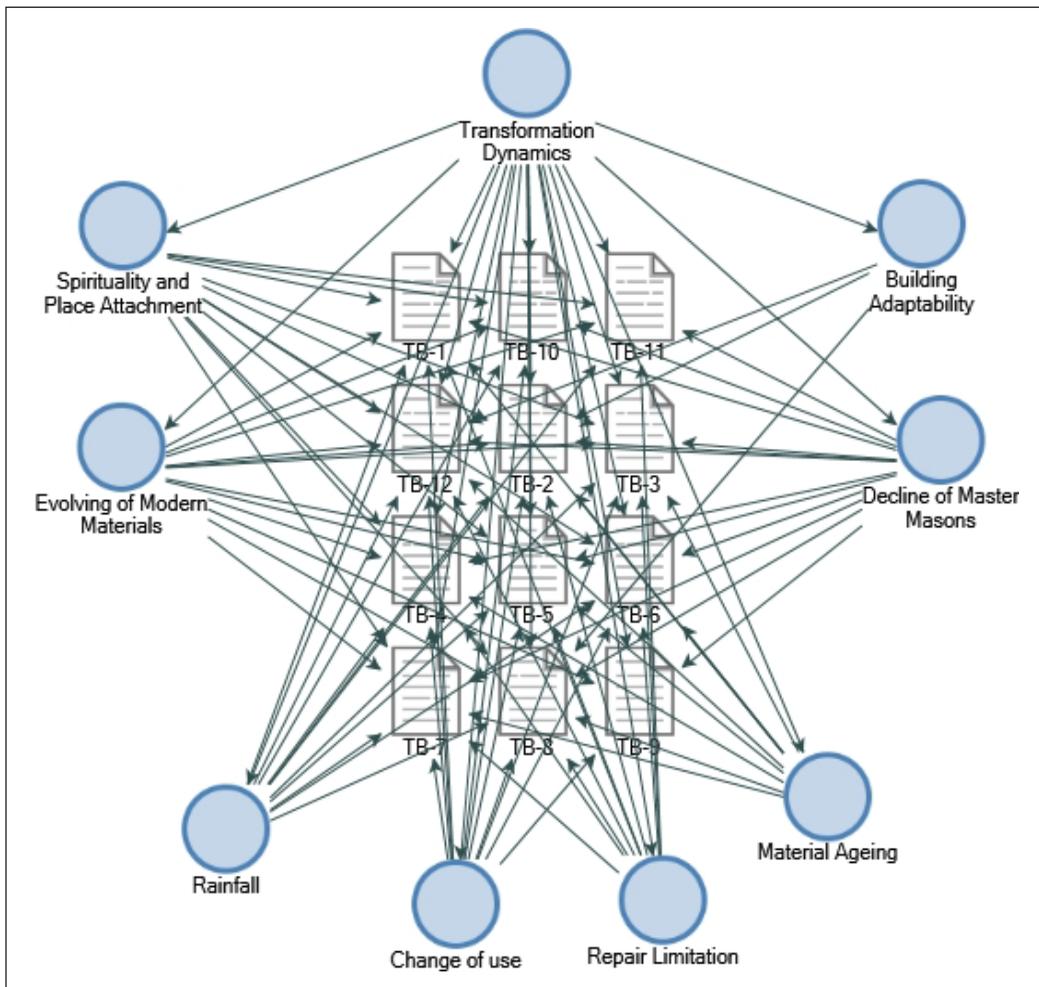


Figure 10. Thematic project mapping of the eight recurring themes elicited from the 12 traditional builder

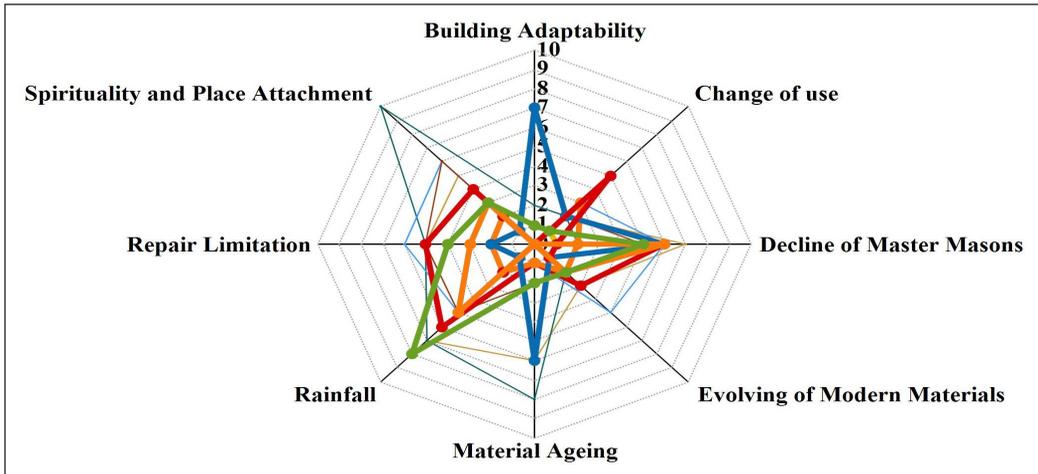


Figure 11. Radar analysis portraying the emphasis of the traditional builders towards elucidating the eight recurring themes

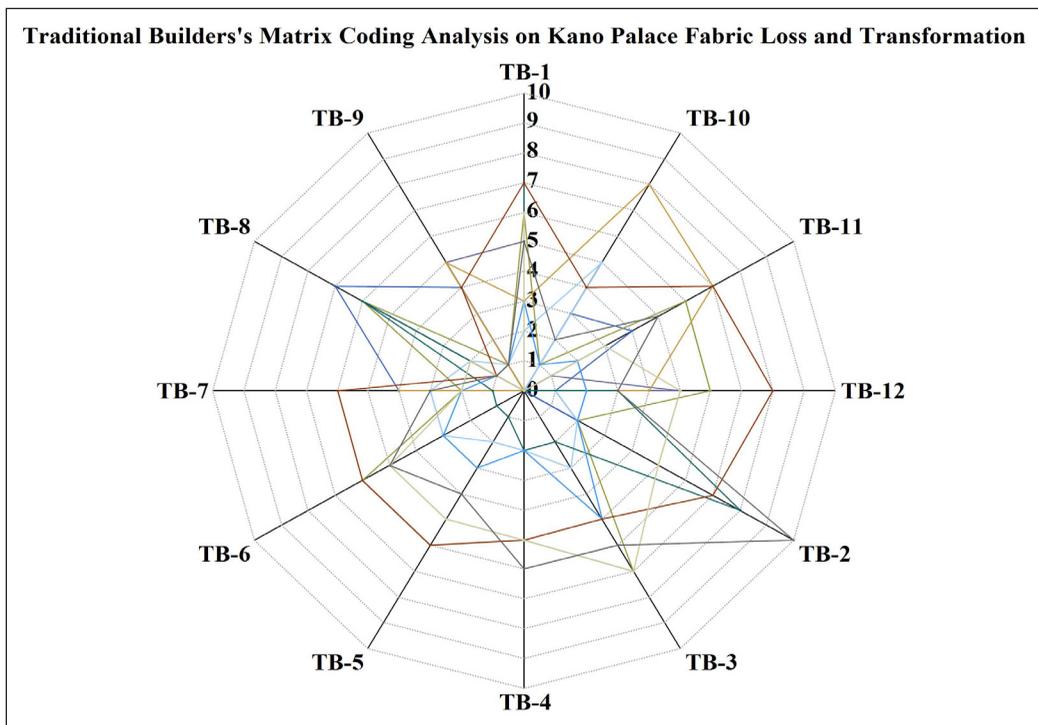


Figure 12. Radar analysis portraying the pattern of the interviewee's responses during the interview

Rainfall

Rainfall portrays the frontline driving factor of changes that prompts the loss and transformation of the Kano Palace earthen

fabric (see Table 1 and Figure 11). The primary reason is that the Palace is conceived in earthen form and contextualised in a semi-arid region, receiving periods of

annual rainfall (Liman et al., 2014). Hence, fabric maintenance is carried out annually to replace the eroded earthen plaster layering on the wall and roof surfaces: *“the consecutive Emirs of Kano Palace remain ever attentive to our needs towards preserving the earthen monuments. However, rainfall remains the unquestionable natural agent that influentially erodes the fabric of the Kano palace monuments annually”* (TB-8). This phenomenon parallels the assertion that earthen heritage structures are the fastest properties to encroach decay (Correia, 2016).

Suppose the layer is not replaced before the following season. In that case, the earthen structures are vulnerable to collapse for being exposed to excessive rainfall scourge: *“If the replacement of the layer is not restored, it becomes vulnerable to the structural stability of the earthen structure. If this persists without urgent repair, the structure over time shows sign of self-collapse”* (TB-2). Therefore, the rainfall scourge is the unquestionable and undisputed disturbance that inevitably erodes the Palace fabric due to the climatic condition. Hence, the community annually creates and recreates the fabric using the same material for the continuity of the Palace tradition. Thus, the creation and recreation of the fabric sides with heritage materialism-revivalism by replicating the same material (Foster & Jones, 2019).

The Decline of Master Masons

The practising master masons are inevitably declining, either through attaining ageing

or passing away: *“The current issue we are facing is that majority of the Kano Emir Palaces’ master masons are dying. In 2005 a considerable population passed away. The few that are alive are now are very old”* (TB-10). On the one hand, the master mason inexistence contributed to the inability to create and recreate the Palace monuments’ quality artistry in their earthen form. On the other hand, the current living heirs cannot achieve the craftsmanship of their forefathers, towards reviving the monuments in an earthen form: *“All the monuments that have been built for more than 100 to 250 years have outlived their life span and require the master masons’ handy work, who is unavailable. At the same time, the youngsters are not passionate about continuing the traditional practice”* (TB-11). Thus, the decline of master masons means the scarcity of the master builders and the low quality of the artistry in earthen form. Therefore, the chance of renewal or reconstruction of stable and reliable earthen construction is becoming more impractical.

A probing question was asked about the status of the current traditional builders: *“Well, the youngsters have shifted their craftsmanship to modern format, in the spirit of reviving the ancestral craftsmanship in the modern look using modern materials. Hence, they fully participate in Kano palace’s arts, and decoration after contractors have finished their job”* (TB-5). The shifting to modernity implies that the living heirs of the master masons perpetually revive the Palace nomenclature identity in the spirit of their ancestors in modern form. This approach

is similar to Boccardi's (2018) notion on craftsmanship revivalism unto heritage. The similarity is because the traditional builders, the living heirs of the Kano palace master builders, are done by replication. Hence, as the Palace community embraces new building materials, the continuity remains perpetual and cyclical embodied with changes (Poulios, 2014; Wijesuriya, 2005).

Spirituality and Place Attachment

This theme is regarded as the prevailing schemata and practices of the Palace community towards safeguarding their heritage imbued with values and notions (see Figure 11). It mediates the Palace continuity with transformation to the present day. It is initiated once an Emir inaugurates a monument imbued with a function on a designated space, then that space becomes a decree. Thus, through these planning processes, the Palace undergoes formation and expansion over time. Then the spirituality notion is the spiritual contents embedded into every monument during the inauguration on the decreed space. The spiritual contents entail written inscriptions from the Islamic Holy Koran verses or abstract symbols written from unknown phrases. The materials are wrapped and encased in a pot or cloth. Finally, they are embedded within or beneath a monument during construction: "*Our forefathers prepare the manuscript arsenals. They are placed beneath the building foundation or in walls or roofs to protect the monument from evil calamities and prolong the life span of the earthen structure*" (TB-8).

Hence, once a monument embodies the spiritual contents and serving its imbued function on its decreed, the heritagisation process is accomplished. Thus, the Palace community perpetually and mutually initiates a nostalgic psychological bonding to that decreed space. Accordingly, the decreed space, continuity of a function, and spiritual contents imbued in the monument are the three psychological dimensions that the Palace community intrinsically values with thoughts and memories. The psychological bonding initiated with thoughts and memory on the decreed space with the spiritual contents embodied in the monument is where 'place attachment' comes into play. Therefore, the Kano palace's tangible and intangible components are interdependent and somewhat not compartmentalised. This mutualism sides with the notion of upholding the interdependency of tangible and intangible features of a heritage (Aikawa, 2004; Bwasiri, 2011; UNESCO, 2003).

The Kano Emir Palace being a living space, is perpetually featured with growth and development. Thus, a monuments' capacity towards accommodating the Palace members is bound to become inadequate in the future. For example, the Palace crown chamber, *soron zauna lafiya* was demolished and enlarged twice and reconstructed on the same decreed space. The first reconstruction was revived in its earthen form in the 1930s. Then the second revival was reconstructed in concrete built form in 1996 (see Figure 6): "*Court halls in Kano palace over time attain short of spatial capacity due to the*

ever-increasing of population, including Emir's council members, chieftains, titleholders, community masses or guests to engage gatherings or meetings" (TB-7). Therefore, once a monument attains short of its performance, whether the monument is structurally fit or in disrepair, it must be demolished and expanded on that exact location: *"During the reconstruction, all the spiritual contents are placed back intact. The placing back of the spiritual content forms respect. It maintains the historical monuments' location, serving its original function on the decreed space initiated by the ancestral Emirs"* (TB-3). Hence, regardless of material, the spiritual contents are always safeguarded and placed back in the new construction after demolition. The placing back is implemented on the same decreed space, with the monument serving the same function. These findings fulfilled the evaluation of the Kano Palace undertaken during their heritage-making, as postulated by Sully (2007) and Vecco (2018). Moreover, the Palace approach sides with Poullos (2014, p. 23) notion that living heritage conservation aims to preserve the intangible dimension and not the fabric, even if it may be harmed.

Repair Limitation and Material Ageing

The majority of the traditional builders emphasised repair limitation and material ageing as the factors that influence the sustainability of the palace earthen structures (see table 1). They connote these two themes as the notable phenomenon that inevitably ends the life span of the Kano Emir Palace

earthen monuments. The ending of the monuments' life span is related to when the imbued local materials attain ageing. One of the traditional builders made a narration on how the rubbles of the collapsed building are seen as evidence showing the materials have attained ageing: *"If you look at the debris of the building, you will see the soil has become like a cloud of dust as its glutinous properties are gone. Even the embedded twigs, which function as reinforcement wiring, has deteriorated and eaten up by the sand over time"* (TB-2).

An exemplar is the Emir's wing that outlived for about 150 years in its earthen form. The embodied twigs and the soil had attained ageing, which leads to the structural instability of earthen monuments. The timber sections shift, causing settlement to the structure and constitutes cracks all over the wall. At this juncture, the component of the entire structure becomes irreparable and highly at risk. In 2018, Part thereof of the Emirs wing started collapsing (see Figure 8): *"When the moment settles and form cracks, next is falling part thereof and eventually the building will collapse vulnerable to the lives of the surrounding people if not demolished"* (TB-9). Thus, to avoid loss of lives and properties, the Emir's wing was demolished and reconstructed on the same spot according to the spirituality and place attachment notion. The reconstruction was revived in concrete-built form (see Figure 9). This approach is in harmony with Poullos (2010, p. 17) claims that conservation in living heritage sites embraces change/ evolution suitable to the present community for their continuity.

Building Adaptability and Change of Use

Being a living heritage, the Palace population remains to evolve and not static. Hence, the behaviour of the Emir and the community also changes responding to time and modernity. Undoubtedly, the space requirement initiated at the beginning will become inadequate, and the preferences to material and design also will be upgraded: *“Yes, as time changes, the ever-increasing population evolves, demanding bigger spaces. Also, the materials used in the Palace are upgraded gradually due to the exposure of the Emirs travelling abroad and receiving local and international guests”* (TB-1). Hence, these mandates layers of changes to structures repurposing to suit every new Emir’s needs. Thus, the perpetual Emirs private wing, wards, the private chambers, and the court halls must tolerate building adaptability. A typical example is the crowning hall chamber that was explained earlier (seen Figure 6).

Evolving of new Building Materials

The evolution and discoveries of new building material embodied with advancement in skills and technology lead to the palace transformation over time. The trend of the changes occurs at a periodic generation responding to modernity. Thus, whenever an intervention is intended, the Palace incorporates new materials towards upgrading the living standard and safeguarding the cultural heritage: *“You know, for every generation, modernisation and technology evolve, so the craftsmanship*

and knowledge improve with adopting new building materials. Therefore, every Emir at his time tries to integrate new and qualitative materials into new interventions for the welfare of the Palace and suits his lifestyle” (TB-2).

An example of the Kano palace transitions towards an upgrade in material use can be seen in Figure 5 from 5a-5f. Particularly, Figures 5a to 5c are transitions of the same earthen fabric form. In figure 5d, the cement material is applied on the monuments’ surfaces by removing the local plaster, *makuba*, done in the 1980s. Then Figure 5e shows the Palace guest-chamber, *soron giwa*, being clad with masonry wall construction in the mid-1990s by preserving the earthen form from its interior in the mid-1990s (see Figure 7). Finally, Figure 5f shows part thereof of the Emir’s wing after total reconstruction after attaining ageing and limit of repair, as explained earlier. The wing is restored according to the spirituality and attachment notion whilst reviving the cultural identity. Hence, to protect lives and properties due to the ageing of the fragile material, the evolving of building materials are embraced to survive and safeguard the Palace cultural heritage.

CONCLUSION

The driving factors of continuity for Kano Emir Palace are explored. Accordingly, rainfall, material ageing, and repair limitation posed to be the deteriorating factors of continuity. They necessitate replications and replacement through the

creation and recreation of materiality, embodied with a variation of craftsmanship. Then, building adaptability and modern material invasions are the reviving factors of continuity that prompt changes imbued with transformation. Whilst, the revival processes are implemented by taking the Palace nomenclature identity into cognisance during the interventions. Finally, the decline of master masons, change of uses, and spirituality and place attachment were revealed as the mediating factors of continuity. Their phenomenon shapes the Palace conservation approach in the ongoing contemporary needs and the reality of the Palace community. Therefore, the eight driving factors are interrelated towards embodying changes and transformation of the Palace in the ongoing continuity, in a cyclical phenomenon (see Figure 13). Nonetheless, every Emir and the

perpetual palace community implement all the interventions based on spirituality and place attachment despite the transformation. The strictness of adhering to the notion is purposely to safeguarding the Kano palace cultural heritage. Hence, the driving factors of continuity in Kano Emir Palace are conceptualised by mediating, deteriorating, and reviving factors for being an earthen living heritage in a semi-arid climate region. Therefore, context, materiality, craftsmanship skills, growing dimension, and climate condition play a role in Kano Emir Palace's heritage making.

Hence, the paper studied the conservation approaches of Kano Emir Palace based on interpreting the reality of its context, spiritual beliefs, and myths. The study affirms that the Palaces' value on the intangible features outweighs that of its tangible features. It is because the

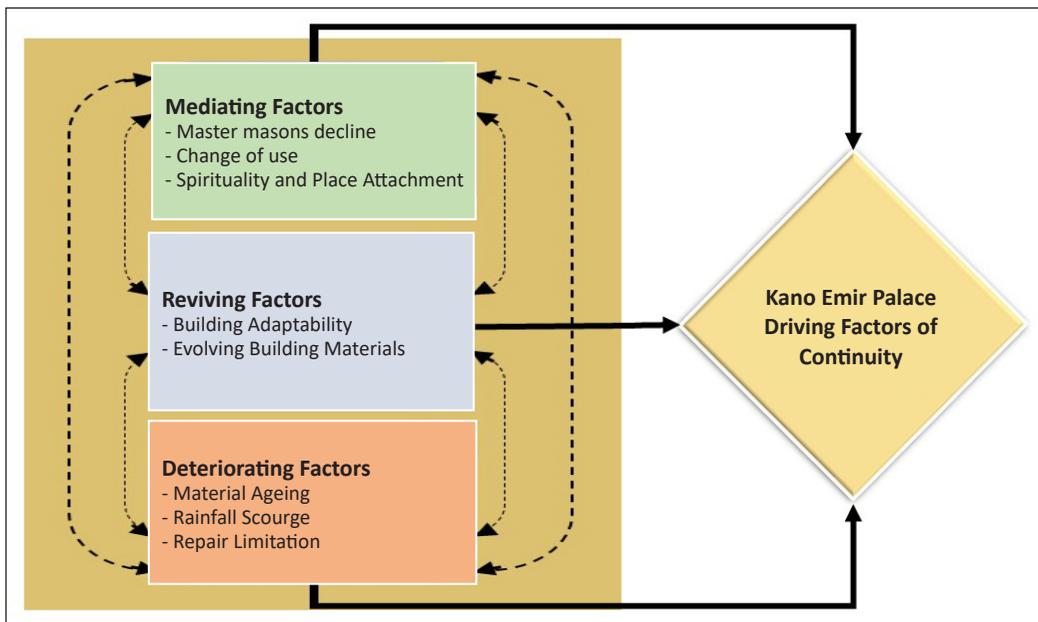


Figure 13. The Kano Emir Palace Continuity driving factors conceptual framework

meaning of the Palace is imbued in the continuity of its daily functions and not the material. Moreover, the Palace is embodied with a living dimension that prompts renewal, expansion, and reconstruction. Thus, responding to modernity for the survival and comfort of the community towards safeguarding the Palace cultural heritage. Essentially, the heritagisation of Kano Emir Palace entails imbuing its values intrinsically not on its monuments' fabric but unto its confined designated space, attached with spiritual contents and continuity of a function on that specific location.

Hence, the epistemological conservation approach of Kano Palace embodies the preservation of a decreed space location and the continuity of a function on that decreed space. Regardless of loss, renewal, expansion, reconstruction, and transformation of its tangible heritage. Thus, the conceptual framework can be co-opted as a cultural framework in the heritage policy for indigenous traditional palaces in Nigeria and Africa. Moreover, the framework can suffice in living heritage sites whose contexts are imbued with beliefs, myths, and values. Besides, the paper suggests a supplementary paradigm of location-based conservation approach in heritage studies. It further recommends theorising the reversal of monuments from lost in resilience and being recognised as a heritage.

ACKNOWLEDGEMENT

First and foremost, the authors would like to express their gratitude to the Kano Emirate

Council for granting permission and access to the Kano Emir Palace for the research investigation. The approval sequel to the request made the research work successful by conducting the fieldwork and interviews. Notably, the authors are grateful to the Secretary of the Kano Emirate Council, Alhaji Abba Yusuf, who reciprocated the requested letter. Furthermore, the authors remain grateful to the interviewees, including the palace Chief builder. In addition, the authors appreciate the palace community members who were kindly and patiently arranging tours around the palace during the fieldwork.

REFERENCES

- Agboola, O. P., & Zango, M. S. (2014). Development of traditional architecture in Nigeria: A case study of Hausa house form. *International Journal of African Society Cultures and Traditions*, 1(1), 61-74.
- Aikawa, N. (2004). An historical overview of the preparation of the UNESCO international convention for the safeguarding of the intangible cultural heritage. *Museum International*, 56(1-2), 137-149. <https://doi.org/10.1111/j.1350-0775.2004.00468.x>
- Auwalu, F. K. (2019). Exploring the different vernacular architecture in Nigeria. *International Journal of African Society, Cultures and Traditions*, 7(1), 1-12.
- Baird, M. F. (2013). The breath of the mountain is my heart: Indigenous cultural landscapes and the politics of heritage. *International Journal of Heritage Studies*, 19(4), 327-340. <https://doi.org/10.1080/13527258.2012.663781>
- Barau, A. S. (2014). The Kano Emir's Palace. In A. I. Tanko & S. B. Momale (Eds.), *Kano:*

- environment, society and development* (pp. 91-110). Adonis and Abbey publisher limited. <https://www.africabib.org/s/rec.php?RID=402223926>
- Bilyaminu, M. (2017). Modern architecture in Nigeria and it's trends in historical buildings: Failure of modernist in conservation and restoration of historical buildings. *International Journal of Architecture and Urban Development*, 7(3), 5-8.
- Birt, L., Scott, S., Cavers, D., Campbell, C., & Walter, F. (2016). Member checking: A tool to enhance trustworthiness or merely a nod to validation? *Qualitative Health Research*, 26(13), 1802-1811. <https://doi.org/10.1177/1049732316654870>
- Boccardi, G. (2018). Authenticity in the heritage context: A reflection beyond the Nara Document. *The Historic Environment: Policy & Practice*, 1-15. <https://doi.org/10.1080/17567505.2018.1531647>
- Braun, V., & Clarke, V. (2019). Reflecting on reflexive thematic analysis. *Qualitative Research in Sport, Exercise and Health*, 11(4), 589-597. <https://doi.org/10.1080/2159676X.2019.1628806>
- Bwasiri, E. J. (2011). The implications of the management of indigenous living heritage: The case study of the Mongomi wa kolo rock paintings World Heritage Site, Central Tanzania. *The South African Archaeological Bulletin*, 66(193), 60-66.
- Chirikure, S., Manyanga, M., Ndoro, W., & Pwiti, G. (2010). Unfulfilled promises? Heritage management and community participation at some of Africa's cultural heritage sites. *International Journal of Heritage Studies*, 16(1-2), 30-44. <https://doi.org/10.1080/13527250903441739>
- Correia, M. (2016). *Conservation in earthen heritage: Assessment and Significance of failure, criteria, conservation theory, and strategies*. Cambridge Scholars Publishing. <https://books.google.com.my/books?id=ESj5DAAAQBAJ%0A%0A>
- Danja, I. I., Li, X., & Dalibi, S. G. (2017). Factors shaping vernacular architecture of Northern Nigeria. *IOP Conference Series: Earth and Environmental Science*, 63(1), 1-10. <https://doi.org/10.1088/1755-1315/63/1/012034>
- Denham, D., Clapperton, H., & Oudney, W. (1985). *Narrative of travels and discoveries in North and Central Africa, 1822, 1823, 1824*. Dorf. <https://archive.org/details/dli.ministry.04703>
- Dmochowski, Z. R. (1990). *An introduction to Nigerian traditional architecture: Northern Nigeria* (Vol. 1). Ethnographica. https://www.worldcat.org/title/introduction-to-nigerian-traditional-architecture-vol1-northern-nigeria/oclc/1158697636&referer=brief_results
- Eneh, A. E. O., & Ati, O. F. (2010). The influence of rainfall on Hausa traditional architecture. *Research Journal of Applied Sciences, Engineering and Technology*, 2(8), 695-702.
- Foster, S. M., & Jones, S. (2019). Concrete and non-concrete: Exploring the contemporary authenticity of historic replicas through an ethnographic study of the St John's of the St John's cross replica, Iona. *International Journal of Heritage Studies*, 1-20. <https://doi.org/10.1080/13527258.2019.1583272>
- Gibson, N., & O'Connor, H. (2017). A step-by-step guide to qualitative data analysis. *A Journal of Aboriginal and Indigenous Community Health*, 1(1), 64-90.
- Graham, B. (2002). Heritage as knowledge: Capital or culture? *Urban Studies*, 39(5-6), 1003-1017. <https://doi.org/10.1080/00420980220128426>
- Kolo, D. N. (2015). *Adaptive re-use potentials of post office buildings as examples of British colonial heritage in Nigeria and north Cyprus*. Eastern Mediterranean University. <http://i-rep.emu.edu.tr:8080/jspui/bitstream/11129/1763/1/KoloDan.pdf>
- Last, M. (1980). Historical metaphors in the Kano Chronicle. *History in Africa*, 7, 161-178. <https://doi.org/10.2307/3171660>

- Liman, M. A., & Adamu, Y. M. (2003). Kano in time and space: From a city to metropolis. In M. O. Hambolu (Ed.), *Perspectives on Kano-British relations* (p. 147). Gidan Makama Museum. <https://searchworks.stanford.edu/view/5706069>
- Liman, M., Idris, H. A., & Mohammed, U. K. (2014). Weather and climate. In A. I. Tanko & S. B. Momale (Ed.), *Kano: Environment, society and development* (pp. 13-22). Adonis and Abbey Publisher Limited. <https://www.africabib.org/s/rec.php?RID=402223926>
- Muhammad-Oumar, A. A. (1997). *GIDAJE: The socio-cultural morphology of Hausa living spaces* [Doctoral dissertation, University College London]. <https://discovery.ucl.ac.uk/id/eprint/1317656/>
- Ndoro, W., & Wijesuriya, G. (2015). Heritage management and conservation: From colonization to globalization. *Global Heritage*, 131-149. https://www.academia.edu/13832425/Heritage_management_and_conservation_from_Colonisation_to_Globalization
- Nura, J. (2014). Traditional Hausa architecture in the Royal Palace, city walls. In *Saharan crossroads: Exploring historical, cultural, and artistic linkages between North and West Africa* (p. 235). LAP LAMBERT Academic Publishing. <https://books.google.com.my/books?id=xItJDAAAQBAJ%0A%0A>
- Ojikpong, B. E., Agbor, E. A., & Emri, S. I. (2016). The impact of building use conversion on residential accommodation in Calabar, Cross River state, Nigeria. *International Journal of Science, Environment and Technology*, 5(3), 1445-1462.
- Olagoke, O. A. (2014). A review of adaptive re-use of historic buildings: Relevant lessons from the Dervish Pasha Mansion, Nicosia in sustaining conservation practice in Osun State, Nigeria. *International Journal of Scientific & Engineering Research*, 5(11), 1169-1176.
- Osasona, C. O. (2015). Heritage architecture as domestic space: A tale of three buildings in Ile-Ife, Nigeria. *International Journal of Sustainable Development and Planning*, 10(1), 42-65. <https://doi.org/10.2495/SDP-V10-N1-42-65>
- Osasona, C. O. (2017). Nigerian architectural conservation: A case for grass-roots engagement for renewal. *International Journal of Heritage Architecture: Studies, Repairs and Maintenance*, 1(4), 713-729. <https://doi.org/10.2495/hav1-n4-713-729>
- Pocock, C., Collett, D., & Baulch, L. (2015). Assessing stories before sites: Identifying the tangible from the intangible. *International Journal of Heritage Studies*, 21(10), 962-982. <https://doi.org/10.1080/13527258.2015.1040440>
- Poulios, I. (2010). Conserving living religious heritage: Maintaining continuity and embracing change – The Hindu temples of Tanjore, Srirangam and Tirupati in India. *South Asian Arts Journal*, (October), 1-23.
- Poulios, I. (2014). Discussing strategy in heritage conservation living heritage approach as an example of strategic innovation. *Journal of Cultural Heritage Management and Sustainable Development*, 4(1), 16-34. <https://doi.org/10.1108/JCHMSD-10-2012-0048>
- Saad, H. T. (1981). *Between myth and reality: The aesthetics of traditional architecture in Hausaland* [Doctoral dissertation, University of Michigan]. <https://www.worldcat.org/title/between-myth-and-reality-aesthetics-of-traditional-architecture-in-hausaland/oclc/15861286>
- Sabri, R., & Olagoke, O. A. (2019a). Predicaments in the management of religious heritage buildings and sites in Nigeria. *Conservation and Management of Archaeological Sites*, 21(1), 45-65. <https://doi.org/10.1080/13505033.2019.1596521>

- Sabri, R., & Olagoke, O. A. (2019b). Rethinking the conservation of Afro-Brazilian mosque legacy. *Journal of Architectural Conservation*, 1-23. <https://doi.org/10.1080/13556207.2019.1595321>
- Sabri, R., & Olagoke, O. A. (2020). A vanishing legacy? Threats and challenges in the conservation of the colonial era's Anglican ecclesiastical heritage in Yorubaland. *Journal of Architectural Conservation*, 1-18. <https://doi.org/10.1080/13556207.2020.1761684>
- Sabri, R., & Olagoke, O. A. (2021). Safeguarding the colonial era's ecclesiastical heritage: Towards a sustainable protection-use model. *Journal of Cultural Heritage Management and Sustainable Development*, 11(1), 121-134. <https://doi.org/10.1108/JCHMSD-01-2020-0017>
- Sinamai, A. (2020). 'We are still here': African heritage, diversity and the global heritage knowledge templates. *Archaeologies*, 16(1), 57-71. <https://doi.org/10.1007/s11759-020-09389-5>
- Smith, L. (2006). *Uses of heritage*. Routledge. https://books.google.com.my/books?id=bYx_AgAAQBAJ
- Smith, L., & Akagawa, N. (2009). Introduction. In L. Smith & N. Akagawa (Ed.), *Intangible heritage* (pp. 1-9). Routledge.
- Sodangi, M., Idrus, A., Khamidi, M. F., & Adam, D. E. (2011). Environmental factors threatening the survival of heritage buildings in Nigeria. *South Asia Journal of Tourism and Heritage*, 2(4), 38-53.
- Sully, D. (2007). *Decolonizing conservation: Caring for Maori meeting houses outside New Zealand*. Left Coast Press. <https://books.google.com.my/books?id=Y5yNyHztYz0C>
- Ugwuanyi, J. K. (2020). Time-space politics and heritagisation in Africa: Understanding where to begin decolonisation. *International Journal of Heritage Studies*, 1-19. <https://doi.org/10.1080/13527258.2020.1795907>
- Umar, G. K. (2017). Transformation in Hausa traditional residential architecture. *International Journal of Innovative Environmental Studies Research*, 5(4), 5-11.
- Umar, G. K., Yusuf, D. A., Ahmed, A., & Usman, A. M. (2019). The practice of Hausa traditional architecture: Towards conservation and restoration of spatial morphology and techniques. *Scientific African*, 5, e00142. <https://doi.org/10.1016/j.sciaf.2019.e00142>
- UNESCO. (2003). *Convention for the safeguarding of the intangible cultural heritage*. UNESCO. <https://ich.unesco.org/doc/src/15164-EN.pdf>
- Vecco, M. (2018). 3 value and values of cultural heritage. In A. Campelo, L. Reynolds, A. Lindgreen, & M. Beverland (Eds.), *Cultural heritage* (p. 2018). Routledge. <https://books.google.com.my/books?id=aj73DwAAQBAJ%0A>
- Vecco, M. (2020). Genius loci as a meta-concept. *Journal of Cultural Heritage*, 41, 225-231. <https://doi.org/10.1016/j.culher.2019.07.001>
- Wijesuriya, G. (2005). The Past is in the present. In H. Stovel, N. Stanley-Price, & R. Killick (Eds.), *Conservation of living religious heritage* (pp. 31-43). ICCROM. https://www.iccrom.org/sites/default/files/publications/2019-11/iccrom_ics03_religiousheritage_en.pdf
- Wijesuriya, G. (2018). Living heritage. In H. Alison & C. Jennifer (Eds.), *Sharing conservation decisions* (pp. 43-56). The International Centre for the Study of the Preservation and Restoration of Cultural Property (ICCROM). https://www.iccrom.org/sites/default/files/2018-05/sharing_conservation_decisions_2018_web.pdf

Women in Leadership: Insights from Female Principals of Rural Secondary Schools in Vhembe District of South Africa

Livhalani Bridget Sinyosi¹ and Onoriode Collins Potokri^{2*}

¹*Department of Education Leadership and Management, College of Education, Muckleneuk Campus, University of South Africa, Gauteng 0181, South Africa*

²*Faculty of Education, University of Johannesburg, Gauteng 2006, South Africa*

ABSTRACT

Gender predisposition towards female leaders within the South African context remains a problem and compelling issue, particularly in rural settings, which are often marginalised and overlooked. Guided by the transformational leadership theory, this article explored the experiences of South African female principals in managing secondary schools in the Vhembe District of Limpopo. A profoundly traditional and patriarchal society characterises this rural setting. Hence, a qualitative research approach and a case study design were used. Ten female principals from ten (10) randomly selected secondary schools in the Vhembe District were purposively selected to serve as participants. Through semi-structured interviews, data were gathered from the sampled participants. Findings from the article reveal that patriarchy still plays a role in disadvantaging women from effectively assuming their duties as leaders. Most of the participants—female principals are subjected to gender bias and thus, unproductive, impact the cooperation from learners, parents, teachers, the community, and the Department of Education officials. Despite unpleasant experiences, female leaders in this article demonstrate selflessness in their daily leadership tasks and routines. Furthermore, they are inspirational and serve as role models to all they had relationships with for the transformation and change they desire in their schools. To the sampled principals, being selfless and inspirational is their leadership strength. One way of the few mentioned becoming a leader one aspires to.

ARTICLE INFO

Article history:

Received: 21 January 2021

Accepted: 26 April 2021

Published: 15 September 2021

DOI: <https://doi.org/10.47836/pjssh.29.3.10>

E-mail addresses:

sinyosiliba@gmail.com (Livhalani Bridget Sinyosi)

cpotokri@uj.ac.za, cnuvie@gmail.com (Onoriode Collins Potokri)

* Corresponding author

Keywords: Gender equality, school management, transformation theory, women leadership

INTRODUCTION

Researchers often cite gender bias against female leaders as a leadership bottleneck, especially in Western world schools.

However, in South Africa, the issue is more of a pandemic (Schmidt & Mestry, 2015). Moraka (2018) posits that, although the Constitution addresses gender equality, women in the education sector still do not experience equal rights in practice. Hence, the predominance of males in educational leadership posts continues to define the South African culture (Zuma, 2018). In South Africa, women dominate the teaching profession (Mestry & Schmidt, 2012). Nevertheless, there remains a dearth of women in leadership positions. For example, in Vhembe district of the Limpopo Province—the context of the study from which this article is drawn—13.5% of all secondary school principals in the district, according to recent 2018 statistics from Vhembe District Data. On a national level, female teachers make up about 68% of the South African teaching force. However, only 36% of principals are women (Davids, 2018). These statistics attest to the current national problem of women under-representation in school leadership positions.

According to Gibbons et al. (2017), despite the post-Apartheid government's gender equality measures, such as assigning more women in senior managerial and leadership positions, activists remain hesitant regarding their impact. Exacerbated by historical and cultural stereotypes, together with the failures of the system to enforce prescripts regarding gender parity and affirmative action, most South African women have been confined mainly to middle or lower positions in the education sector (Johnson & Mathur-Helm, 2011). Thus, this

resulted in a significant gap between the number of men and women occupying the position of the secondary school principal. In the light of this, this article explored female school principals' experiences to understand how they manage their schools.

PROBLEM STATEMENT

Despite the prevailing problem of gender inequalities in South Africa, little research has been conducted regarding the phenomenon. Of the few studies conducted, most (e.g., Botes, 2014; Mestry & Schmidt, 2012; Zikhali & Smit, 2019) have been conducted on the urban environment and overlooking the rural schools. Botes (2014, p. 1) argues that “while rural-based women are often silent, hidden and under-appreciated, they represent probably the world's most powerful untapped natural resource, and they are surely more than ever before a key to world stability and understanding”.

There are two dominant narratives in research about female principals and educational leadership. The first centres on women's struggles in accessing leadership positions—internal and external. The second relates to what women must deal with in retaining those positions (Davids, 2018). The latter narrative underpins the specific objective of this article. In particular, it links to women's experiences in the management of secondary schools in South Africa using the Vhembe District as a case study. Thus, this article contributes to the empirical literature by highlighting and exploring the lived experiences of female principals in rural secondary schools.

WHAT DOES LITERATURE TELL US?

Gender Discrimination in South African Education System

The South African Department of Education (Diko, 2014) maintains that gender discrimination against women is still prevalent, as observed in the relatively fewer women in fundamental managerial positions within the education sector, despite the more significant proportion of women being educators. Younger and Cobbett (2014) argue that there are active measures to mitigate against this discrimination. However, it will take a longer period to fulfil these objectives. Diko (2014) further reveals that research focusing on gender bias against women within the education system of South Africa shows the growing practice of barring women from being endorsed to managerial positions, especially in secondary schools. For Batton and Wright (2019), this status quo needs to be challenged because women are proficient leaders as their male counterparts. Cubillo and Brown (2003) also confirm that the experiences of women who desire and attain managerial posts are controversial and worthy of further inquiry so that a more precise picture can be portrayed.

Diko (2014) espoused, the South African Department of Basic Education states that women have been exposed to adverse stereotyping for many years. Furthermore, women are often still anticipated to be passive and more dependent on their male counterparts. They are indeed not projected to be ambitious and assertive in their quest

for appointment in leadership positions. Diko argues further that this tenacity of women's negative stereotyping is partly due to most men and women's roles in society. For example, women are still regarded as homemakers, whereas most males are employed outside the home (Posel & Bruce-Brand, 2020; Potokri, 2015). Such stereotyping is confirmed by the lack of women in top management positions in the South African education system.

Moorosi (2008) points out that cultural stereotypes attribute school principalship with masculinity, hampers women's promotion to higher posts within the education sector. One typical consequence of the negative stereotyping of women is that they are often not credited with having the adequate innate ability to be successful. Instead, their success is attributed to external factors such as excellent teaching. The Department of Basic Education (Zuma, 2018, p. 28) maintains that "schools must aim at shifting these attitudes by instituting gender awareness programs that transcend barriers both in curricular and extra-curricular activities". Aside using gender awareness programmes, females leaders and their colleagues who aspire to become leaders must learn and lean towards transformational patterns and styles that use interpersonal skills to actively instigate a discussion with those already in leadership to reach a consensus decision and avoiding confrontation through encouragement and compromise that develop them into adopting of a participative approach (see Flanders, 1994; Rigg & Sparrow 1994).

Experiences of Female Principals in South African Secondary Schools

Despite the South African government's strategies, mechanisms, and policies to curb gender inequality in state institutions, Diko (2014) reveals that secondary schools generally favour males taking up leadership roles. Females tend to be more popular as principals in elementary schools in South Africa rather than secondary schools because females relate better to younger children (Department of Education, 2008). Zuma (2018) points out that apartheid policies compound the challenges women face in educational management in South Africa, even in this era when democratic policies should protect and support the advancement of women leaders. According to Makgoka (2016), the general belief that leadership in the education sector is aligned to males meant that female principals in South African secondary schools receive backlash from their male counterparts and female teachers, learners, and parents.

In research conducted on females who managed to get into managerial positions within Gauteng's secondary school, Zikhali and Smit (2019) uncovered that some of those promoted became irritated and ultimately resigned from their leadership posts due to social, individual, and work-related barriers. Accordingly, factors that account for their irritation and resignation include backbiting, jealousy, rejection of authority by pupils, parents, and colleagues, lack of support from colleagues, lack of role models, and discrimination. In addition, Makgoka (2016) highlights that secondary

school female principals experience administrative challenges including the grievances of parents, limited resources, time management, and staff handling. On the other hand, there are personal challenges such as wavering self-confidence, balancing work and social lives, and home conflicts.

Relating his study to secondary schools, Arar and Abramovitz (2013, p. 10) emphasises that "women find it difficult undertaking school principalship in rural, remote schools because parents and the community members still view this role through the stereotype of an authoritarian married male". To collaborate Arar's view, Makgoka (2016, p. 62) argues that "patriarchal culture remains dominant in many rural communities and schools in South Africa, playing formidable constraints on women's advancement to principalship". Thus, this has created an atmosphere whereby women often find it challenging to be accepted as equals by their male counterparts. It suggests a failure to implement transformation within the education system. Consequently implies that females are overlooked as per their constitutional bestowed right of equality which could positively impact their appointment to, or retention in, educational leadership positions (Diko, 2014).

Yulianti et al.'s (2020) work, titled *School efforts to promote parental involvement: The contributions of school leaders and teachers*, which was conducted in Indonesia, provides practical thought on how school leaders can be successful in the involvement of parents in their children

school activities and as well contribute to the general good of the school. Accordingly, they hypothesised that transformational school leadership for parental involvement and inviting behaviour of teachers encourage parents to become more intensely involved with their child's education. However, contrary to their hypothesis, findings from their study through multilevel regression analyses showed that transformational leadership did not directly affect parental involvement. Thus, significant effects were found of teacher invitations on parental involvement. In particular, teacher invitations contributed to school-based parental involvement, such as recruiting parents as volunteers and involvement in decision-making at school. Accordingly, school leaders and teachers are two essential agents within the school organisation to promote parental involvement invariably enhancing the parent's relationship with the school leader and teachers.

The Policy Context of Gender Inequality in the South African Education System

In terms of gender, the South African Parliament is one of the most progressive globally (Brothers, 2020). A woman heads the country's Department of Basic Education. In addition, the Department of Women, Youth and Persons with Disabilities and several ministries are occupied by women, but challenges still prevail. One noticeable challenge rather than the problem is some departments' inconsiderate attitudes towards gender sensitivity in leadership positions. For the focus of this article, it

must be noted that not all the education departments across the country's nine provinces are vehemently pursuing gender equality policies in education because, at the moment, some do not have concrete gender policies in place. This situation has undesirable effects on schools. For instance, students do not have positive role models, and the school management tends not to prioritise gender issues in filling leadership positions. Based on this, South African researchers and practitioners, as prescribed by Diko (2014, p. 828), need to tackle the following question: "What factors might be impeding the implementation of the progressive policy of gender equality in educational leadership and management in schools?"

The government has initiated specific attempts to reverse gendered thinking around management and leadership in education. One of these is the South African Schools Act of 1996 (SASA), accountable for forming School Governing Bodies (SGBs). This act, among its many objectives, attempts to remedy the gendering of responsibilities in schools. It abolishes gender stereotyping of management and the apartheid's top-down approach to education leadership. It also permits the various school interest groups, including women, the right to be embodied in school governance and leadership and to lead (Department of Education, 1996). Despite this corrective step, according to Mestry and Du Plessis (2020), SASA does not do enough as it fails to specify measures to avoiding reformation of the conventional gendered power relations in

school leadership and governance. Instead, it promotes the perpetuation of past practices, particularly in rural areas where this article focused on, as well as in townships where parents are not literate enough to participate in such management effectively.

School principals, predominantly male, continue to lead schools through their implementation and interpretation of SASA (Diko, 2014). Subsequently, gendered practices prevail continuously in some schools. Zuma (2018), cognisant of this tendency to revert to the familiar, described that females aspiring to become education leaders are still side-lined. Naledi Pandor, a former Minister of Education, disturbed about this continuing situation, in 2004 said that where women strive for managerial roles, there is a notable failure to open space for them (Diko, 2014).

THEORETICAL FRAMEWORK

From the literature, it is clear that several factors influence women's institutional leadership and management roles. To address these factors, a transformation that policies and the constitution of the Republic of South Africa seek must be indeed legitimised across sectors, especially the education sector. For this reason, transformational leadership theory was used as the article's framework.

Leithwood et al. (1994, p. 230) state that transformational leadership is viewed as leadership that "implies major changes in the form, nature, function and/or potential of some phenomenon applied to leadership". Denmark (2012) states that this leadership

theory is more appropriate for educational management than others. Transformational leadership theory best aligns with this article because it focuses on building good relationships with subordinates, the ability to advise subordinates, care about subordinates, advise subordinates regarding career development, building a good relationship with all stakeholders, and being interested in their affairs. Cognisant of this, the article assumes that if female principals adopt transformational leadership theory in the Vhembe District, the whole community will admire their leadership style. Thus, it will go a long way in mitigating gender bias against female principals in schools.

Marks and Printy (2003) argue that transformational leadership theory applies well when the underlining barriers affecting women to rise in leadership positions are addressed. Chabalala (2006) argues that women have as much potential as men and should be given equal rights to exercise their capabilities to remedy their injustices. English (2008) further points that if women are given the right platform to express themselves, they can be productive and effective leaders. According to Burns (1978), transformational leadership involves establishing oneself as a role model by gaining the trust and confidence of followers; the leader ensures that followers are consciously aware of the importance of sharing organisational goals and values.

Furthermore, Burns states that transformational leaders motivate their followers to go beyond their interests and work for the organisation by appealing to the higher-level needs of followers.

With transformational leadership, the process of influencing significant changes in attitudes and assumptions of organisational members and building commitment for the organisational mission and objectives is possible (Yukl, 1989, 2005). Therefore, the relationship between a transformational leader and followers is characterised by pride and respect (Bass & Avolio, 1990). In such circumstances, “the level of trust and confidence in the leader is usually high because subordinates are proud to identify themselves with the leader and thus, develop a strong sense of loyalty” (Silva & Mendis, 2017, p. 20).

MATERIALS AND METHOD

A qualitative research methodology brought to the forefront the varied experiences of women principals. Individual interviews were the main data-gathering tools to explore the uniquely contextualised nature of women principals’ experiences. Ten (10) female principals from ten (10) randomly selected secondary schools in the Vhembe District were purposively selected to serve as sampled participants. The Vhembe District comprises twenty-seven circuits, with each circuit comprising primary schools and secondary schools. The researchers selected five circuits from the twenty-seven with the highest number of secondary schools managed by females. Two schools were selected from each of the circuits. The respective principals of the selected schools were requested to participate in the study. Relying on the writings of Creswell (2014), the data were analysed using thematic

content analysis of open coding to identify themes. Accordingly, thematic content analysis of open coding is a systematic process for data analysis in which statements are analysed and categorised into themes representing the phenomenon of interest.

Empirical information was broken down into themes, clustered, and coded to find the essence of the information. Ultimately the collated information allowed salient themes to emerge, providing the significant findings of the study. The researchers adhered to strict ethical requirements. Therefore, consent was obtained from all participants. Permission was duly sought and approved from the Limpopo Provincial Department of Education, Vhembe District Department of Education, and the Ethics Committee of the University, where this article emanates the large study. Participants were ensured of their anonymity and were made aware that they could withdraw from the research at any time. No personal information of participants is used in this article to ensure confidentiality. Alphabets such as P1 /SCH 1 were used in place of their names or identities. P1 represents participant 1, and SCH 1 represents school 1.

To address the issue of replication, the researchers adhered to the tenets of trustworthiness. In the light of this, dependability, transferability, conformability, and credibility of the research data used were sought and ensured.

First, the researchers made sure that the data collected were credible. Therefore, data were collected from relevant people who are informed about the phenomenon under investigation. It had to be female principals

in rural schools in the Vhembe District of South Africa. The study is delimited because the study was about women leadership insights from female principals of rural schools. Despite collecting data from these people (participants), the researchers ensured that the data collection was not hurriedly done but prolonged to allow participants to provide in-depth information needed for the study. To further ensure credibility, researchers used member checks, as Silverman (2010) and Creswell (2014) advise.

Accordingly, a member check is also known as informant feedback or respondent validation. Member checking was conducted during the interview process and after the study. The researchers engaged the participants in member checking during the interview process by creating a natural rapport to obtain honest and open responses. During the interviews, the researchers restated and summarised information and the questions, then probed the participants further to determine the accuracy of their responses in comparison with their initial responses. Furthermore, at the end of the data collection process, we (the researchers) returned to the participants with the transcribed comments to verify the accuracy of the interpretations.

Secondly, is the aspect of conformability refers to the extent to which the interpretation of the research study may be traced back to the source and that they do not represent someone's ideas but those of the participants (Babbie & Mouton, 2010). The researchers ensured that the information that was tape-recorded was transcribed without

any alterations. Third, the researchers were concerned about dependability. It refers to the accuracy of the data presented and whether people may depend on the information for future use (Gibbs, 2007). We pooled our research expertise and asked for help from other colleagues in the field of women leaders in education to review the codes to determine whether or not they would have coded the data the the same way as we did.

In addition, we went back to the participants after analysing the data to ensure that what was written as an accurate representation of what they meant. To be finally assertive in replicating the study, we ensured that the study is transferable to an acceptable extent. In Babbie and Mouton's (2010) view, transferability refers to the possibility of the type or kind of study being repeated by other people and yielding similar results to those obtained by the previous researcher(s). To achieve this, the researchers documented in detail, as shown in this, article the blueprint used for the study including the research design, research approach, the instruments, and the analysis used. As a result, we believe we will assist researcher(s) to carry out similar studies in the future.

RESULTS AND DISCUSSION

The findings indicate that female principals in the rural area of the Vhembe district had various experiences as principals. Most of these experiences were shared or common and ranging from positive to negative depending on individual principles.

These experiences are expressly discussed under the following emerged sub-themes: relationship experiences with learners, teachers, and parents and relationship experiences with other stakeholders, and the DoE support. These are presented below and supported with verbatim quotations from the participants.

Relationship Experiences with the Learners

Regarding the relationship with learners, the majority of the female principals were concerned about the learners' unseriousness and bad behaviour, which displayed their negative attitude towards the female principals. It is aptly captured by the quotation from P4 /SCH 4, who voiced her experience with her learners as undesirable, as indicated in her words below:

“When I started as a principal, it was not easy because the formal principal was a male and I am a female, mostly about the learner. When I tell them how to behave in school and give instructions, they take it for granted because I am a female, and they believe I am just making it up, and it's not a constitutional requirement or stipulated code of conduct. I experienced indiscipline from learners like late coming and other disturbing acts”. (P4 /SCH 4)

SCH 9/P9 also mentioned that:

“The relationship at first was very bad because I am the first female

principal in this school, you can imagine, people were saying she can't cope, and she will bring the result down and all. Students were not used to having a female principal at all, so they had a negative attitude towards me”.
(SCH 9/P9)

The above quotations highlight that the female principals are faced with a lack of cooperation and being undermined by the learners due to their gender. Learners undermine the authority of the female principals, making it difficult for them to effectively manage the learners, as evidenced by the rebellious acts of the learners, which caused great worry for the principals. Traditionally, positions of power were primarily dominated by males, and it became a socially acceptable norm for males to take up the most superior positions. Due to this, women who defy social expectations by taking up leadership positions face various challenges and lack cooperation. The results support work by Faulkner (2015), who found that female principals' experiences are adversely influenced by the prevailing and entrenched patriarchal attitudes within the communities that they serve, which learners adopt.

In explaining the negative attitude experienced by the learners, one of the principals linked this behaviour to the lack of motivation on the part of the learners due to the community's economic status, which is characterised by the absence of opportunities. SCH 4/P4 specified that:

“And the learners, they are not motivated because of their background, and it is a deep rural area ...in short poverty influences them to behave negatively, and they live without ambition”. (SCH 4/P4)

The above indicated the status of the community, which results in the learners having no prospects for growth or achievement, leading to diminished aspirations for a better life. Learners did not perceive the benefit of going to school, which led to a lack of seriousness with their school work. Consequently, they had no adherence to the stipulated rules, making it difficult for the principals to enforce them, resulting in a negative relationship with the learners. The situation supports the view of Naidoo and Perumal (2014) that environmental conditions harm the curriculum because they do not contribute to academic stimulation, and do not support the aspirations of learners.

In contrast to the above, the other principals highlighted positive experiences with their learners which was shown by their learners’ the cooperation, good behaviour, and seriousness. This experience was fulfilling to the female principals as this helped them take up their role in guiding and supporting the learning process of these learners. It is pointed out by SCH 1/P1, who emphasised the respect she gets from her learners as follows:

“With me here, the relationship is good with learners; they respect me, they listen to me whenever I

reprimand them, especially when they do something wrong, they listen to me and change their behaviour. So I feel the relationship is good even though you have to work harder than your male counterpart to make this happen”. (SCH 1/P1)

The quotation indicates a good and reciprocal relationship between the learners characterised by cooperation and respect, which gave the principal motivation and the energy to support the learners to become better people. Although good rapport has been noted, the quote indicates that female principals have to make a special effort in building relationships with their learners, which is not the case with their male counterparts. It clearly shows that some gender influence is barricading the process that female principals have to break for them to succeed in their work. The work of Silva and Mendis (2017) corroborates this finding. Accordingly, the efforts of these principals indicate that the transformational leadership style they align themselves with is congenial to women. Some of their components are relatively communal. Nevertheless, these particular communal behaviours help female leaders deal with the unique problems of lesser authority (in this case students).

Relationship Experiences with the Teachers

In light of the relationship with the teachers, a more significant proportion of the participants have ill-relationship with teachers, mostly at first, while very few enjoyed good relationships. For example,

SCH 4/P4 voiced her experience with the teachers as unpalatable in the following manner:

“When it comes to the educators, they just undermine the female principal in things which must be done. For example, in our school, there is a 3 in 1 sporting facility and when it was under construction, there was a tug of war between the educators and the SGB because all the property in school is controlled and overseen by the SGB. To achieve that construction, it was a war. The educators just don’t want to understand your explanation or support you because to them they think you are just making up all the procedures. Meanwhile, it was the right procedure to follow by involving the SGB in all this, and that is a problem with the educators”. (SCH 4/P4)

The explanation by the participant indicates the lack of cooperation from the teachers who are stakeholders in the success of the school’s goal. In addition, it might be attributed to the principal being female, which makes the educators have less confidence in her leadership and reluctant in supporting her vision. SCH 7/P7 highlighted this by shedding more light on the aspect of societal norm and female leadership unacceptance as follows:

“The relationship with teachers as a female principal is not that good in the sense that as we know in our

society, we have this problem of patriarchy, in the sense that men are seen to be the people who are supposed to be rulers and even in schools they still believe that the principal is supposed to be a man. Because of this, I am been undermined as a principal, and because of this, the relationship is not that good”. (SCH 7/P7)

It clearly shows the role of patriarchy in making women less acceptable as leaders in society and makes it difficult for them to question certain cultures and practices as the work of Potokri (2015), the ‘*exposition of culture*’ illuminates. Both men and female teachers in this society come from a culture characterised by male dominance. A women’s place is considered home, and males are seen as breadwinners (Potokri, 2011, 2015). When women make it into the top positions, they are mostly met with resistance. This finding is supported by Booyesen and Nkomo (2010). They argue that female principals find male counterparts or teachers uncooperative due to societal authority and views they want to maintain even in the workplace. Women are still regarded as homemakers, whereas most males are employed outside the home (Posel & Bruce-Brand, 2020). Such stereotyping makes it difficult for women to conduct their duties and retain their leadership positions.

In addition, the article revealed that principals who lead the same schools where they were teachers before they were appointed principals reportedly have difficulty gaining the respect of teachers.

For example, one of the principals (SCH 6/P6) described her own experience with the teachers as sour because she worked with them before being promoted.

“Because I was working together with them as an educator, and they seem not to understand that it is real that I am now a principal. Some couldn’t take my instructions easily because they still think I am an educator like them and not a leader. The bottom line is the relationship was not that good”. (SCH 6/P6)

The above indicates the lack of cooperation from colleagues. Thus they cannot acknowledge and accept the superiority of the principal to the extent of not listening to her directive. Various studies reveal the lack of cooperation of teachers due to the perception that female principals are incapable of leading educational institutions (for example, see Parsaloi, 2012; Schmidt & Mestry, 2015). Booysen and Nkomo (2010) assert that female principals find male counterparts or male teachers uncooperative because they are used to society’s respect, thus making it difficult to work under women’s leadership. In some cases as Syed’s (2018) work revealed, some male teachers quit their jobs to avoid being under a woman’s leadership. Jean-Marie and Martinez (2013) and Schmidt and Mestry (2015) also highlighted that those female colleagues expected to be more supportive to the female principals also show a lack of support. Again, it might be attributed to how they were brought up and making

them reluctant to accept female principals as their leaders.

Another participant indicated that tribalism also contributed to the negative experience of principals. SCH 10/P10 explained:

“Because I was brought into this village to head the school from another location, the thing called “son of the soil” affect the way they treat me because they feel that the position should have been given to one of them and not me... this was more with the teachers. ... a few teachers, they feel like the position should have been given to a man and not a woman”. (SCH 10/P10)

It explains the role of tribalism in the reluctance of some teachers to accept the principals from other cultures or places outside their community. Principals from within the community are more likely to receive support in doing their work than outside communities. It shows the intersectional challenges that some female principals encountered. They are discriminated against not just because of their gender but also because of their different tribes.

Nonetheless, a few principals indicated that they enjoyed good relations with the teachers. These relationships were characterised by cooperation and respect. Participant SCH 1/P1 said:

“With my teachers, it’s a good relationship because I haven’t seen any educator with a bad or negative

attitude because whatever I tell them to do, they do". (SCH 1/P1)

Similarly, SCH 10/P10 was also in line with others she said

"When it comes to the educators, we also have a wonderful relationship because we don't regard ourselves as Mr or Mrs. We regard ourselves as Brother and Sister like a family". (SCH 10/P10)

This good relationship appeared to be one of a kind as few principals indicated enjoying this unique kind of relationship with their teachers. Other participants indicated that they wished to have such a wonderful and cordial relationship with their subordinates.

The relationship experiences of most of the principals with their teachers suggest that there is an adverse reaction from the teachers no matter how hard the principals try to make the relationship work. Crucial to transformational leadership, Carli (2001) asserts that these adverse reactions can be minimised when female leaders are careful in displaying warmth and lack of self-interest, such as by expressing agreement, smiling, supporting others, and explicitly stating an interest in helping others reach their goals. However, these findings concerning the relationship of the principals with teachers herein seem to suggest otherwise. The participants demonstrated support for their teachers and showed interest in helping them reach their goals just like they did for their students. Nevertheless, most teachers

did not change their innate or traditional beliefs of the female vs male leadership discourse because they did not see female leaders as mentors who can attend to their individualised considerations and needs.

Relationship Experience with Parents

One sub-theme that emerged from the data collected was the principals' relationship experience with the parents of their learners. Some of the participants indicated that their relationship with their parents was not pleasant. For example, SCH 1/P1 highlighted having a good relationship experience with both learners and teachers. However, interestingly she had a different experience when it came to her parents.

"With parents, when you call them to meetings they don't, most of them don't come, it's like they are not serious am not sure maybe it's because the principal is a woman or not. Thus, the relationship here is not good because there is a lack of commitment from the parents' side, which in itself can be frustrating". (SCH 1/P1)

SCH 10/P10 also explained that:

"As for the parents, they feel like the position should have been given to a man and not a woman, for instance, one parent even recently went to the extent of saying that we thought that this woman won't make it here because we think females cannot become leaders". (SCH 10/P10)

Statements by the participants indicate the lack of teamwork from the parents in moulding young people or the learners to be better people. Furthermore, the quotations show the lack of concern from the parents' side in taking part in decisions that affect their children's future. It is evident by their unresponsiveness when they are invited to meetings by the principal. Such a situation makes it difficult for the principals to effectively lead or manage the school towards outstanding achievements and the creation of future leaders. Additionally, some participants explained that parents do not take them seriously because they were born in the same village currently serving as principals. Thus, the order of the day is the societal stigma, gender discrimination, lack of commitment, negative attitudes and lack of belief that females can perform in the role of a principal. In agreement with this, Ndebele's (2018) asserted that women principals are painfully and powerfully exposed to gender discrimination because leadership is popularly attached to masculinity. Also, the studies of Parsaloi (2012) and Schmidt and Mestry (2015) revealed that women are often perceived as incapable of leading educational institutions due to the entrenched culture of male dominance. It is similar to the struggles faced by the Vhembe female principals. Their responses or views are reported in this article.

Despite the enormous sour relationship experienced by some participants with the parents, of SCH 10/P10's experience was eye-catching because her experience with learners, teachers, and parents seems to be

consistently good and sound. She indicated that:

“The relationship with the parents is good because if not for the support from the parents I won't have the kind of learners that I have, and I won't have the great relationship that I have with the learners been that I am in a deep rural area. We have got this family kind of relationship, which I also emphasise with the learners and the educators. The good relationship with parents gives rise to peace and harmony in the school”. (SCH 10/P10)

Maintaining a good relationship between the principal and the parents of the learners is essential in achieving learners' success and the success of the school's activities. As SCH 10/P10, her relationship experiences with the parents were very positive, and she equated their relationship to a family kind. It enabled the principal to lead the school without facing resistance from the parents correctly. This finding corroborates Ndebele's (2018) where parents were indicated to support the female principals due to of the trust relationship between the two parties. Yulianti et al. (2020) adds that teachers should be in a good relationship with the school leaders and parents because they are important agents within the school organisation to promote parental involvement. Unfortunately, this is not the case with the relationship between the sampled principals and most teachers.

Based on this, the unhealthy relationship experienced by principals from some parents is thus not surprising because it concurs with Yulianti et al.'s assertion.

Relational Experiences with the Community

When sharing their experiences, some of the participants pointed out that they were happy with the support they receive from their community whilst other participants were not so impressed. Nevertheless, the vast majority of the participants asserted that the community was supportive to a large extent. For example, one of the participants (SCH 8/P8) said this in the following manner:

“I am happy because the traditional leaders in the community are supportive because we also support them during community rituals and other things.” It can be deduced that there seems to be a two-way relationship between the community and the school without which the relationship can go entirely sour overnight”. (SCH 8/P8)

From the above, it can be deduced that there is a reciprocal relationship between the community members and the principal. It is because of the cooperative attitude and the principal's involvement in the events taking place in the community. Working with the community creates cordial relationships and support because they perceive the principal as their own and a stakeholder interested in the community's development.

Despite the amicable relationship with the community reported by some participants, some were not impressed. For example, participants SCH 3/P3 and SCH 8/P8 pointed out that the community is far from giving adequate support because they lack knowledge about the school and educational matters. They hardly care whether the school activities run smoothly or not. SCH 8/P8 said:

“Sometimes during class lessons, or examination some members of the community will be playing loud music and having a bash, and when you try to tell them that the learners are learning or writing exams, they just turn deaf ears to you like you do not matter and continue with their noise and disturbance anyways.” “This is so annoying and disrespectful”. (SCH 8/P8)

The statement by one of the principals indicates a lack of cooperation and concern by the community in supporting a conducive environment for the learners to study. Even though the principal tries to make them understand by talking to them, they show resistance and disregard her opinion. It might be due to the community not valuing education given the socio-economic status making them not see the benefits of education. Undermining of the principal's authority might also be attributed to their gender. This finding is in line with previous studies. In rural communities, community members still view the role of principalship as a male role. Therefore, the patriarchal

culture limits the support of female principals by the community members, making it difficult for them to effectively manage the schools (Arar & Abramovitz, 2013; Makgoka, 2016).

Support from the Department of Education (DOE)

One of the revelations or findings of this article indicates that some principals receive adequate support from the Department of Education through constant officials' visits to the school. The department checks on how the learners and teachers are faring, providing workshops and seminars, and connecting them with other relevant third parties such as social workers and the police when needed. It is aptly captured in some of the following quotations.

"The support from the department is high for us, our circuit manager is always here to monitor and give support in order to know of any of our challenges. The curriculum advisors are always here to give support to subject educators. Even the district director visits us like twice per term to show us support. If you check our final results, we produce better than our male counterparts in the area because we are always working hard as female principals due to the support which motivates us to work more". (SCH 1/P1)

Participants SCH 3/P3 also shared her experience as follows:

"The support that I am having now is from the circuit manager and she's very much supportive and visited us even at night to motivate us during our study camps around 7 pm and left around half 9. Her presence really motivated us and inspired the learners and the teachers. It was the first time I saw a circuit manager show support to what we are doing". (SCH 3/P3)

Support from the DoE officials, as indicated above, encouraged the female principals to work extra hard, which made their students excel and their schools produce very good results.

In contrast, some participants explained that they do not have good relationship experience with the DoE. For example, SCH 10/P10 sadly explained her experience when it comes to receiving support from the DoE as follows:

"The support is not there yet, because, in our school that is led by me, we should be having people like counsellors to visit more often and check on the school progress and on us to see how we are doing, to guide us and orientate us, nobody is there to do that, at least quarterly they should visit. So the support is really weak. Though they organise workshops, but these workshops won't serve any meaningful purpose if they don't visit hands-on, especially for us ladies". (SCH 10/P10)

From the statement by SCH 10/P10, it can be deduced that some of the female principals in rural areas do not receive the necessary support from the DoE. As a result, this makes it difficult for the principals to execute their duties and keep motivated because they feel left out and isolated. From the principals' perspective, visitations and frequent involvement of officials from the DoE are essential for executing the duties entrusted to them. This finding corroborates a study by Chisholm (2001). Chisholm's study posits that female principals lack desirable recognition, perceptibility, and sustenance from the side of DoE officials. It might be attributed to the fact that higher positions in the DoE are male-dominated, and to maintain this dominance, little support is given to principals who pose a threat to patriarchy (Naidoo & Perumal, 2014).

CONCLUSION

This article aims to explore female school principals' experiences to understand how they manage their schools in the rural Vhembe District of South Africa. In managing their schools, principals—female leaders exhibit the qualities of transformational leadership style. They are comfortable with the leadership style because of their beliefs and gender roles/qualities. Being women, transformational leadership provides them with the leverage to use their natural female qualities such as personifies communicating, caring, supportive and considerate behaviours to support their subordinates and communities—students,

teachers, and parents. Findings suggest that they are coping with the management of their schools amidst their frustrations mainly caused by the roles, capabilities, and interpretations that society ascribes to gender and leadership. The participants are not happy nor successful in overcoming their leadership obstacles or challenges. However, we argue that competence in their natural gender roles or qualities, which are the transformational leadership, kept them in their leadership role despite the challenges and frustrations they encounter and respond.

Although there has been significant progress in South Africa in the numbers of women taking up leadership positions in education, still a lot needs to be done to ensure gender equality in school leadership. Despite the hard work of female principals, the article indicates that the challenges they encounter impede them from successfully managing and implementing the change they desire in their schools. The principals rely on the cooperation of learners, parents, teachers, the community, and the DoE as important stakeholders in the success of the schools. So, cooperation between the leader (principals) and subordinates (for example, learners, teachers, and parents) is cardinal to successful leadership especially for women whose experiences are different from their male counterpart, as reviewed literature also reveals.

Participants' experiences in this article are unpleasant in many instances. Nonetheless, they demonstrate selflessness in their daily leadership tasks and routines. Furthermore, they are inspirational and serve

as role models to all they had relationships with for the transformation and change they desire in their schools. To the participants—sampled principals, being selfless and inspirational is their leadership strength and one way of the few mentioned to becoming a leader they aspire. Nonetheless, they would need government and institutional support in the form of policies targeted at the re-orientation and thinking reconfiguration of their male counterparts and society about female leadership. Otherwise, successful leadership, particularly the transformational style, will remain a dream. The theory applies well when the underlining barriers affecting women to rise in leadership positions are addressed.

ACKNOWLEDGEMENT

The authors would sincerely like to thank all participants of this study for their roles and cooperation.

REFERENCES

- Arar, K., & Abramovitz, R. (2013). Teachers' attitudes toward the appointment of women as school leaders: The case of the Arab education system in Israel. *Management in Education, 27*(1), 32-38. <https://doi.org/10.1177/0892020612459188>
- Babbie, E., & Mouton, J. (2010). *The practice of social research* (10th ed.). Oxford University Press Southern Africa.
- Bass, B. M., & Avolio, B. J. (1990). *Transformational leadership development: Manual for the multifactor leadership questionnaire*. CA Consulting Psychologist Press.
- Batton, C., & Wright, E. M. (2019). Patriarchy and the structure of employment in criminal justice: Differences in the experiences of men and women working in the legal profession, corrections, and law enforcement. *Feminist Criminology, 14*(3), 287-306.
- Booyesen, L. A., & Nkomo, S. M. (2010). Gender role stereotypes and requisite management characteristics. *Gender in Management: An International Journal, 25*(4), 285-300.
- Botes, W. (2014). *Female teachers' experiences of senior male colleagues' exercising of power in schools* [Master's dissertation]. North-West University.
- Brothers, L. (2020, February 7). Women in parliament – How does SA rank? *South Africa Good News*. <https://www.sagoodnews.co.za/heading-women-in-parliament-how-does-sa-rank/>
- Burns, J. (1978). *Leadership*. Harper & Row.
- Carli, L. L. (2001). Gender and social influence. *Journal of Social Issues, 57*(4), 725-741.
- Chabalala, W. L. (2006). *What do women teachers identify as barriers to promotion?* [Doctoral dissertation]. University of Pretoria.
- Chisholm, L. (2001). Gender and leadership in South African educational administration. *Gender and Education, 13*(4), 387-399.
- Creswell, J. W. (2014). *A concise introduction to mixed methods research*. SAGE Publications.
- Cubillo, L., & Brown, M. (2003). Women into educational leadership and management: International differences? *Journal of Educational Administration, 41*(3), 278-291. <https://doi.org/10.1108/09578230310474421>
- Davids, N. (2018, August 1). *Female principals in South Africa: The dynamics that get in the way of success*. The Conversation. <https://theconversation.com/female-principals-in-south-africa-the-dynamics-that-get-in-the-way-of-success-100698>
- Denmark, V. (2012). *Transformational leadership - A matter of perspective*. SCRIBD. <https://>

- www.scribd.com/document/279170597/Transformational-Leadership
- Department of Education. (1996). *South African Schools Act of 1996*. DoE Policy Document.
- Department of Education. (2008). *Understand school leadership & governance in the South African context*. https://www.education.gov.za/Portals/0/Understand_school_leadership_and_governance_in_the_South_Afr.pdf?ver=2009-10-14-125049-867
- Diko, N. (2014). Women in educational leadership: The case of hope high school in the Eastern Cape Province, South Africa. *Educational Management Administration & Leadership*, 42(6), 825-834.
- English, F. W. (2008). The New McCarthyism: The right wing's assault on American academic thought. In E. A. Samier & A. G. Stanley (Eds.), *Political approaches to educational administration and leadership* (pp. 252-268). Routledge.
- Faulkner, C., (2015). Women's experiences of principalship in two South African high schools in multiply deprived rural areas: A life history approach. *Educational Management Administration & Leadership*, 43(3), 418-432.
- Flanders, M. L. (1994) *Breakthrough: The career woman's guide to shattering the glass ceiling*. Paul Chapman Publishing.
- Gibbons, J. L., Poelker, K. E., & Moletsane-Kekae, M. (2017). Women in South Africa: Striving for full equality post-apartheid. In *Women's evolving lives* (pp. 141-159). Springer.
- Gibbs, G. R. (2007). *Analysing qualitative data*. Sage Publications.
- Jean-Marie, G., & Martinez, A. (2013). Race, gender, & leadership: Perspectives of female secondary leaders. In M. Nielsen & M. S. Plakhotnik (Eds.), *Proceedings of the Six Annual College of Education Research Conference: Urban and international education section* (pp. 43-48). CORE. <https://core.ac.uk/download/pdf/46946571.pdf>
- Johnson, Z., & Mathur-Helm, B. (2011). Experiences with queen bees: A South African study exploring the reluctance of women executives to promote other women in the workplace. *South African Journal of Business Management*, 42(4), 47-55.
- Leithwood, K., Begley, P. T. & Cousins, J. B. (1994). Performance appraisal and selection of school leaders: Selection processes and measurement issues. In *Developing expert leadership for future schools* (pp. 228-252). Falmer Press.
- Makgoka, K. P. (2016). *The leadership experiences of female secondary school principals in Sekhukhune District, Limpopo* [Doctoral dissertation]. University of South Africa.
- Marks, H. M., & Printy, S. M. (2003). Principal leadership and school performance: An integration of transformational and instructional leadership. *Educational Administration Quarterly*, 39(3), 370-397.
- Mestry, R., & Du Plessis, P. (2020). South Africa: Education authorities and public schools: The organisation and impact of policies in South Africa. In *Educational Authorities and the Schools* (pp. 371-388). Springer.
- Mestry, R., & Schmidt, M. (2012). A feminist postcolonial examination of female principals' experiences in South African secondary schools. *Gender and Education*, 24(5), 535-551.
- Moorosi, P. (2008). Creating linkages between private and public: Challenges facing women principals in South Africa. *South African Journal of Education*, 27(3), 507-521.
- Moraka, N. V. (2018). *An African feminist study of talent management practices applied to improve gender equality in JSE-listed South African mining boards: A multiple case analysis* [Doctoral dissertation]. University of South Africa.

- Naidoo, B., & Perumal, J. (2014). Female principals leading at disadvantaged schools in Johannesburg, South Africa. *Educational Management Administration & Leadership*, 42(6), 808-824.
- Ndebele, C. (2018). Gender and school leadership: Breaking the glass ceiling in South Africa. *Multidisciplinary Journal of Gender Studies*, 7(2), 1582-1605.
- Parsaloi, M. (2012). *Lived experiences of female head teachers in rural primary schools in Kenya* [Unpublished Master's thesis]. University of South Africa.
- Posel, D., & Bruce-Brand, J. (2020). 'Only a housewife?' Subjective well-being and homemaking in South Africa. *Journal of Happiness Studies*, 22(1), 1-20.
- Potokri, O. C. (2011). *The academic performance of married women students in Nigerian higher education* [Doctoral dissertation]. University of Pretoria.
- Potokri O. C. (2015). Exposition of culture and the space of women: An African view for policy consideration. *Gender and Behaviour*, 13(2), 6694-6703.
- Rigg, C., & Sparrow, J. (1994). Gender, diversity and working styles. *Women in Management Review*, 9(1), 9-16.
- Schmidt, M., & Mestry, R. (2015). The experiences of female principals in the Gauteng province. *American Journal of Educational Research*, 3(7), 813-821.
- Silva, D. A. C. S., & Mendis, B. A. K. M. (2017). Male vs female leaders: Analysis of transformational, transactional & laissez-faire women leadership styles. *European Journal of Business and Management*, 9(9), 19-26.
- Silverman, D. (2010). *Doing qualitative research*. Sage Publications.
- Syed, N. (2018, December 17). *Are teachers more likely to quit under female leaders?* The Educator Australia. <https://www.theeducatoronline.com/k12/news/are-teachers-more-likely-to-quit-under-female-leaders/258686>
- Younger, M., & Cobbett, M. (2014). Gendered perceptions of schooling: Classroom dynamics and inequalities within four Caribbean secondary schools. *Educational Review*, 66(1), 1-21.
- Yukl, G. (1989). Managerial leadership: A review of theory and research. *Journal of Management*, 15(2), 251-289.
- Yukl, G. (2005). *Leadership in organizations* (6th ed.). Prentice-Hall.
- Yulianti, K., Denessen, E., Droop, M., & Veerman, G. J. (2020). School efforts to promote parental involvement: The contributions of school leaders and teachers. *Educational Studies*, Ahead-of-Print, 1-16. <https://doi.org/10.1080/03055698.2020.1740978>
- Zikhali, J. T., & Smit, B. (2019). Women leaving leadership: Learnings from female school principals in Gauteng Province, South Africa. *Pertanika Journal of Social Sciences & Humanities*, 27(1), 475-489.
- Zuma, N. (2018). *Experiences and practices of black women teachers: A case study of a rural secondary school in KwaZulu-Natal, South Africa* [Master's dissertation]. Durban University of Technology.

Spiritual Well-being and Work Performance among Ground-level Employees: Unravelling the Connection

Jeffrey Khong Loong Yee^{1*}, Jonathan Smith² and Simon Robinson³

¹*Faculty of Business and Management, Quest International University, 30250, Perak Darul Ridzuan, Malaysia*

²*Salmon Personal Development Ltd., Overleigh Behind Hayes, Devon EX9 7JQ, United Kingdom*

³*Emeritus Professor of Applied and Professional Ethics, Leeds LS7 2UL, United Kingdom*

ABSTRACT

Extant research shows that spiritual well-being and work performance are directly connected. The connection is theorised to be due to the alignment between what employees are spiritually inclined towards and what they do at work. However, research overemphasises the performative benefits of spiritual pursuits and privilege the leaders' views. These developments, coupled with the prevalent use of quantitative methods, have resulted in one-sided and uncontextualised theorisations that constrict how workplace spirituality is investigated, understood, and converted into action. In response to these gaps, this paper investigates the experiences of ground-level employees to uncover stories of how spiritual well-being may be connected to their work performance. The study uses the qualitative paradigm and narrative inquiry as its methodology to uncover the diverse ways in which spiritual well-being and work outcomes are connected, including ones that diminish or are inconsequential to work performance. There is a need to re-examine accepted knowledge regarding the direct connection between spiritual well-being and work performance and the assumed compatibility of enacting spiritual inclinations in organisational settings. This paper calls for a more nuanced understanding of how spiritual well-being is experienced and the implications these experiences might have on the ground-level employees' work performance. Even as research unravels this relationship further, prescriptions for practice

ought to be qualified, contextualised, tentative, and customised for and by the ground-level employee.

ARTICLE INFO

Article history:

Received: 24 March 2021

Accepted: 07 May 2021

Published: 15 September 2021

DOI: <https://doi.org/10.47836/pjssh.29.3.11>

E-mail addresses:

jeffrey.yee@qiu.edu.my (Jeffrey Khong Loong Yee)

salmonpersonaldevelopment@outlook.com (Jonathan Smith)

prorobinson7@gmail.com (Simon Robinson)

* Corresponding author

Keywords: Ground-level employees, narrative inquiry, qualitative, spiritual inclinations, spiritual well-being, work performance

INTRODUCTION

The connection between spiritual well-being and work performance has been widely studied empirically across different business disciplines, including leadership (Wu & Lee, 2020), human resource management (Joelle & Coelho, 2019), hospitality and tourism (Milliman et al., 2018), psychology (Moon et al., 2020) and management (Fox et al., 2018; Singh & Chopra, 2018). In the past two decades, empirical studies have also been conducted in different countries, such as in The United States of America (Tejeda, 2015), Portugal (Albuquerque et al., 2014), Canada (Kinjerski & Skrypnek, 2008), India (Sengupta, 2010); China (Wang et al., 2019), South Korea (Kim & Yeom, 2018), Taiwan (Chen & Yang, 2012), Thailand (Petchsawang & Duchon, 2012), Malaysia (Wan Yunan et al., 2018), and Pakistan (Hassan et al., 2016). These studies covered many sectors, including healthcare, energy, retail, finance, manufacturing, accounting, education, and technology services. Despite the diversity in the disciplines, countries, and sectors investigated, the findings of current studies are remarkably consistent—that spiritual well-being and work performance are directly correlated. In large measure, studies theorise that the performance benefits of enhanced spiritual well-being are due to an ‘alignment’—between what people value or are inclined towards and what they do at work.

However, the breadth in this thread of research does not extend to all organisational stakeholders. For example, the leaders’ perspectives or organisations’ interests are

privileged over the ground-level employees’ views. Furthermore, coupled with the primary use of the quantitative over the qualitative paradigm (Vasconcelos, 2018), the intent and scope of current research seem limited to merely confirming the benefits of spiritual well-being for the workplace and work performance. In so doing, criticisms of the (in)compatibility of spiritual pursuits in organisational settings (Robinson & Smith, 2014) and the exploitative and manipulative stances (Case & Gosling, 2010; Tourish & Tourish, 2010, Tzouramani & Karakas, 2016) embedded in the discourse are not accounted for. Collectively, these gaps constrict or possibly even misdirect the way the connection between spiritual well-being and work performance is investigated, understood, and converted into action. It is thus not surprising that the mechanisms in which spiritual well-being influences work performance are still vague (Fox et al., 2018).

In response to these gaps, this paper presents an empirical study that examines the connection between spiritual well-being and work performance from the ground-level employees’ perspectives. The study uses the qualitative paradigm to examine how the need to enact spiritual inclinations interfaces with the need to meet prescribed work goals. The study uncovered un-storied experiences regarding spiritual well-being and work performance and found the connection to be more complex and diverse than currently evidenced. These findings also provided contextual clarity to the nuanced ways spiritual well-being and work performance may be connected.

The following sections discuss the literature on spirituality, on the hypothesised connections that spiritual well-being has with work performance and the accompanying theorisations. Following this, the context of the investigation and the study's use of narrative inquiry are argued for. After that, the analyses are presented, the findings are discussed, the study's implications are raised, and future research is recommended.

Spiritual Well-being – A Definition

The way spirituality is defined within organisational literature is diverse and occasionally disparate (Ottaway, 2003). This study embraces this diversity of perspective. It defines spirituality as five closely interrelated notions: meaning, authenticity, values, connection, and growth. Each notion helps define and lead to the experience of other notions.

Correspondingly, spiritual well-being is the employee's state of being when these notions are experienced at work. This eclectic approach embraces conceptual diversity of definitions and helps reflect the wide range of contextual meanings people associate with spiritual well-being (Swinton & Pattison, 2010). This definition thus enables the study to investigate spiritual inclinations and well-being without the need to be unduly definitive or exhaustive.

Of the five, the notion of meaning appears central to spirituality (Barrett, 2009; Mitroff & Denton, 1999a, 1999b; Reave, 2005). It refers to employees' inclinations to seek work that has a larger, higher, or worthy purpose, or a purpose beyond

merely earning a salary. It implies altruistic tendencies (Mirvis, 1997; Pfeffer, 2003) and subordinates personal gain, and can be embedded in ideas such as in "service to God or their fellow human beings" (Reave, 2005, p. 666), in "making a difference" and contributing to a "greater good" (Kinjerski & Skrypnek 2004, pp. 34-35) and in the idea of a calling (Conklin, 2012).

The notion of authenticity pertains to the honest expression of people's identity or being true to one's self at work (Ashar & Lane-Maher, 2004; van Tonder & Ramdass, 2009). It is premised on the belief that it contradicts human nature to expect people to separate themselves from what they do at work (Pfeffer, 2003). The idea of the employee being aligned with his or her work is evident in this notion of spirituality.

The notion of values can be understood as a set of guiding principles that govern work behaviour (McGhee & Grant, 2008). As a significant aspect of who we are and what we consider important in life (Schwartz, 2012), enacting broad ideals such as "making a contribution to humankind" (Milliman et al., 1999, p. 222) or specific values such as virtue (Cavanagh & Bandsuch, 2002), honesty (Elm, 2003), and benevolence, respect, justice and integrity (Jurkiewicz & Giacalone, 2004) in the workplace can thus engender spiritual well-being.

The fourth notion, connection or interconnectedness, can be described as being connected with "something larger than self" (Kinjerski & Skrypnek, 2004, p. 36), other people, humanity or nature (Ashforth

& Pratt, 2003), or to mean that “(e)verything affects and is affected by everything else” (Mitroff & Denton, 1999a, p. 89). Less ethereal definitions include how employees feel aligned with their co-workers (van Tonder & Ramdass, 2009) and a common worthwhile purpose (Ashmos & Duchon, 2000).

The fifth notion, growth, will be discussed alongside exemplifying the interrelatedness of the five notions (as indicated in square brackets). The notion of growth refers to the employee’s tendency to want to develop themselves, professionally as well as via “a realization of one’s aspirations and potential” (Ashforth & Pratt, 2003, p. 94) [meaning] [values]. The inclusion of outward and inner growth in defining spiritual well-being is underpinned by the belief that people are holistic beings; it is impossible to compartmentalise spiritual growth from developing our physical, mental, and emotional selves (Barrett, 2009) [authenticity]. Correspondingly, the ability of employees to experience and deepen their sense of authenticity, meaning, and connection and enact values in their work and at the workplace is indicative of one’s spiritual growth. Rosso et al.’s (2010) review of the meaning of work literature describes values and connection as sources of meaning while authenticity and growth as how work becomes meaningful, lending credence to the interrelatedness in the five notions.

These notions are ideals and allude to what employees may be inclined towards but do not seem to be getting from work. As Swinton and Pattison (2010, p. 231)

argue, the discourse on spiritual well-being points to “absences” – the lack of something. Thus, meaning, authenticity, connection, values, and growth are emphasised because the experience of work satiating such inclinations is absent. In a sense, the interest in spiritual well-being within organisational literature is fuelled by currently unattained ideals.

Work Performance Concerning Spiritual Well-being

Organisational scholarship and practice are generally concerned with improving the work performance of some level or some kind—a substantial portion of spiritual well-being research exhibit a similar interest. On the whole, studies (see next section) suggest that individuals, teams, and organisations that exhibit the qualities of spiritual well-being are more efficient.

According to Lips-Wiersma et al. (2009), substantially more studies explore the potential benefits rather than the possible detriment of spiritual well-being. Dent et al. (2005, p. 639) argued that there are dangers associated with taking this line of inquiry because “increased spirituality would presumably prohibit an individual from certain forms of work”, leading to lower work performance levels. However, this issue has not received much attention in the literature.

For the study that this paper reports, work performance is defined in general terms, i.e., as the enhancement of or improvement in efficiency, productivity, meeting and or exceeding work goals, expectations and

targets, and similar concepts. The definition of work performance specific to the study is described in the subsection on ‘Sampling’.

Spiritual Well-being and Work Performance – Evidence and Gaps

While it may be attractive for advocates to promote ideas of spirituality in the workplace, it is equally, if not more, attractive to link spiritual well-being with improved performance. Quantitative methods are, by far, the prevalent choice used to investigate this connection (Vasconcelos, 2018). The findings from quantitative studies (Afsar & Rehman, 2015; Albuquerque et al., 2014; Garg, 2017; Kolodinsky et al., 2008; Petchsawang & Duchon, 2012; Phuong et al., 2018; Rego & Pina e Cunha, 2008; Wu & Lee, 2020) are remarkably consistent in that they show, albeit to varying extents, a statistically significant positive correlation between spiritual well-being and work performance. This consistency displayed in extant research is notable. Studies define spiritual well-being in disparate ways, use different proxy constructs for work performance, and sample a wide range of the working populace. These studies perhaps indicate the extensive influence of spiritual well-being on many facets of performance irrespective of contextual differences across different populations and jobs.

Qualitative studies, though far fewer, also suggest that spiritual well-being and enhanced work performance are related. This is observed at the individual and group levels (Ashar & Lane-Maher, 2004; Kinjerski & Skrypnik, 2008) and the

organisational level (Milliman et al., 1999). For some, this was evidenced by examining real-world success (Csikszentmihalyi, 2004; Lewin & Regine, 2001), lending support to arguments, such as in Fry and Slocum Jr. (2008), that spiritual well-being contributes positively to the organisations’ bottom line.

Collectively, studies theorise that the performative benefits of increased spiritual well-being as the result of an alignment between the employee’s inclinations and the organisations’ goals. For instance, Lewin and Regine (2001) conclude that the organisations in their study are successful because they enable employees to engage in work that they care about individually and collectively. In another instance, Csikszentmihalyi (2004, p. 150) cites Yvon Chouinard, the founder of Patagonia, as being in business to “find solutions to a lot of this environmental crisis”. It inevitably led Patagonia to source for organically grown cotton and champion its use in the outdoor apparel industry, which contributed to developing a niche market and the company’s healthy bottom line. As such, Csikszentmihalyi (2004, p. 4) concludes that the leaders he interviewed are high-achieving because they can conduct their work in a way “that is good in both senses: the material and the spiritual”.

Nevertheless, three significant gaps can be observed from the current discourse. Firstly, studies tend to view spirituality in the workplace solely in a positive light (MacDonald, 2011), evading unpopular perspectives such as the conflict that arises from pursuing spiritual ideals in work

environments that are either neutral or antagonistic to these very ideals. Hoffman (2010) cautions that the organisations' and the employees' values may be acutely divergent since organisations serve their interests first. Mitroff and Denton (1999b), who conducted seminal studies in the area, highlights one such conflict:

“(T)he chairman of a large, important organisation in his industry bemoaned the fact that if he criticized the greed so rampant in corporate America, he would offend some of his biggest clients. This sharply contrasted with his earlier remarks in which he claimed that, as the chairman and founder of his organization, he was exempt from compromising his deepest values. When asked whether there was a contradiction in his responses, he was silent”. (Mitroff and Denton, 1999b, p. 86)

Secondly, the leaders' views and the organisations' interests are privileged. Largely elicited via survey questionnaires developed for statistical analyses, the voices of ground-level employees are not audible. Theoretical arguments about alignment are expected since it reflects the leaders' and organisations' interests, or duty, to align employees with organisational goals. This has invited criticisms of the subtle exercise of power, instrumentality, control (Lips-Wiersma et al., 2009), and coercion exerted

by leaders (Tourish & Tourish, 2010) over their employees.

Thirdly, **attempts by predominantly quantitative empirical studies** to explain the connection has led to uncontextualised theorisations that exaggerate the linear and mechanistic way people behave, irrespective of countervailing influences, and imply spiritual well-being as a panacea for falling employee performance. For instance, Petchsawang and Duchon (2012, p. 198) speculate that insight meditation (as a way to achieve spiritual well-being) “trains the mind to seek a sense of peace and happiness ... which can then be used to see things clearly and insightfully (and) can be applied to many circumstances ... including the potential of performing better work”.

The study this paper reports (hereon referred to as ‘the study’) attempts to redress the lop-sidedness of current knowledge and theoretical arguments in this area. Specifically, the study used the qualitative paradigm to investigate the ground-level employees' experience of the interface between two forces; the need to enact one's spiritual inclinations in the workplace and the need to meet institutionally prescribed work targets (hereon referred to as ‘the interface’). Examining how these two forces interface among ground-level employees provided a means for this study to uncover novel evidence, including ones that contradict current theorizations, and unravel the connection between spiritual well-being and work performance.

METHODS

With its ability to develop causal explanations (Maxwell, 2013), the qualitative paradigm was used. It provided the premise to uncover experiences that were likely to be multifaceted and individualised, and contingent upon the work individuals engage with. The qualitative paradigm also enabled the study to shed light on the specific contexts within which the interfaces occur. The choice of methodology for the study was narrative inquiry (NI). It is underpinned by the theory that people make sense of their experiences by telling stories about them (Mishler, 1986; Riessman, 2008). Specifically, storytelling is viewed as a natural form for people to convey how things happened (White, 1980) and in a manner that is relevant to the narrator (Connelly & Clandinin, 1990). Stories also represent a window into people's lives, including their identities, personalities (Lieblich et al., 1998), beliefs, desires, theories, and values (Bruner, 1991).

Sampling

The healthcare sales industry was selected as the study site because it provided two salient features for this investigation. The first is the social values attached to 'healthcare', which may facilitate spiritual well-being. The second feature is the 'sales' part, representing the typical organisation's concern for meeting its bottom-line as a performance measure. Healthcare sales representatives (HSRs) are ground-level employees and were where participants were drawn from.

The HSR's primary role is to achieve its sales targets by selling its products (medical devices and/or pharmaceutical drugs) to doctors, pharmacists, and other healthcare professionals. The study was conducted in Malaysia as it is a multi-religious, multi-cultural country with the likelihood of a spiritually diverse work environment. Furthermore, as a Malaysian who has worked more than a decade in the Malaysian healthcare sales industry, the author had sufficient background of the country's culture and the industry to conduct this study.

This study used the purposive sampling strategy as it enabled the deliberate selection of exemplar cases (Maxwell, 2013). HSRs who were high performers, defined as ones who have met their sales targets for at least three years out of a span of five years, was the exemplar cases the study sought. HSRs were recruited via the recommendation of the HSRs' immediate line managers. In the final tally, 11 HSRs were recruited for the study.

Participants were interviewed twice, resulting in an average of two hours of interview recordings per participant. Their ages ranged from 29 to 43. Of the 11 participants, eight of them have worked in more than one healthcare sales company. Their experience in healthcare sales ranged from five to 19 years. They were from a mix of religious affiliations, namely Buddhism, Catholicism, and Christianity. Table 1 provides the background information of the participants.

Table 1
Background information of research participants

No	Name (Pseudonym)	Gender	Age	Ethnicity	Religion	Medical			Sales representative experience (years)			Total industry experience (years)
						Medical	Pharmaceutical	Industry experience	Pharmaceutical	Industry experience	Sales target achievement	
1	Alan	M	37	Indian	Catholic	6	-	6	-	6	4	13**
2	Chong	F	29	Chinese	Buddhist	5	2	7	2	7	6	7
3	Emily	F	31	Chinese	Catholic	3	3	6	3	6	6	6
4	Susan	F	33	Chinese	Catholic	7	2	9	2	9	8	9
5	Huang	F	43	Chinese	Christian	19	-	19	-	19	14*	19
6	Kenneth	M	40	Chinese	Buddhist	-	16	16	16	16	14	16
7	Lim	M	43	Chinese	Freethinker	-	19	19	19	19	11	19
8	Loh	F	33	Chinese	Buddhist	3	5.5	8.5	5.5	8.5	7	8.5
9	Valerie	F	37	Chinese	Buddhist	6	-	6	-	6	4	10**
10	Yeoh	M	31	Chinese	Buddhist	-	5	5	5	5	4	5
11	Yong	M	30	Chinese	Buddhist	2	3	5	3	5	5	5

Note: M = Male; F = Female

*Met sales targets for the past six consecutive years

**Total industry experience included positions other than as a sales representative

Narrative Interview and Narrative Analysis

Following Mishler (1986) and Riessman (2004), the interview method used in the study was in active response to the participants’ stories and the direction they took rather than to the interview schedule. For participants to develop their stories, the interviewer intervened sparingly throughout the interview (Squire, 2008). In this way, the interviews were minimally structured and designed for exploration rather than confirmation of preconceived types of experiences.

Larger narratives during the early stages of the analysis were subsequently parsed into story segments. Thematically similar segments were then combined. Specific analytical steps include focusing on the contents, structure, and minutiae of the participants’ stories and on contrary cases. The coherence of the participants’ narrated accounts was analysed as part of the attempt at trustworthiness, one of the hallmarks of validity in narrative research (Riessman 2008). The aim was to facilitate uncovering the verisimilitude of the participants’ experiences rather than mere factual evidence.

ANALYSIS AND FINDINGS

Initial general impressions of the participants’ stories show that they experienced the interface in two main ways – as ‘compatible’ or ‘incompatible’. Subsequent analyses showed that singular experiences of the interface yielded different findings of the connection between spiritual well-being and work performance. It resulted in four narrative themes (see Table 2).

The four narrative themes are illustrated below. Although each narrative theme was evident in several participants’ stories, only selected participants’ experiences are reproduced in this paper. Although not practical to represent in entire lengthy interview conversations, the following excerpts are of a particular length so that the storytelling is not overly truncated. The aim is to make the participants’ voices more ‘audible’ and the researcher’s interpretations more ‘visible’ for the reader. A guide to the transcription symbols used can be found in Appendix A.

Narrative Theme 1

The direct connection between spiritual well-being and work performance brought about by a compatible interface was visible

Table 2
Narrative themes based on the interface and the connection between spiritual well-being and work performance

Narrative theme	The interface between the spiritual inclinations and work targets	The connection between spiritual well-being and work performance
1	Compatible	Direct
2	Compatible	Inconsequential
3	Incompatible	Inverse
4	Incompatible	Inconsequential

in four participants' stories. One of them is Yong, a 30-year-old man with seven years of working experience, the latter five years in healthcare sales. In the excerpt below, he describes a "satisfaction" in medical devices sales that he did not experience while working in the pharmaceutical sales. The story takes place in a government hospital setting where funding for medical devices for late-stage cancer surgeries is not available.

"I'm actually enjoying what I do right now. I'm actually enjoying because one reason is sometimes over here in medical, comparing in pharma, over here, there is this satisfaction that is not able to be found in pharma, where there were cases where a lot of very, very, poor patients and not able to actually pay for their medical equipment. I am here to actually help them apply for funds through Majlis Kanser Nasional or any non, I mean, those social welfare bodies where we can actually help them apply for all these equipment given the right documentations. So, it's actually through the social welfare, and they're actually quite a tedious process over here. But once you were able to get things across, the satisfaction is only you yourself know how, how, how satisfied you are to actually bring the thing across to that very poor patient to have that surgery on and be successful. (... describes the

process of getting the funding in detail ...). So that is, that is one of the extra channels that we able to get some funds besides depending on the conventional funds. Not much, maybe 2000 Ringgit a month, comes to like 24000 a year. So that is an extra 24000 for me in my sales. So, if things, I mean, if I can be luckier, then perhaps it could be 36000 or 48000". (Excerpt 1-1)

The government hospital did not purchase Yong's products directly because funding was insufficient. However, some patients required his products for their surgeries. Despite the "tedious process", the way he gained sales was something Yong found "satisfaction" in doing. It seems unlikely that Yong would have undertaken this additional workload of securing social welfare funds for poor patients if it did not benefit patients the way it did or if it did not result in sales for him. The more he aided the process of securing the funds, the more sales he would register. This depicts how Yong's inclinations for meaningful work align with the obligation to meet sales targets, directly connecting spiritual well-being and work performance.

Narrative theme 1 provides empirical support for and contextual clarity to extant evidence that suggests a direct relationship between spiritual well-being and work performance, and for theoretical arguments that posit the direct relation to be an influence of the alignment between the employees' spiritual inclinations and their work.

Narrative Theme 2

A compatible interface was not necessarily accompanied by a direct connection between spiritual well-being and work performance. This was observed from the narratives of five participants. Susan, who has nine years of experience in healthcare sales and met her yearly targets eight times, storied her experience that illustrates this theme. Excerpt 2-1 is Susan storying how her values were compatible with the meaning she derives from work while promoting devices for minimally invasive surgical procedures.

“Imagine among all the sales job that we have, and we’re in healthcare, and I think our products mmm, we, you can feel they’re a bit different you know, by providing this product, the doctor can do this, and it actually benefit the patient (... expands on the same points ...) Because, example my mother-in-law, she had a hysterectomy. She did (a minimally invasive surgical procedure). And I have an aunt who did (an open surgery) years ago. So, when my auntie visited my mother-in-law, she was so impressed the next day she could already sit up. So, you know, although you know you didn’t, you know, create (minimally invasive procedures), but you know that by every time you’re asking the surgeon to embark on new procedures, there’s a difference in the patient’s recovery. So, I think,

at the end of the day, you feel good, you know”. (Excerpt 2-1)

Shortly after the segment, Susan qualifies the point she wanted to make, revealing how she saw the connection between making a “difference in someone’s life” and meeting her sales targets (see Excerpt 2-2).

“The first thing I think about I think about hitting my sales target and, and how I need to hit my sales target. So, but yeah, so it’s really, really, very work objective-driven. But the thing that I said why I can last so long, although it’s so much work, so stressful and all because it’s not just a typical sales job. Because at the end of the day, you know that all you’re doing, of course, you have your own achievement, your own recognition that gives you a good life or whatever, but at the end, there is someone benefitting from it, that gives you an extra good feeling I guess, that you’re doing something right, you’re not just pushing sales for the sake of pushing”. (Excerpt 2-2)

Susan liked that the products she promoted made a difference. It is why she “can last so long” despite the stress that comes with chasing sales. However, the feeling of being able to make a difference was an inevitable outcome of her job rather than something Susan actively sought after. This can be inferred from multiple

references she made about ‘feeling good’ alongside the repeated use of the terms “at the end of the day” and “at the end”. On the other hand, meeting her sales target was a task that Susan saw as a requirement of the job. For Susan, being able to make a difference was more a prerequisite for staying in the job than a motivator for sales achievement. More tellingly and unlike Yong (see narrative theme 1), the overarching narrative of Susan’s stories does not reflect the ‘the more I sell, the more patients I can help’ theme. While the interface is compatible, Susan’s ability to enact her spiritual inclinations in her job did not have any consequential influence on how much she sold.

Narrative theme 2 provides an alternative argument to extent knowledge. Most of survey-statistical research readily assumes that spiritual well-being and enhanced work performance are directly related because they are observed simultaneously. Instead, it suggests that spiritual well-being and the experienced alignment between ground-level employees and their work are inconsequential to work performance levels.

Narrative Theme 3

Narrative theme 3 is visible in two participants’ storytelling, although it is evident in Loh’s stories. For example, in excerpt 3-1, Loh relates her experience promoting immunosuppressant drugs for post-transplant patients to nephrologists. Although ‘life-saving’ in many respects and the work potentially meaningful, a significant portion of her storytelling revealed an incompatible interface.

“In (Government Hospital A) right, we are trying to convert some of the transplant patients who are on (Competitor X’s drug) to (my Company’s drug). And the doctor actually agreed. And I’m the one who’s really worried. Because, our product (...talks about the high incidence of adverse reactions of her company’s drug ...) So that’s why, that’s the reason why most of the, the nephrologist, right, they wouldn’t, they wouldn’t change their patient, just convert like that, you know. They don’t want to rock the boat if let’s say nothing happen. Because because, it’s very precious, you know, the organ that they got it. It’s very precious. So that’s why mmm (.) mmm. Yeah, my boss actually says that the doctor agreed, you know, to convert that time. I was the one that I’m really not comfortable with it because I’m very worried. I’m not sure what’s going to happen to the patients. (... recounts her conversation with her immediate manager on the strategy to switch ...) So, when I mention patient focus, it’s like, what I mean, you know, I also care for the patient. I don’t want you imagine if that is your relative or anyone that you love. Would you want to switch your father? Your father is already doing well with the current regimen, why would you change? That you don’t see a need to change, you know.

I would rather capture the new market instead of getting someone that already doing well, then you convert them. I'm not comfortable, actually (...Loh expands on her reasons to oppose the switch despite the increase in sales...) So, for me it's like, although (I want patients) but I don't want, I don't want these kinds of business". (Excerpt 3-1)

In the above segment, Loh was more concerned about the patients' well-being than the windfall in sales. Potentially jeopardising patients' health for sales went against her values. The strategy to convert post-organ transplant patients stable on competitor's drugs to her company's drugs, she considered, was morally questionable and something she was "not comfortable" with. In the end, Loh did not pursue the strategy despite being behind her quarterly sales target at that time. That she would forgo potential sales (and sales incentives) lends credibility to her overall narrative that patients' welfare comes first. This shows that Loh's inclinations not to jeopardise patients' well-being were incompatible with the need to meet her sales targets. Owing to her choice to not pursue the drug switch, she recorded lower sales figures. Loh's experience depicts how an incompatible interface led to lower sales achievements.

Narrative theme 3 reveals a new level of complexity to the existing empirical findings. It suggests that enacting one's spiritual inclinations can undermine one's work performance when incompatible with the need to meet work targets. This finding

validates calls for research to move beyond merely affirming the work performance benefits of pursuing spiritual well-being.

Narrative Theme 4

An incompatible interface did not always mean an inverse relationship between spiritual well-being and work performance. Six of the participants told stories that depicted this theme. The following segments are from Chong, a 29-year-old lady with seven years of experience in healthcare sales. In excerpt 4-1 and excerpt 4-2, Chong described a quality lacking in her time as a pharmaceutical sales representative promoting cardiovascular drugs. In excerpt 4-3, she contrasts the current role of promoting medical devices for minimally invasive procedures with her experience in pharmaceutical sales.

"In (pharmaceutical company), I was doing well for the first year. And the second year I was doing well also but I feel like the things I learn is the same. There's no way I can learn more things differently (... expands on what was just said ...). You feel like there's not so much room to grow, so I move to (medical device company)". (Excerpt 4-1)

"My job scope (while promoting cardiovascular drugs) is literally see surgeon with the detail aid, detail to them, and bring in the sales. Talk to the purchaser, trying to get in the sales. Occasionally you have to run event which the

marketing managers are doing everything for you. You just have to reach out to the surgeon, please come, please come, please come. So, to sum it up, it's like, if you do all these well already, that's it". (Excerpt 4-2)

So, I always thought that I want to do a job as close to healthcare, as close to doctors as possible. Like in partnership with them, to know exactly what they do to the patients. When I was in (pharmaceutical company), same goes with (medical device company), I suppose now it's still the same but sometimes the busyness get lost in a way that, I want to make a difference, especially in, and selling medicine doesn't help—it's just a drug pusher. But for (medical device company), sometimes, we know what's going on in other countries, in terms of the procedure development. For example, people are already doing key-hole surgery for lung cancer. Malaysia is not. And I have a sense of satisfaction is there when I'm actually trying to introduce this procedure so that it can benefit the people, reach out to more people. And if I'm able to develop the procedure by training surgeons and develop their skills and see them grow and how they do from open surgery to key-hole surgery and the patients get the ultimate

benefit, that helps a lot. That makes me feel, wow, you know I'm actually creating some impact. So that is one of the important motivation for me also. (Excerpt 4-3)

Chong depicted a spiritual void she experienced in pharmaceutical sales by contrasting it with her medical devices sales experience. Chong's inclinations to make a difference to patients could not be enacted while promoting pharmaceutical products. Instead, owing to the nature of the work and business, she found herself merely a 'drug pusher', which means that the job has no other meaning except to coerce her customers to buy the drugs she promoted who otherwise will not. However, it had minimal impact on sales achievements as she met her yearly sales targets while in pharmaceutical sales.

Narrative theme 4 shows another nuanced way spiritual well-being and work performance are connected. Though not entirely novel, it is an important reminder that spiritual well-being is not a prerequisite to work performance. Rather than influencing work performance, the absence of spiritual well-being may increase the chances of attrition.

DISCUSSION

Theoretical Implications

What has perhaps crept into the discourse is the presumed unproblematic ways in which spiritual inclinations can be enacted in the workplace and the leader-organisation bias. Commercial firms are not neutral grounds

for spiritual matters since they “by design are instrumental, goal-driven entities with a clear focus on ends” (Lips-Wiersma et al., 2009, p. 292), profits representing one such end. Tourish and Tourish (2010, p. 219) take a more critical view and argue that “business organisations are not a suitable forum for exploring [spiritual well-being] issues”. While we ought not to dismiss the possibility of the work place as an avenue to simultaneously satiate spiritual inclinations and meet organisational goals, caution should be exercised with prescriptions that broadly imply workplace spirituality as the panacea for organisational ills.

Beyond presenting evidence of the influence of spiritual well-being on work performance, this study sheds light on other ways they may be connected. The direct connection between spiritual well-being and work performance can be facilitated by the alignment of the employees’ inclinations and their work, provided the following are present: (i) employees are inclined to enact their spiritual inclinations while at work; (ii), there are avenues for employees to experience their jobs as satisfying their spiritual inclinations; and (iii) satisfying spiritual inclinations is mainly compatible with achieving key work targets for the employee. If one of these criteria is absent, the direct connection does not seem possible. This set of criteria form the initial framework for uncovering further the mechanism in which spiritual well-being influences work performance.

What was surprising was that the alignment of spiritual inclinations and work outcomes did not always result in enhanced work performance. That employees can enact their spiritual inclinations while at work sometimes only explains why employees stay on the job and not why employees perform better. Less surprising but an equally important finding is that attempts to pursuing one’s spiritual inclinations in the workplace can lead to diminished work performance levels. This unintended work outcome was observed when the employees’ spiritual inclinations clashed with key work objectives. From an organisation’s perspective, this is the worst-case scenario. However, the opposite—that work performance levels were unaffected despite the clash in spiritual inclinations and work outcomes—was another possible scenario. Largely absent in current empirical literature, these three alternative scenarios deconstruct the assumed singular view of the connection between spiritual well-being and work performance. They also draw attention to inconsequential or less desirable work performance outcomes and challenge implied perspectives of spiritual well-being as vital for work performance.

Interestingly, the role the employees’ leaders occupy in enacting spiritual inclinations was not storied. Conceivably then and contrary to current assumptions, leaders’ role play is not critical, at least not from the ground-level employee’s point of view. The journey to spiritual well-being for the individual employee, if so desired, is perhaps a more personal one.

Practical Implications

This paper calls for a more nuanced understanding of how spiritual well-being may be experienced within different contexts and the implications these might have on how employees engage with work. As these begin to be better understood, prescriptions ought to be clearly qualified, uniquely contextualised, and expressly tentative while practices customised for and by the ground-level employee.

Practitioners are encouraged to adopt an evaluative stance. If desired, both employees and their leaders/organisations must be equally invested in seeing a direct relationship between spiritual well-being and work performance. Work contexts must be malleable or at least not antagonistic to spiritual notions. The leaders' efforts to create a work climate conducive for experiencing spiritual well-being, however possible that might be, maybe misguided if their employees are not similarly inclined. Likewise, helping employees achieve some sense of spiritual well-being may have multiple consequences, some unfavourable for organisational performance.

Recommendations for Future Research

Empirical work using interpretivist lenses and methodologies that privilege the ground-level employees' voices will undoubtedly enrich the area. It is hoped that this study's findings will initiate more investigative efforts to complement and rectify the lopsided viewpoints inherent in

the discourse. Future studies that uncover how employees engage (or not) spiritual notions and navigate (or not) the different work imperatives around them are needed.

Limitations

The limitations of this study would be the single method of inquiry and the investigation of employees working in a single industry and a single country. However, this was a deliberate choice as it enabled the study to generate contextually meaningful and rich data for investigation.

CONCLUSION

Workplace spirituality may represent an essential component of a range of efforts that can enhance work performance levels. However, in the fervent interest to find solutions where organisations and their employees may be able to navigate the need to satisfy both spiritual and work goals simultaneously, some blind spots were encountered. This paper contributes to an expanded understanding of spiritual well-being and its connection with work performance among ground-level employees. There is a need to re-examine accepted knowledge regarding the direct connection between spiritual well-being and work performance, and the assumed compatibility of enacting spiritual inclinations in organisational settings. As uncovered in this paper, these issues are more nuanced and complex than initially thought to be.

ACKNOWLEDGEMENT

The authors would like to thank the research participants for their candid responses during the interviews and for their valuable time. Without their generous and active participation, this paper and the ideas therein would not have been possible.

REFERENCES

- Afsar, B., & Rehman, M. (2015). The relationship between workplace spirituality and innovative work behavior: The mediating role of perceived person–organization fit. *Journal of Management, Spirituality & Religion*, 12(4), 329-353. <https://doi.org/10.1080/14766086.2015.1060515>
- Albuquerque, I. F., Cunha, R., Martins, L. D., & Brito Sá, A. (2014). Primary health care services: Workplace spirituality and organizational performance. *Journal of Organizational Change Management*, 27(1), 59-82. <https://doi.org/10.1108/JOCM-11-2012-0186>
- Ashar, H., & Lane-Maher, M. (2004). Success and spirituality in the new business paradigm. *Journal of Management Inquiry*, 13(3), 249-260. <https://doi.org/10.1177/1056492604268218>
- Ashforth, B. E., & Pratt, M. G. (2003). Institutionalized spirituality: An oxymoron? In R. A. Giacalone & C. L. Jurkiewicz (Eds.), *Handbook of workplace spirituality and organizational performance* (pp. 93-107). M. E. Sharpe.
- Ashmos, D. P., & Duchon, D. (2000). Spirituality at work: A conceptualization and measure. *Journal of Management Inquiry*, 9(2), 134-145. <https://doi.org/10.1177/105649260092008>
- Barrett, R. (2009). What's right and wrong with spirituality in the workplace. *Journal of Management, Spirituality and Religion*, 6(3), 261-268. <https://doi.org/10.1080/14766080903069372>
- Bruner, J. (1991). The narrative construction of reality. *Critical Inquiry*, 18(1), 1-21. <https://doi.org/10.1086/448619>
- Case, P., & Gosling, J. (2010). The spiritual organization: Critical reflections on the instrumentality of workplace spirituality. *Journal of Management, Spirituality & Religion*, 7(4), 257-282. <https://doi.org/10.1080/14766086.2010.524727>
- Cavanagh, G. F., & Bandsuch, M. R. (2002). Virtue as a benchmark for spirituality in business. *Journal of Business Ethics*, 38(1/2), 109-117. <https://doi.org/10.1023/A:1015721029457>
- Chen, C.-Y., & Yang, C.-F. (2012). The impact of spiritual leadership on organizational citizenship behavior: A Multi-sample analysis. *Journal of Business Ethics*, 105, 107-114. <https://doi.org/10.1007/s10551-011-0953-3>
- Conklin, T. A. (2012). Work worth doing: A phenomenological study of the experience of discovering and following one's calling. *Journal of Management Inquiry*, 21(3), 298-317. <https://doi.org/10.1177/1056492611414426>
- Connelly, F. M., & Clandinin, D. J. (1990). Stories of experience and narrative inquiry. *Educational Researcher*, 19(5), 2-14. <https://doi.org/10.3102/0013189X019005002>
- Csikszentmihalyi, M. (2004). *Good business: Leadership, flow, and the making of meaning*. Coronet.
- Dent, E. B., Higgins, M. E., & Wharff, D. M. (2005). Spirituality and leadership: An empirical review of definitions, distinctions, and embedded assumptions. *The Leadership Quarterly*, 16(5), 625-653. <https://doi.org/10.1016/j.leaqua.2005.07.002>
- Elm, D. R. (2003). Honesty, spirituality, and performance at work. In R. A. Giacalone & C. L. Jurkiewicz (Eds.), *Handbook of workplace spirituality and organizational performance* (pp. 277-288). M. E. Sharpe.

- Fox, C., Webster, B. D., & Casper, W. C. (2018). Spirituality, psychological capital and employee performance: An empirical examination. *Journal of Managerial Issues, 30*(2), 194-153.
- Fry, L. W., & Slocum Jr., J. W. (2008). Maximizing the triple bottom line through spiritual leadership. *Organizational Dynamics, 37*(1), 86-96. <https://doi.org/10.1016/j.orgdyn.2007.11.004>
- Garg, N. (2017). Workplace spirituality and employee well-being: An empirical exploration. *Journal of Human Values, 23*(2), 129-147. <https://doi.org/10.1177/0971685816689741>
- Hassan, M., Nadeem, A. B., & Akhter, A. (2016). Impact of workplace spirituality on job satisfaction: Mediating effect of trust. *Cogent Business & Management, 3*(1), 1189808. <https://doi.org/10.1080/23311975.2016.1189808>
- Hoffman, A. J. (2010). Reconciling professional and personal value systems. In R. A. Giacalone & C. L. Jurkiewicz (Eds.), *Handbook of workplace spirituality and organizational performance* (2nd ed., pp. 155-170). M.E. Sharpe.
- Joelle, M., & Coelho, A. M. (2019). The impact of spirituality at work on workers' attitudes and individual performance. *The International Journal of Human Resource Management, 30*(7), 1111-1135. <https://doi.org/10.1080/09585192.2017.1314312>
- Jurkiewicz, C. L., & Giacalone, R. A. (2004). A values framework for measuring the impact of workplace spirituality on organizational performance. *Journal of Business Ethics, 49*(2), 129-142. <https://doi.org/10.1023/B:BUSI.0000015843.22195.b9>
- Kim, H. S., & Yeom, H.-A. (2018). The association between spiritual well-being and burnout in intensive care unit nurses: A descriptive study. *Intensive & Critical Care Nursing, 46*, 92-97. <https://doi.org/10.1016/j.iccn.2017.11.005>
- Kinjerski, V., & Skrypnek, B. J. (2004). Defining spirit at work: Finding common ground. *Journal of Organizational Change Management, 17*(1), 26-42. <https://doi.org/10.1108/09534810410511288>
- Kinjerski, V., & Skrypnek, B. J. (2008). The promise of spirit at work: Increasing job satisfaction and organizational commitment and reducing turnover and absenteeism in long-term care. *Journal of Gerontological Nursing, 34*(10), 17-25. <https://doi.org/10.3928/00989134-20081001-03>.
- Kolodinsky, R. W., Giacalone, R. A., & Jurkiewicz, C. L. (2008). Workplace values and outcomes: Exploring personal, organizational, and interactive workplace spirituality. *Journal of Business Ethics, 81*(2), 465-480. <https://doi.org/10.1007/s10551-007-9507-0>
- Lewin, R., & Regine, B. (2001). *Weaving complexity & business: Engaging the soul at work*. Texere Publishing.
- Liebllich, A., Tuval-Mashiach, R., & Zilber, T. (1998). *Narrative research: Reading, analysis, and interpretation*. SAGE.
- Lips-Wiersma, M., Dean, K. L., & Fornaciari, C. J. (2009). Theorizing the dark side of the workplace spirituality movement. *Journal of Management Inquiry, 18*(4), 288-300. <https://doi.org/10.1177/1056492609339017>
- MacDonald, D. A. (2011). Studying spirituality scientifically: Reflections, considerations, recommendations. *Journal of Management, Spirituality & Religion, 8*(3), 195-210. <https://doi.org/10.1080/14766086.2011.599145>
- Maxwell, J. A. (2013). *Qualitative research design: An interactive approach* (3rd ed.). SAGE Publications, Inc.
- McGhee, P., & Grant, P. (2008). Spirituality and ethical behaviour in the workplace: Wishful thinking or authentic reality. *Electronic Journal of Business Ethics and Organization Studies, 13*(2), 61-69.
- Milliman, J., Ferguson, J., Trickett, D., & Condemi, B. (1999). Spirit and community at Southwest

- Airlines: An investigation of a spiritual values-based model. *Journal of Organizational Change Management*, 12(3), 221-233. <https://doi.org/10.1108/09534819910273928>
- Milliman, J., Gatling, A., & Kim, J. (2018). The effect of workplace spirituality on hospitality employee engagement, intention to stay, and service delivery. *Journal of Hospitality and Tourism Management*, 35, 56-65. <https://doi.org/10.1016/j.jhtm.2018.03.002>
- Mirvis, P. H. (1997). 'Soul Work' in organizations. *Organization Science*, 8(2), 193-206.
- Mishler, E. G. (1986). *Research interviewing: Context and narrative*. Harvard University Press.
- Mitroff, I., & Denton, E. (1999a). *A spiritual audit of corporate America: A hard look at spirituality, religion, and values in the workplace*. Jossey-Bass Publishers.
- Mitroff, I., & Denton, E. A. (1999b). *A study of spirituality in the workplace*. MIT Sloan Management Review. <https://sloanreview.mit.edu/article/a-study-of-spirituality-in-the-workplace/>
- Moon, T., Youn, N., Hur, W.-M., & Kim, K.-M. (2020). Does employees' spirituality enhance job performance? The mediating roles of intrinsic motivation and job crafting. *Current Psychology*, 39, 1618-1634. <https://doi.org/10.1007/s12144-018-9864-0>
- Ottaway, R. N. (2003). Defining spirituality of work. *International Journal of Value-Based Management*, 16(1), 23-35. <https://doi.org/10.1023/A:1021984029154>
- Petchsawang, P., & Duchon, D. (2012). Workplace spirituality, meditation, and work performance. *Journal of Management, Spirituality & Religion*, 9(2), 189-208. <https://doi.org/10.1080/14766086.2012.688623>
- Pfeffer, J. (2003). Business and the spirit: Management practices that sustains values. In R. A. Giacalone & C. L. Jurkiewicz (Eds.), *Handbook of workplace spirituality and organizational performance* (pp. 29-45). M.E. Sharpe.
- Phuong, V., Khoa, T., Khanh, H., & Ho, P. (2018). The role of leader's spiritual leadership on organisation outcomes. *Asian Academy of Management Journal*, 23, 45-68. <https://doi.org/10.21315/aamj2018.23.2.3>
- Reave, L. (2005). Spiritual values and practices related to leadership effectiveness. *The Leadership Quarterly*, 16(5), 655-687. <https://doi.org/10.1016/j.leaqua.2005.07.003>
- Rego, A., & Cunha, M. P. e. (2008). Workplace spirituality and organizational commitment: An empirical study. *Journal of Organizational Change Management*, 21(1), 53-75. <https://doi.org/10.1108/09534810810847039>
- Rego, A., & Pina e Cunha, M. (2008). Workplace spirituality and organizational commitment: An empirical study. *Journal of Organizational Change Management*, 21(1), 53-75. <https://doi.org/10.1108/09534810810847039>
- Riessman, C. K. (2004). Narrative interviewing. In M. S. Lewis-Beck, A. Bryman, & T. F. Liao (Eds.), *The Sage encyclopedia of social science research methods* (pp. 709-710). Sage Publications.
- Riessman, C. K. (2008). *Narrative methods for the human sciences*. Sage Publications, Inc.
- Robinson, S., & Smith, J. (2014). *Co-charismatic leadership: Critical perspectives on spirituality, ethics and leadership*. Peter Lang UK.
- Rosso, B., Dekas, K., & Wrzesniewski, A. (2010). On the meaning of work: A theoretical integration and review. *Research in Organizational Behavior*, 30, 91-127. <https://doi.org/10.1016/j.riob.2010.09.001>
- Schwartz, S. H. (2012). An overview of the Schwartz Theory of Basic Values. *Online Readings in Psychology and Culture*, 2(1), 3-20. <https://doi.org/10.9707/2307-0919.1116>

- Sengupta, S. S. (2010). Correlates of spiritual orientation & managerial effectiveness. *Indian Journal of Industrial Relations*, 46(1), 45-60. <https://doi.org/10.2307/25741096>
- Singh, J., & Chopra, V. G. (2018). Workplace spirituality, grit and work engagement. *Asia-Pacific Journal of Management Research and Innovation*, 14(1-2), 50-59. <https://doi.org/10.1177/2319510X18811776>
- Squire, C. (2008). Experience-centred and culturally-oriented approaches to narratives. In M. Andrews, C. Squire, & M. Tamboukou (Eds.), *Doing narrative research* (pp. 41-63). SAGE Publications.
- Swinton, J., & Pattison, S. (2010). Moving beyond clarity: Towards a thin, vague, and useful understanding of spirituality in nursing care. *Nursing Philosophy*, 11(4), 226-237. <https://doi.org/10.1111/j.1466-769X.2010.00450.x>
- Tejeda, M. (2015). Exploring the supportive effects of spiritual well-being on job satisfaction given adverse work conditions. *Journal of Business Ethics*, 131(1), 173-181. <https://doi.org/10.1007/s10551-014-2269-6>
- Tourish, D., & Tourish, N. (2010). Spirituality at work, and its implications for leadership and followership: A post-structuralist perspective. *Leadership*, 6(2), 207-224. <https://doi.org/10.1177/1742715010363210>
- Tzouramani, E., & Karakas, F. (2016). Spirituality in management. In M. de Souza, J. Bone, & J. Watson (Eds.), *Spirituality across disciplines: Research and practice* (pp. 273-284). Springer International Publishing. https://doi.org/10.1007/978-3-319-31380-1_21
- van Tonder, C. L., & Ramdass, P. (2009). A spirited workplace: Employee perspectives on the meaning of workplace spirituality. *SA Journal of Human Resource Management*, 7(1), 230-241. <https://doi.org/10.4102/sajhrm.v7i1.207>
- Vasconcelos, A. (2018). Workplace spirituality: Empirical evidence revisited. *Management Research Review*, 41(1), 789-821. <https://doi.org/10.1108/MRR-07-2017-0232>
- Wan Yunan, W. R., Ahmad, A., & Omar, Z. (2018). Linking workplace spirituality and employee commitment in Malaysian public service organizations. *Pertanika Journal of Social Sciences & Humanities*, 26(T), 205-220.
- Wang, M., Guo, T., Ni, Y., Shang, S., & Tang, Z. (2019). The effect of spiritual leadership on employee effectiveness: An intrinsic motivation perspective. *Frontiers in Psychology*, 9, 2627. <https://doi.org/10.3389/fpsyg.2018.02627>
- White, H. (1980). The value of narrativity in the representation of reality. *Critical Inquiry*, 7(1), 5-27.
- Wu, W.-L., & Lee, Y.-C. (2020). How spiritual leadership boosts nurses' work engagement: The mediating roles of calling and psychological capital. *International Journal of Environmental Research and Public Health*, 17(17), 6364. <https://doi.org/10.3390/ijerph17176364>

APPENDIX

Appendix A

Transcription symbols

Symbols	Meaning
(<i>words</i>)	Translation from local dialects to the English language/anonymised portion
(... <i>words</i> ...)	Condensed segment of talk
(.)	Clear discernible pause



Legal Literacy for Muslim Converts in Malaysia

Mohd Al Adib Samuri^{1,2*} and Azlan Shah Nabees Khan³

¹*Institute of Islam Hadhari, University Kebangsaan Malaysia, 43650 Bangi, Selangor, Malaysia*

²*Faculty of Islamic Studies, University Kebangsaan Malaysia, 43650 Bangi, Selangor, Malaysia*

³*ARBA Foundation, Putrajaya, 62502, Selangor, Malaysia*

ABSTRACT

Many Muslim converts in Malaysia are not well-informed of their rights and the legal implications of conversion to Islam. Implementing legal pluralism, particularly the different sets of personal laws that apply to Muslims and non-Muslims, sends the converts, their non-Muslim families, and the religious authorities into bitter legal battles whenever an individual converts to Islam. Furthermore, as religious institutions currently offer no legal literacy program, some Muslim converts are unclear regarding the course of action they should take whenever legal issues are involved, especially from the aspects of identity change; civil marriage dissolution; matrimonial properties distribution; child custody and guardianship; determination of child's and the deceased's religion; and inheritance and derivative pension distribution. Therefore, this research explores Muslim converts' perspectives on the need for and development of legal literacy regarding rights and legal implications of conversion to Islam. This study employed in-depth semi-structured interviews with 9 participants who were all Muslim converts. Each interview was transcribed verbatim, and the data were analysed with NVIVO software based on a thematic approach. The research found that all participants unanimously agreed to empower Muslim converts with legal literacy,

considering many are not well-informed of the legal implications of conversion to Islam, despite it directly affecting their personal lives, family dynamic, and the multicultural society in Malaysia.

Keywords: Civil law, conversion Islam, freedom of religion, human rights, Islamic law, legal empowerment, legal literacy, Muslim convert, religious conversion

ARTICLE INFO

Article history:

Received: 30 March 2021

Accepted: 25 June 2021

Published: 13 September 2021

DOI: <https://doi.org/10.47836/pjssh.29.3.12>

E-mail addresses:

al_adib@ukm.edu.my (Mohd Al Adib Samuri)

azlanshahjb@gmail.com (Azlan Shah Nabees Khan)

*Corresponding author

INTRODUCTION

In the Malaysian context, when a person converts to Islam, some legal effects or implications involve Muslim converts, their families, and the Islamic administrative institutions (Khan & Samuri, 2018). However, not many Muslim converts have sufficient information and understand their conversion to Islam's rights and legal implications. To date, the legal literacy program for Muslim converts conducted in any religious institutions on the rights and legal implications of Muslim conversion has yet to be developed. Consequently, some of the Muslim converts are not clear on the course of action that has to be taken when involved in legal issues, especially on the aspect of identity change; civil marriage dissolution and matrimonial properties distribution; child custody and guardianship; determination of child's religious status; determination of the deceased's religion; as well as inheritance and derivative pension distribution (Adil, 2013, 2014; Kusrin 2006; Kusrin & Muda, 2009; Kuek & Tay, 2012; Samuri & Quraishi 2014). More gravely, some Muslim converts do not inform their families or spouses of their conversion, thus causing problems when they pass away, especially concerning the rights to manage the deceased's body and estate and the determination of the converts' religion (Husin & Samuri 2014).

It becomes even more complicated when the majority of the Muslim converts who do not have a legal background or are mere laymen have no clear understanding of the pluralistic legal system in Malaysia.

As a result, they are often confused with the conflict of the jurisdiction of civil and Sharia courts in hearing cases related to converts, especially when initiating appropriate legal action or course of action in courts. Though Article 121(1A) of the Federal Constitution has been amended to ensure that civil courts do not interfere with the jurisdiction of Sharia courts, issues relating to Muslim converts often involve non-Muslims who cannot file their cases in Sharia courts (Wan Muhammad, 2010; Shuaib, 2008). As a result, the conflict of court jurisdictions has resulted in some Muslim converts and non-Muslim families not resolving their cases and claims. On the other hand, if they receive good exposure to the related legislation, their cases and claims can be resolved well in courts with the appropriate jurisdiction and according to the correct legal channels.

Such issues have sparked criticism and dissatisfaction among Malaysian people of various ethnicities and religions (Abdullah, 2007). Moreover, it can potentially spark friction among religious groups, especially when involving sensitive issues such as determining children and the deceased's religion (Guan, 2005). On the other hand, it shows that the understanding and readiness of Muslim converts to manage the legal implications of their conversion to Islam are closely linked to ensuring the peace and stability of the country. When Muslim converts understand the legal rights and implications, they choose the best approach to resolve their case.

It implies that Muslim converts need to be well-exposed and well-informed about legal literacy regarding the rights and implications of their conversion to Islam. Khan and Samuri (2018) argue that this matter can be solved by empowering the converts with legal literacy, particularly on the legal rights and implications of conversion to Islam. However, given the unique context of conversion to Islam in Malaysia, there is still no study that explores the need for Muslim converts to obtain information on the legal implications of their conversion to Islam. Therefore, this article aims to discuss the perspective of Muslim converts in Malaysia regarding the need for legal literacy among converts on their rights, responsibilities, and impacts of conversion to Islam in Malaysia.

THE LEGAL IMPLICATIONS OF CONVERTING TO ISLAM AND THE NEED FOR LEGAL LITERACY

Although there are studies relating to the legal implication of conversion to Islam as carried out by Abdullah (2004), Adil (1994, 1998, 2013, 2014, 2016, 2017a, 2017b), Adil and Saidon (2017), Husin et al. (2016), Kusrin and Hashim (2016), Ibrahim (1990, 1993, 1996, 2000a, 2000b), Mohamed (2010), Rahman (2007), Wan Muhammad (2010), and Yussof (2014), their research focused on the legal implications and conflicts that arose from conversion to Islam as well as the conflict of court jurisdiction, particularly on the aspect of civil marital status, non-Muslim spouses alimony, matrimonial property division, child custody

and guardianship, and determination of child's religion. However, none of these academic writings, explored the perspective of converts on the legal implications and the need to educate the converts to be legal literate as they are designed to discuss legal issues only.

The discussion regarding conversion to Islam in Malaysia is closely related to the provision of Article 11 in the Federal Constitution, which states that each individual is granted the right to freely profess and practise his or her religion, respectively. This provision also indirectly allows each individual to freely convert or embrace other religions, including conversion to Islam if the conversion meets the conditions set out in the Constitution, Federal law, or State law (Husin et al., 2016). However, though each individual is free to convert and practice his or her religion, Article 11(4) of the Federal Constitution restricts the spread of doctrines of other religions to Muslims.

Henceforth, in the context of conversion to a new religion in Malaysia, the conversion usually involves conversion to one religion other than Islam to another religion other than Islam or conversion from a religion other than Islam to Islam. For instance, an individual can convert from Hinduism to Christian, from Buddhism to Hinduism, or from any religion other than Islam to Islam. Nonetheless, it should be emphasised that the freedom to convert to another religion is not given absolutely by the Federal Constitution. Due to the restrictions imposed under Article 12(4) to individuals below

18 years old to convert to a religion other than their parents' religion. Conversion of religion for individuals below 18 years old can only be done with the consent of their parents.

Suppose we delve into the aspect of legal implication. In that case, conversion from a religion other than Islam to another religion other than Islam does not induce complication as all believers of other religions than Islam in Malaysia are subject to the same law, namely civil law. Instead, the legal implications arise when an individual converts from a religion other than Islam to Islam. For example, if the conversion to Islam is done by a Muslim convert who has a civil marriage under Law Reform (Marriage and Divorce) Act 1976 (Act 164), but his or her spouse does not convert to Islam, the husband or wife who converts to Islam is still responsible for fulfilling all obligations of the civil marriage sealed before converting to Islam (Abdullah, 2004).

Before the amendment of Act 164 in 2017, such converts faced confusion in searching for platforms to dissolve, obtain rights and claim ancillary reliefs of their civil marriage. According to the provisions of Act 164, those who convert to Islam are restricted to file for divorce in civil courts. Sharia courts, on the other hand, do not have the jurisdiction to hear claims from non-Muslims. Therefore, some Muslim converts took action by dissolving their civil marriage in Sharia courts. In reality, this does not officially dissolve the marriage under civil law in Malaysia. The problem will become more complicated if the couple

has children below 18 years old and wishes also to convert the children's religion and obtain child custody and guardianship. The legal implications following the conversion to Islam are not limited to the dissolution of civil marriages as discussed above. Nevertheless, it also involve issues of identity change, matrimonial property division, child custody and guardianship, determination of child's religion, determination of deceased's religion, and funeral arrangements, and inheritance and derivative pension claims (Khan & Samuri, 2018).

Therefore, there is a grave necessity to explore the perspectives of Muslim converts regarding the need for legal literacy that can educate them to make good decisions in the matters mentioned above to avoid going into a prolonged legal battle and wasting resources. Legal literacy is vital in community empowerment and as a means of challenging social injustice (Barter, 2020; Vissandjée et al., 2017). According to Grimes (2003), legal literacy can promote a clearer understanding of the rights and responsibilities to the public to obtain better information, access their rights, and fulfil their responsibilities more effectively. It is also known as 'legal empowerment', and people's increased knowledge is the most common positive impact when the government or civil society organisations advance legal empowerment in the community (Goodwin & Maru, 2017). The evidence also suggests that legal empowerment programs can lead to the acquisition of legal remedies and effective conflict resolution.

Previous literature emphasises that legal literacy is suitable for two groups; the first is marginalised and discriminated members of society (Macaulay, 2002). The other group includes teachers and medical practitioners exposed to legal issues (Perry-Hazan, & Tal-Weibel, 2020; Schimmel & Militello, 2007). In this study, Muslim converts in Malaysia may be included in the latter group since they are not marginalised or denied rights. In addition, the legal issues related to them are more personal law-based, including marriage and child custody, rather than involving criminal law or tort liabilities that impact disputing parties. Therefore, when Muslim converts are not exposed to proper legal knowledge, their non-Muslim family members may not receive the rights they deserve or fulfil their legal responsibilities accordingly. In a multicultural society such as Malaysia, such things should be avoided, leading to controversy and conflict. Additionally, this study provides insight into the needs of religious-based groups regarding legal literacy, something that has never been examined in any previous studies.

METHODS

Generally, this article is part of a broader study that revolves around the legal implication of conversion to Islam, which may develop a legal literacy for converts in Malaysia. Data for this study were obtained through in-depth semi-structured interviews, which according to Daymon and Holloway (2002), will assist researchers in obtaining the same type of data from

all interview participants. In addition, interviewing several participants on a common issue or phenomena will provide various, and engaging narratives for the researchers (Darlington & Scott 2002). This method also provides more space for researchers to explore the narratives of research participants regarding their behaviour, experiences, and perspectives towards some issues compared to the focus group interview method (Hansen, 2006).

As suggested by Murray and Sergeant (2012), through in-depth semi-structured interviews, researchers have explored the participants' perspectives through personal stories, styles of language used, continuity of experiences, forms of changes experienced as well as participants' interactions with outsiders in regards to the legal implications of conversion to Islam. The perspectives of each participant also differ according to the social context that is influenced by personal, family, racial, education, and employment background (Daymon & Holloway, 2002). This method assumes, that the participants are experts in their experiences and present their perspectives on specific issues or phenomena being studied (Darlington & Scott 2002). In this research, in-depth semi-structured interviews have been conducted with 10 participants from Malay, Chinese, Indian, and Bumiputera Sabah ethnicities. This group of participants can be divided into two categories. The first category is participants who are active in managing the welfare of Muslim converts, and the second category is newly converted Muslims with cases in courts.

Interview Questions

In conducting the in-depth semi-structured interviews, the researchers have followed the suggestion by Hansen (2006) to use a list of open-ended questions and not to be rigid in following the sequence of the questions in the list. Researchers were already prepared to omit any questions that do not fit certain characters or situations of the participants.

Also, researchers limit the number of questions posed to encourage participants to recount their experiences and perspectives in detail on particular issues or phenomena (Daymon & Holloway 2002).

For the purpose of publishing this article, only 4 out of 10 sets of questions regarding the need and development of legal literacy are stated in Table 1.

Table 1
List of questions

Questions	Justification
Did the participant know or was informed about the legal implications before converting to Islam?	To identify the level of legal literacy of the participants regarding the legal implications of conversion to Islam.
What is the perspective of the participant towards the need for legal literacy before & after converting to Islam?	To identify the participants' perspective on the need for legal literacy for Muslim converts regarding the legal implications of conversion to Islam.
What is the information that must be included in the legal literacy according to the participant's views?	To get suggestions from the participants regarding the contents that needs to be included in the module that will be produced.
What impact does the participant hope for from the construction of legal literacy?	To identify the expected impact by the participants after this is produced and applied.

Profile of Participants

The study participants were selected from various backgrounds to obtain a broader range of perspectives, as suggested by Darlington and Scott (2002, p. 48). For confidentiality purposes, the names of each interview participant are not stated in this study. However, the profiles of the participants are as follows in Table 2.

The snowball method was used to get 9 participants starting by interviewing Participant 1, a Muslim convert with more than 16 years of experience handling the welfare of newly-converted Muslim converts. Another two participants, 4 and 6, are acquaintances of the researcher who had been contacted directly without being referred by other participants. The

researchers had contacted every participant through phone calls to set the date, time, and place agreed by both researcher and participant so to conduct the interview face-to-face.

Table 2

Background of the participants

No	Participant	Race	Former Religion	Category	Year of Conversion to Islam
1.	Participant 1	Indian	Hindu	Muslim Convert, Da'wah activist	1991
2.	Participant 2	Indian	Hindu	Muslim Convert	1991
3.	Participant 3	Indian	Hindu	Muslim Convert, Da'wah activist	1975
4.	Participant 4	Chinese	Buddhist	Muslim Convert, Da'wah activist	2005
5.	Participant 5	Indian	Hindu	Muslim Convert, Da'wah activist	2000
6.	Participant 6	Indian	Hindu	Muslim Convert, Da'wah activist	1986
7.	Participant 7	Bumiputera Sabah	Christian	Muslim Convert, Da'wah activist	1985
8.	Participant 8	Indian	Hindu	Muslim Convert	2012
9.	Participant 9	Indian	Hindu	Muslim Convert	2015

Procedure and Ethics of Interview

Before the interview began, researchers first took the time to get to know the participant to ensure that both parties felt comfortable and trusted each other. Prior to participating in interviews, participants were provided with an overview of the ongoing research and allowed to ask any questions they might have regarding the research, as suggested by Hansen (2006). All participants were assured that they would be treated fairly and be heard without stigma or prejudice towards them. Throughout the interview,

researchers respected the participants' privacy and personal limitations, especially when discussing personal or traumatic experiences (Darlington & Scott, 2002).

In line with the recommendation by Hansen (2006), after explaining the terms of the research confidentiality, the researcher requested the participants to fill out a consent form before the interview session began. This consent form is intended to ensure the confidentiality of the subject's identity. At the same time, the audio recording was carried out for transcription purposes.

Researchers permitted participants to withdraw from the interview at any time without objecting or questioning them. Each participant in this study had given their written consent for the interview session to be audio recorded.

Most interview sessions were conducted either in an office room or in a mosque, which others could not interrupt. A reasonable duration of one hour was taken per interview session in this study compared to the number of questions posed to participants. Because some participants had experienced prolonged legal conflicts in the past, the researchers took precautionary measures by using tender language and giving participants more time to respond and reflect, as suggested by Murray and Sergeant (2012). During this study, some interviewees answered spontaneously, whereas others took their time to answer thoughtfully.

RESULTS

The Need for Legal Literacy

All participants in this study agree that providing legal literacy for Muslim converts, particularly on legal rights and implications of conversion to Islam, is a necessity as it is currently not available in the country. The reason is that the legal literacy model focuses on increasing people's awareness of their rights, particularly vulnerable individuals (Hasan, 1994). For example, Participant 1 stated, "Must have a legal literacy so that they understand what is happening." When being asked about the need for legal literacy for converts, Participant 5 responded as:

"This one I agree! No need to talk about other converts, I myself had no one to inform me. But we must also need to have general knowledge because we at least know, how about some people... because we know that not all Muslim converts are educated people....".
(Participant 5)

The need for legal literacy for converts is further strengthened when several participants, such as Participants 3, 4, 5, 6, and 7, who actively handle the welfare of converts through Islamic organisations, admitted that they are obfuscated and confused when facing legal issues that the converts are dealing with. For example, Participant 3, with more than 26 years of experience in managing the converts' affairs, stated: "since during my time until now, there have been a lot of changes happening, we also don't even know about this law". Participant 7, a president of an Islamic organisation admitted: "even before this issue, we also don't [clear]. Hazy. This matter [legal issues] is not clear. We only then understand this issue. And we can advise our new brothers and sisters [on what should be done]."

According to some participants, legal literacy is vital to provide legal knowledge and awareness for converts that can guide them to choose the correct cause of action, as purported by Participant 1. According to him, if the converts face legal issues after their conversion to Islam, they have to engage directly with lawyers, which would cost them expensive legal fees. These

converts voiced a view similar to that of Schimmel and Militello (2007) and Tie (2014), in that legal literacy tends to avoid litigation when possible since litigation can be expensive, distracting, polarising, and time-consuming. In addition, legal literacy enables individuals to avoid unconstitutional actions and bring violations of the law to the attention of the relevant authorities. Due to insufficient information about the legal rights and implications after conversion to Islam, some converts were dissatisfied with the Islamic authorities. Therefore, they did not inform them about the legal implications of their conversion. It is described by Participant 5 as follows:

“...he said, ‘why before I converted to Islam you did not say... why are you not clear to us that I cannot revert to my former faith’ ...”. (Participant 5)

The Approach of Legal Literacy

The participants in this study suggested that the approach for the legal literacy for Muslim converts emphasises the aspects of legal remedies and rights and responsibilities of the converts. Thus, it matches claims made by Zariski (2014), who asserted that legal literacy empowers people to make critical judgments about the content of the law and its processes and take appropriate actions in response to issues related to it. In this study, Participants 1, 3, 6, and 7 suggested that legal literacy focuses on legal remedies for issues related to converts, as asserted by Participant 1:

“...if this legal literacy exists, I believe there are many things that can be solved well, if the converts have a legal understanding, it will be easy for us to teach them. You may separate with your wife, but you still need to pay alimony, you still need to take care of your child, right? For inheritance, even if cannot be inherited or bequeathed, you can give as hibah or present, you can donate, but not given as inheritance”. (Participant 1)

In addition, according to Participants 6 and 7, the rights of the converts and their responsibilities towards their non-Muslim families must also be given attention to so that the rights of their non-Muslim families are not neglected after the conversion to Islam. By doing this, Hak (2012) contends that Shariah principles are not violated if, after a divorce, the ex-wife is facing hardship and is unable to support herself. As an example, Participant 7 stated:

“We have to make sure, that our new brothers and sisters know their rights, and that they can balance between claiming the rights with the Maqasid al-Shariah (the objective of Sharia), means the well-being of the spouses or with their initial family and community...”. (Participant 7)

Moreover, Participant 7 emphasised that in addition to discussing the aspect of legal remedies, this legal literacy must also highlight the compassion and benevolence

of Islam. The problematic situation in Malaysia could be solved by building trust, respect, and compassion between the two parties, as argued by Rahman and Khambali@Hambali (2013). For example, Participant 7 expressed the suggestion as below:

“...there are many more things, a lot of aspects that must be understood by our new brothers and sisters when they convert to Islam.... The beauty of Islam is seen when he or she converted, the meanings that Islam does not oppress people, does not abuse spouse and does not cause disorder among the community, right? That aspect must be included, the aspect of the compassion of Islam”. (Participant 7)

Expected Impacts of the Legal Literacy

The participants in this study expect that the implementation of legal literacy will strengthen the management of the converts' affairs, produce legally literate converts, reduce legal disputes due to conversion to Islam, and improve the perception of the multicultural community towards Islam. There is no doubt that the complex legal issues related to Muslim converts affect Malaysian multicultural society, as Samuri and Khan (2020) argue, and how these issues are handled could significantly affect society. The positive impact that Participants 1 and 4 from the legal literacy to converts is that the management of the converts' affairs will be strengthened. It is depicted by Participant 4 as follows:

“It is hoped that this legal literacy will be able to strengthen the management of converts' affairs at various levels. Not only in NGOs, but also at the individual level, and mosque level. Also, Participant 6 argued that legal literacy would assist the parties involved in managing the legal issues of the converts by regulating the conflict resolution approach. According to him, we can regulate, these problems can be solved easily, as there is a reference to refer to, what is the step, with a measuring stick, and parameters, very helpful”. (Participant 4)

Participants 1 and 9, on the other hand, were of the view that the converts will be more legally literate, more prepared with the legal implications due to their conversion to Islam, and more responsible with the decisions they make. Khan & Samuri (2018) and Baharudin & Said (2017) discussed that a convert aware of the law could choose a legal avenue that is beneficial to himself or his non-Muslim family. For example, Participant 1 mentioned:

“...the converts actually also know what they are doing, the decision they make. The implications faced and no room for any conflict. They know, the law of cause and effect, right? The damage and advantage to be gained or the loss to be faced in order for us to choose this religion”. (Participant 1)

Similar to Participant 1, Participant 9, who has experience in facing legal issues involving dissolution of civil marriage, division of matrimonial property, claims of child custody and guardianship, as well as determination of the child's religion, asserted, "They [converts] will be more aware and more knowledgeable, and whatever that is coming, they will be well-prepared."

According to Participants 1, 2, 3, and 9, providing legal literacy to converts will help to reduce the legal issues arising from conversion to Islam. For example, Participant 1 said, "can reduce unnecessary tension." While Participant 9 briefly responded, "not to be like me", in referring to himself that was affected by the legal implications that arose between him and his family members, as well as the society after his conversion to Islam.

DISCUSSION

Although several previous studies have discussed the legal implications of conversion to Islam in Malaysia (Abdullah, 2004; Adil, 1994, 1998, 2013, 2014, 2016, 2017a, 2017b; Adil & Saidon, 2017; Ibrahim, 1990, 1993, 1996, 2000a, 2000b; Husin et al., 2016; Kusrin & Hashim 2016; Mohamed, 2010; Rahman, 2007; Wan Muhammad, 2010; Yusof 2014), those studies did not explore the need for legal empowerment or legal literacy for those affected in religious conversion. In addition, previous research regarding the Muslim converts' learning experience focused on learning the foundations of Islam

(Alkouatli, 2018; Challet, 2015; Speelman, 2018), but not on legal issues that arise due to conversion to Islam. Moreover, the implications of embracing Islam only occur in Malaysia. They are not experienced in other countries, given legal conflicts between Islamic and civil laws, affecting Muslim converts (Samuri et al., 2018). Therefore, this study can fill the research gap on the perspectives of the converts regarding the need for legal literacy to help the converts easily understand the complex legal implications due to conversion to Islam and guide them in choosing the proper legal remedies.

Moreover, the study found that the converts were not clearly and systematically informed of the legal implications of conversion to Islam by the Islamic religious authorities in Malaysia. The previous studies that were conducted on Islamic authorities' management of Muslim converts mainly discussed the teaching of converts, dealing with converts' welfare, *dakwah* activism, and administration tasks (Abu Bakar & Ismail, 2018; Ibrahim et al., 2019; Shahrudin & Muhamat-Kawangit, 2014; Samuri & Quraishi, 2014). It appears that the religious authorities do not give Muslim converts enough information before or after they convert to Islam. It has caused the converts to be unclear about the cause of action that needs to be taken, which has resulted in them facing lengthy legal battles. Consequently, it affects not only the lives of the converts and their non-Muslim families and can potentially spark tension among the multicultural society in

Malaysia. Henceforth, as supported by all the participants in this study, there is a need to empower the converts with legal literacy regarding the legal rights, responsibilities, and implications of conversion to Islam.

As in the context of this study, through the provision of legal literacy, it can assist the converts in resolving legal conflicts that they are facing by proposing the right remedy in the proper court. Legal literacy for Muslim converts should be uniformly implemented in all states' religious departments throughout Malaysia or privately initiated by Islamic organisations. In addition, religious authorities can develop a particular module to train officers to provide information to Muslim converts on topics related to legal implications of conversion to Islam such as change of identity; dissolution of civil marriage; division of matrimonial property; child custody and guardianship; determination of child's religion; determination of deceased's religion; as well as distribution of inheritance and derivative pension (Samuri & Khan, 2020). A framework for this module should be based on civil and Islamic law in Malaysia, with a practical action plan. It can be implemented by the converts or by government agencies. Even though religious officers do not possess formal legal training, these training modules can help to give them the knowledge they need to perform their duties better and thus benefit the converts and society at large.

CONCLUSION

In Malaysia, there are six identified legal implications as a result of converting to Islam which are change of identity; dissolution of civil marriage; division of matrimonial property; child custody and guardianship; determination of child's religion; determination of the deceased's religion; and distribution of inheritance and derivative pension. This study found a need for legal literacy for converts regarding legal rights, responsibilities, and implications arising from their religious conversion. Legal literacy is an important initiative to respond to the need to educate and guide converts to understand the legal implications caused by conversion to Islam. This study proposed that converts might avoid any possible legal dispute by equipping themselves with legal knowledge and resolving the family conflict effectively. This legal empowerment is benefitting Muslim converts and people of other faiths in Malaysia by upholding justice through out-of-court settlements such as mediation.

On the other hand, legal literacy will also assist the Malaysian religious authorities and the Islamic organisations in understanding the legal implications of conversion to Islam before advising any interested individual before his/her religious conversion. Thus, well-informed individuals may convert to Islam with an understanding and primary level of legal knowledge that may avoid any possible issues that might trigger the sensitivity of the multicultural

society in the future. Beyond Malaysia, this study illustrates how legal literacy can empower individuals and communities to understand their rights and responsibilities due to his/her religious conversion.

ACKNOWLEDGMENTS

This research is funded by Universiti Kebangsaan Malaysia, GUP-2016-017. The authors want to thank CRIM UKM and the Faculty of Islamic Studies, Universiti Kebangsaan Malaysia, for the awarded grant. They also would like to express their gratitude to all States' Islamic departments and Islamic organisations which assisted the research.

REFERENCES

- Abdullah, N. (2007). Legislating faith in Malaysia. *Singapore Journal of Legal Studies*, (Dec), 264-289. <http://law.nus.edu.sg/sjls/articles/SJLS-Dec-2007-264.pdf>
- Abdullah, N. C. (2004). *Conversion to Islam – Effect on status of marriages and ancillary reliefs*. International Law Book Services.
- Abu Bakar, S. A., & Ismail, S. Z. (2018). Pengurusan muafak di Malaysia: Kerjasama dinamik antara agensi kerajaan dan bukan kerajaan [Management of Muslim converts in Malaysia: Dynamic cooperation between government and non-government agencies]. *AL-ABQARI: Journal of Islamic Social Sciences and Humanities*, 16, 133-155. <https://oarep.usim.edu.my/jspui/handle/123456789/5212>
- Adil, M. A. M. (1994). Seksyen 51 Akta Membaharui Undang-undang (Perkahwinan dan Perceraian) 1976: Kesan dan implikasinya terhadap undang-undang keluarga Islam [Section 51 of the Law Reform (Marriage and Divorce) Act 1976: Effects and implications on Islamic family law]. *Kanun Jurnal Undang-undang Malaysia*, 6(3), 7-15.
- Adil, M. A. M. (1998). Kesan dan implikasi pertukaran agama dalam perundangan Malaysia [Effects and implications of religious conversion in Malaysian law]. In A. H. Buang (Ed.), *Undang-undang Islam di mahkamah-mahkamah syariah di Malaysia* (pp. 31-43). Universiti Malaya.
- Adil, M. A. M. (2013). *Conversion of the child: The quest for a just solution*. International Institute of Advanced Islamic Studies.
- Adil, M. A. M. (2014). *Penentuan agama dan hak penjagaan kanak-kanak menurut undang-undang Islam* [Determination of religion and custody of children according to Islamic law]. Jabatan Kemajuan Islam Malaysia.
- Adil, M. A. M. (2016). Custodial issues arising upon the conversion of one spouse to Islam. *Islam and Civilisational Renewal*, 7(3), 415-418.
- Adil, M. A. M. (2017a). Custody and religion of minors in Malaysia. *Islam and Civilisational Renewal*, 8(2), 272-274.
- Adil, M. A. M. (2017b). *Pindaan Akta Memperbaharui Undang-Undang (Perkahwinan Dan Perceraian) 1976 (Akta 164) (Pindaan 2017) dan implikasinya terhadap bidang kuasa mahkamah syariah* [Amendment of the Law Reform (Marriage and Divorce) Act 1976 (Act 164) (Amendment 2017) and its implications on the jurisdiction of syariah courts]. International Institute of Advances Studies (IAIS) Malaysia.
- Adil, M. A. M., & Saidon, R. (2017). Religion as a determinant of child welfare in custody cases in Malaysia and classical Islamic law: A comparative overview. *Islam and Civilisational Renewal*, 8(1), 35-46.
- Alkoutli, C. (2018). Pedagogies in becoming Muslim: Contemporary insights from Islamic traditions on teaching, learning, and developing.

- Religions*, 9(11), 367. <https://doi.org/10.3390/rel9110367>
- Baharudin, N. I., & Said, N. L. M. (2017). Method of resolving inheritance problem of new muslim converts in Malaysia. *Islāmiyyāt*, 39(1), 47-56. <http://dx.doi.org/10.17576/islamiyyat-2017-3901-06>
- Barter, F. (2020). Lessons in legal literacy: Democratizing legal critique as a means of resisting racial injustice. *Law, Culture and the Humanities*, 16(3), 365-378. <https://doi.org/10.1177/1743872117707620>
- Challet, A. (2015). Thinking outside the mosque: On learning to be Muslim in America. *Boom: A Journal of California*, 5(4), 104-108. DOI: 10.1525/boom.2015.5.4.104.
- Darlington, Y., & Scott, D. (2002). *Qualitative research in practice: Stories from the field*. Allen & Unwin.
- Daymon, C., & Holloway, I. (2002). *Qualitative research methods in public relations and marketing communications*. Routledge.
- Goodwin, L., & Maru, V. (2017). What do we know about legal empowerment? Mapping the evidence. *Hague Journal on the Rule of Law*, 9(1), 157-194. <https://doi.org/10.1007/s40803-016-0047-5>
- Grimes, R. (2003). Legal literacy, community empowerment and law schools — Some lessons from a working model in the UK. *The Law Teacher*, 37(3), 273-284. <https://doi.org/10.1080/03069400.2003.9993135>
- Guan, Y. S. (2005). Managing sensitivities: Religious pluralism, civil society and inter-faith relations in Malaysia. *The Round Table*, 94(382), 629-640. <http://dx.doi.org/10.1080/00358530500303700>
- Hak, N. A. (2012). Rights of a wife in the case of conversion to Islam under family law in Malaysia. *Arab Law Quarterly*, 26(2), 227-239. <https://doi.org/10.1163/157302512X629214>
- Hansen, E. C. (2006). *Successful qualitative health research: A practical introduction*. Allen & Unwin.
- Hasan, F. R. (1994). Limits and possibilities of law and legal literacy: Experience of Bangladesh women. *Economic and Political Weekly*, 29(44), WS69-WS76.
- Husin, K., & Samuri, M. A. A. (2014). Kerahsiaan kemasukan Islam: Isu undang-undang kes pemeluk Islam saudara baru di Malaysia [Secrecy in conversion to Islam: Legal issues in cases of conversion to Islam in Malaysia]. *Kanun (Jurnal Undang-Undang Malaysia)*, 26(1), 1-25.
- Husin, K., Samuri, M. A. A & Muda, M. Z. (2016). *Selepas syahadah: Kewajipan pemeluk Islam [After testimony of faith: The duty of notification of conversion to Islam]*. UKM Press.
- Ibrahim, A. (1990). The need to amend section 51 of the Law Reform (Marriage & Divorce) Act, 1976. *The Malayan Law Journal*, 1, ivii.
- Ibrahim, A. (1993). Dissolution on ground of conversion to Islam. In *Malaysian Law News* (pp. 29-34). Universiti Malaya.
- Ibrahim, A. (1996). Pertukaran agama Islam. In A. M. Yaacob & S. Othman (Eds), *Tinjauan kepada perundangan Islam* (pp. 41-78). Institut Kefahaman Islam Malaysia.
- Ibrahim, A. (2000a). Effect of conversion on marriage – Section 51 of the Law Reform (Marriage and Divorce) Act 1976. In *Administration of Islamic law in Malaysia* (pp. 207-226). Institut Kefahaman Islam Malaysia.
- Ibrahim, A. (2000b). Conversion to and from Islam. In *Administration of Islamic law in Malaysia* (pp. 325-358). Institut Kefahaman Islam Malaysia.
- Ibrahim, A. Q., Ab Rahman, R., & Zakaria, M. B. (2019). Role Selangor Islamic Religious Council (MAIS) and Selangor Islamic Religious Department (JAIS) on development and social

- welfare of Islamic society in Selangor. *Asian Journal of Civilizational Studies*, 1(1), 55-66.
- Khan, A. S. N. & Samuri, M. A. A. (2018). *Natijah syahadah: Impak pemeluk Islam di sisi undang-undang* [The implication of testimony of faith: The legal impact of conversion to Islam]. UKM Press.
- Kuek, C. Y., & Tay, E. S. (2012). Unilateral conversion of a child's religion and parental rights in Malaysia. *Singapore Academy of Law Journal*, 24(1), 92-112.
- Kusrin, Z. (2006). Conversion to Islam in relation to divorce in Malaysian family law. *Islam and Christian-Muslim Relations*, 17(3), 307-315.
- Kusrin, Z. M., & Hashim, N. M. (2016). Pemeluk Islam pasangan perkahwinan sivil: Isu berbangkit dan cadangan penambahbaikan menurut undang-undang Malaysia [The conversion to Islam of civil marriage couples: Issues and recommendation under Malaysian law]. *Jurnal Kanun*, 28(1), 16-42.
- Kusrin, Z. M., & Muda, M. Z. (2009). Conversion of minors to Islam in Malaysia. *Religion and Human Rights*, 4(2-3), 107-119. <https://doi.org/10.1163/187103109X12471223630874>
- Law Reform (Marriage and Divorce) Act 1976 (Act 164). <https://lom.agc.gov.my/act-detail.php?type=principal&lang=BI&act=164>
- Macaulay, F. (2002). Taking the law into their own hands: Women, legal reform and legal literacy in Brazil. In N. Craske & M. Molyneux (Eds.), *Gender and the politics of rights and democracy in Latin America* (pp. 79-101). Palgrave Macmillan UK. https://doi.org/10.1057/9781403914118_4
- Mohamed, A. A. (2010). Converting to Islam: Jurisdiction of court to dissolve non-Muslim marriage. *Shariah Law Report*, 2, 19-28.
- Murray, M., & Sargeant, S. (2012). Narrative psychology. In D. Harper, A. R. Thompson (Eds.), *Qualitative research methods in mental health and psychotherapy: A guide for students and practitioners*. Wiley-Blackwell.
- Perry-Hazan, L., & Tal-Weibel, E. (2020). On legal literacy and mobilization of students' rights from a disempowered professional status: The case of Israeli teachers. *Teaching and Teacher Education*, 90, 103016. <https://doi.org/10.1016/j.tate.2020.103016>
- Rahman, N. A. (2007). Hak kekeluargaan pasangan berlainan agama [Family rights of couples of different religions]. In A. H. Buang (Ed), *Undang-undang Islam di Malaysia: Prinsip dan amalan*. Universiti Malaya Press.
- Rahman, N. F. A., & Khambali@Hambali, K. M. (2013). Religious tolerance in Malaysia: Problems and challenges. *International Journal of Islamic Thought*, 3, 81-91. <https://doi.org/10.24035/ijit.3.2013.007>
- Samuri, M. A. A., & Khan, A. S. N. (2020). Legal implications of conversion to Islam on civil marriage: Narrative of converts in Malaysia. *Islāmiyyāt*, 42(2), 103-111. <https://doi.org/10.17576/islamiyyat-2020-4202-10>
- Samuri, M. A. A., & Quraishi, M. (2014). Negotiating apostasy: Applying to "Leave Islam" in Malaysia. *Islam and Christian-Muslim Relations*, 25(4), 507-523. <http://dx.doi.org/10.1080/09596410.2014.907054>
- Samuri, M. A. A., Khan, A. S. N., & Muhamat, R. (2018). Naratif mualaf dan aktivis dakwah terhadap dasar penamaan saudara baru [Narratives of Muslim Converts and Muslim Preachers on Muslim Naming Policy]. *International Journal of Islamic Thought*, 13(1), 52-68. <https://doi.org/10.24035/ijit.13.2018.006>

- Schimmel, D., & Militello, M. (2007). Legal literacy for teachers: A neglected responsibility. *Harvard Educational Review*, 77(3), 257-284. <https://doi.org/10.17763/haer.77.3.842n787555138746>
- Shaharuddin, S. A., & Muhamat-Kawangit, R. (2014). Sikap pembelajaran terhadap pencapaian kursus Fardhu Ain dalam kalangan mualaf Cina di Jabatan Agama Islam Daerah Kajang [Learning attitude toward Fardhu Ain course achievements among Chinese Mualaf at Jabatan Agama Islam, District of Kajang]. *Islamiyyat*, 36(2), 97-102. <https://ejournal.ukm.my/islamiyyat/article/view/7716/3097>
- Shuaib, F. S. (2008). *Powers and jurisdiction of Syariah courts in Malaysia* (2nd ed.). LexisNexis.
- Speelman, G. (2018). Learning religion how to 'become' a Muslim: A learning environment for converts. In U. Winkler & H. Jensen (Eds.), *Shifting locations and reshaping methods: Methodological challenges arising from new fields of research in intercultural theology and interreligious studies*. LIT.
- Tie, F. H. (2014). A study on the legal literacy of urban public school administrators. *Education and Urban Society*, 46(2), 192-208. <https://doi.org/10.1177/0013124512446220>
- Vissandjée, B., Short, W. E., & Bates, K. (2017). Health and legal literacy for migrants: Twinned strands woven in the cloth of social justice and the human right to health care. *BMC Int Health Hum Rights*, 17, 10. <https://doi.org/10.1186/s12914-017-0117-3>
- Wan Muhammad, W. M. (2010). Shariah courts: Conflicting jurisdiction in conversion cases. *Shariah Law Report*, 4, 83-105.
- Yussof, S. A. (2014). Conversion issues in Malaysia: A challenge to religious and racial harmony. *Islam and Civilisational Renewal*, 5(3), 446-449.
- Zariski, A. (2014). *Legal literacy: An introduction to legal studies*. Athabasca University Press.

Case Study

Building Social Resilience after the 2014 Flood Disaster

Sarina Yusoff* and Nur Hafizah Yusoff

Centre for Research in Development, Social and Environment, Faculty of Social Sciences and Humanities, Universiti Kebangsaan Malaysia, 43600 Bangi, Selangor, Malaysia

ABSTRACT

The 2014 flood disaster has brought physical destruction, damage as well as social disruption that caused normal life to become less stable. A state of social equilibrium needs to be restored through effective restoration solutions to normalise life after the disaster. This qualitative research aims to identify two main issues, namely social disruption and social resilience, by utilising a case study of the 2014 flood disaster in Hulu Dungun, Terengganu. A total of 15 victims were selected using the purposive sampling method based on a set of defined criteria—the data collection method comprised of in-depth interviews and non-participant observation. The data were analysed through thematic analysis techniques. The results showed that the disruption suffered by the victims included disruption of social roles, the uncertainty of employment, instability of social routine, and collective trauma. However, the availability of social resilience had enabled the victims to rebuild their lives after flood disasters and restore the ‘normal’ or ‘stable’ situations of

social equilibrium. The research is expected to contribute to environmental sociology that has yet to receive widespread attention from sociological researchers in Malaysia. This research is a meaningful effort towards promoting and increasing the environmental sociology study, which to date, remains disoriented.

ARTICLE INFO

Article history:

Received: 24 February 2021

Accepted: 22 June 2021

Published: 21 September 2021

DOI: <https://doi.org/10.47836/pjssh.29.3.13>

E-mail addresses:

yna_sarena@yahoo.com (Sarina Yusoff)

nur_hafizah@ukm.edu.my (Nur Hafizah Yusoff)

*Corresponding author

Keywords: Flood disaster, recovery, social disruption, social resilience, victims

INTRODUCTION

Natural disasters are the manifestations of climate change that occur to the environment and humans and can cause floods, tsunamis, earthquakes, hurricanes, epidemics and other calamities. Malaysia is more vulnerable to flood nowadays due to the development activities that do not emphasise the environmental sensitivity aspects. Flood events have affected the lives of every individual involved as they destroyed their home, properties, and livelihoods (Isahak et al., 2018), and restrained them from pursuing normal social life as before. Destruction is broader than damage because it involves significant and financial loss (Palekiencè et al., 2014), as well as causing social disruption (Vollmer, 2013). Jurjanos and Seekamp (2018) claimed that ugliness and feelings towards the social environment are essential for community resilience. Neglecting these two can weaken a community's resilience to face any form of disaster. The world has recently been enmeshed in a significant epidemic that stretches to all walks of life. As we know through the efforts of all parties in handling and curbing the pandemic of Covid-19, the concerted efforts and social solidarity to an end are required to achieve two main objectives: to get the country back to normalcy or normalise the disruption.

Similarly, this research focused on normalising disruption in the little scope, flood disaster issues in 2014 on the East Coast of Peninsular Malaysia. In general, floods are a common natural phenomenon in Malaysia (Alias et al., 2021). Nevertheless,

the 2014 flood disaster has caused destruction and physical damage to the environment. That particular phenomenon caused losses of RM2.85 billion, killed 25 lives, and involved approximately 500,000 victims in Kelantan, Terengganu and Pahang. The number of victims involved is the highest compared to a series of flood disaster incidents in Malaysia from 1965 to 2014. In addition, 2014 marked as a year when East Coast Malaysia re-experience a big flood after about 43 years since 1971 (Elfithri et al., 2017). An estimated 300,000 residents in East Coast state, including Johor and Perak, were affected by the disaster. Moreover, 1500 residents have lost their homes, and the impact of damage and destruction of public assets reached up to RM200 million. The catastrophic event of the 2014 floods disaster has disrupted everyday life, caused chaos, and destroyed the social structures of at-risk communities, especially among the flood victims (Yusoff et al., 2018).

LITERATURE REVIEW

Disaster is a severe disruption to the functioning of a community or society that involves widespread loss and impact on the people at any scale, materials or environment losses beyond the ability of affected communities to overcome with their resources (Bănică et al., 2020). Two aspects of this definition are highlighted in this research. First, the emphasis of the definition is on a severe disruption. Thus, one can expect a catastrophic event to be something that significantly changes everyday life. It is an event that most affected communities

will feel as it removes them from ordinary life. Second, the differences are defined by the occurrence of extraordinary disasters. Thus, disaster is considered an event beyond the community's ability to deal with the consequences by using all their resources.

In order to know the concept of social disruption in the context of disaster, this research requires several interdisciplinary approaches. Social disruption is a concept used in sociology to discover the social changes, dysfunctions or disintegrations in a community (Vollmer, 2013). Disasters cause social disruption and impede the provision of resources necessary for community survival and well-being (Norris et al., 2009). Sources intended are food, shelter or housing, medical treatment, employment, social support and emotional support. Thus, a policy has been established in Malaysia around 1997 known as *Arahan No. 20: Dasar dan Mekanisme Pengurusan Bencana Negara* to manage disasters. Floods can cause physical damage and destruction, disrupt the social equilibrium from stable to unstable, as well as weaken the human element.

In relation to that, the process for normalising disruption from unstable to stable, or in the other words, to reinstate the life of victims as usual for at least before the occurrence of the flood disaster desperately required strenuous effort involving social support from all stakeholders. Disaster management is a process that requires individuals, groups and communities to manage or improve the risks, dangers and effects of disasters (Tan, 2013). Many

disruptions happen and draw little attention beyond people's situations, thus requiring practical efforts in building social resilience.

In the context of confronting disruptions as the nexus of social situations, when flood disaster occurs suddenly and unexpectedly, a less 'stable' situation arises and demands the social structure adjustment and social changes within the community. It is to ensure that the state of social equilibrium can be restored in a society that has been affected by the disasters, and restoring society's stability as usual. The social structure of society has been equipped with various social institutions that function to maintain their stability. According to Burnes (2009), in a social equilibrium, changes still happen but are relatively stable. In short, disaster is disruptive and requires different adjustments in terms of scale, scope and time.

Whilst the victims who lost their homes need financial support. They also need psychological support to reduce their trauma. The victims go through a chain of 'loss' when the disaster ripped their home, source of income and led to trauma that will further strengthen the crisis (McDermott & Cobham, 2012). Essentially, no matter how serious the injuries, losses or destructions in a disaster situation, the victims will feel stressed, worried and depressed. Their suffering may lead to emotional and psychosocial stress problems that can disrupt their resilience to rise again in building new lives after the flood. This situation can affect their well-being, safety and vulnerability. Meanwhile, significantly

increased social support is needed to address loss and trauma from disaster, lack of accessibility, disruption or damage after a disaster (Zakour, 2010).

According to Toland and Carrigan (2011), social resilience is an attitude of resilience and social protection against adverse events. Social resilience also refers to positive adjustment or maintaining social and mental stability despite difficulties in more stressful situations (Morton & Lurie, 2013). Generally, vulnerability refers to the inability to anticipate, cope with, prevent, and recover from the effects of disasters (Madhuri et al., 2014). Wood et al. (2010) stated that social vulnerability is context-dependent and often associated with the degree of exposure to extreme events and the preparedness and resilience of individuals and social groups. However, social vulnerability and social resilience represent a different point of time in the stage of the disaster.

Social vulnerability is descriptive of conditions before a disaster happen. These conditions are continually changing. Safe conditions can deteriorate, and unsafe conditions can be removed or managed. Social resilience refers to the response and recovery process after a disaster has happened. It is applied most directly to the recovery process because it entails a return to pre-disaster conditions or something better. It also helps social systems to prepare for disruptions, cope with and recover if they occur, and adapt to new context conditions. Social vulnerability also indicates a condition that makes

victims vulnerable to flood disasters. It requires them to be physically, socially and emotionally resilient to recover.

Although floods are a 'normal' phenomenon, this situation remains a public concern. The concern is basically because the flood disaster is an incident and situation not desired by all parties. The flood disaster causes physical damage and destruction, and disrupts social stability, and weakens the humanitarian element. Disasters also attempt to threaten survival, causing 'pain' in the form of emotional, physical, rational, and spiritual, and triggering conflict in all levels of the social systems of society (Schlehe, 2010). In addition, human is the victims of the most significant impact in the cycle of catastrophic events from beginning to end. The impact of the flood disaster on the physical aspects may be reversible. However, the effects are pervasive on human and humanitarian aspects.

MATERIALS AND METHODS

This research was conducted by qualitative methods using case study design through in-depth interview and non-participant observation techniques. Qualitative research using case study design is an in-depth exploratory study conducted on a limited system such as activities, events, processes or individuals based on extensive data collection (Creswell, 2014). Case studies are appropriate to answer questions about the 'how' and 'why' of a phenomenon being studied (Yin, 2014). A total of 15 victims facing the 2014 flood disaster were selected from three villages in Hulu Dungun, namely

Kampung Minda, Kampung Kuala Jengai, and Kampung Pasir Raja. The results were compiled through the practical experience of the victims, which was conducted in 2016.

Hulu Dungun is located in the Dungun district, an inland area called 'upstream' by the locals. It is also a flood-prone area. The rationale for selecting the three villages is because of the villages that were classified as the most vulnerable to danger, risk and flood disaster. Every year, the villages will be flooded every time the monsoon season arrives. During the 2014 flood disaster, almost 80% of Hulu Dungun was hit by floods caused by water overflow in Sungai Dungun. A total of five victims for each village through the purposive sampling method were selected to gather more in-depth information. The informants selected consisted of victims aged between 16 to 70 years, who were voluntary and comfortable sharing their experiences, appreciation, and empirical perceptions throughout the events.

In-depth interview and non-participant observation methods were selected in this research to obtain data and information. In most qualitative studies, the data will be collected through the interview method. The non-participant observation was conducted to enable researchers to observe the study area's situation, behaviour, and attitude. Data and information are analysed using thematic analysis methods to identify and report the pattern of a theme obtained (Liamputtong, 2010). Qualitative data and information were studied descriptively and then presented in the form of descriptions, charts, diagrams, and tables to facilitate the reporting activities of the findings.

RESULTS

The research found that the victims were encountered with disruption of social roles, the uncertainty of employment, instability of social routine, and collective trauma.

Disruption of Social Roles

The 2014 flood disaster caused the victims to face disruption of their social roles. The change in social roles encountered was due to the everyday life changed into less stable due to the disasters, affecting the victims in both genders. For example, a female was the gender group that received new daily role or responsibility changes after the disaster. A 26 years old victim stated that:

We as a woman have difficulties after the flood. We have to take care of our kids and help the family to reconstruct the ruined. We also have a problem supplying drinking water, and we have to walk a long way in rainy weather to fetch clean water. Not only that, we have to warm water to these pans to shower our babies and kids. We had no such problems before the flood disaster.

According to Moreno and Shaw (2018), women are the vulnerable groups that need to be given the same support as children, the elderly and people with disabilities when disasters strike. However, the research found that the disruption of social roles also occurred among men. For example, one victim, a 42 years old man, reported:

It has been a long time when we are trying to re-construct our home. We like to get back to our job routine. But,

unfortunately, we cannot do agriculture and other jobs before building our house back to normal.

Although the disruption of social roles did not last long, the situation could threaten the dynamics of family relationships. Disruption of social roles was found to cause emotional impact when the victims had to do homework that he or she had never done before. The situation, in turn could affect the harmony and peace of a family. Furthermore, current social issues faced by the victim's family, such as financial problems, could exacerbate the existing situation and causing stress. This situation could also increase the social vulnerability and challenge the social resilience of victims to rising and recovery.

Uncertainty of Employment

This research found that the floods have brought disruption by the uncertainty of employment. The floods have caused destruction and physical damage to groceries, livestock, crops and numerous others, which were the source of income for the victims. Thus, victims suffered from the loss of economic sources, especially jobs related to natural resources. A study by Wilson et al. (2018) on the Hu communities in Scihuan, China, found that economic aspects strongly influence community resilience to disasters. One of the male victims aged 43 explained:

Most of us catch fish. We take wages to make some fish-based products like *keropok lekor*, *belacan*, *budu*, *ikan*

kering and any types of crackers or chips. It was our seasonal job. However, they are ruined. We need jobs to get back to our everyday and ordinary life. We have some skills, but the situation is not prepared for using the skills and restoring the job.

Another victim, a 47 years old single mother, reported the situation after the flood disaster as follows:

My house was destroyed. Many items were destroyed because they could not be saved. I am a single mother. No one came to help us at that time when the flood happened suddenly. Only me and my kids. Everyone needed to save themselves and their belongings from the flood. After that, I had no hope and motivation to go back and continue. I became unemployed.

The same thing also happened to the plight of farmers and ranchers who have to deal with the loss of jobs and sources of income. One of the victims, a 56 years old woman, has associated the job loss with emotional impact. It is elucidated as "farmers have to bear losses when their crops were destroyed. Ranchers were facing the loss of livestock. They lost money and their job. They were depressed when they could not work."

The 2014 flood disaster had a very significant impact as the victims had to deal with employment disruption. Undoubtedly, flood disaster affects the lives of all groups regardless of the economic activities carried out. It also affects the reduction of

income and increased poverty, especially in rural areas. Meanwhile, job loss and deteriorating sources of income could also leave a psychosocial effect on individuals. It is disasters that cause the communities especially the victims to be uncertain, thus affecting their ability to move forward and decrease their motivation. The factors contributing to psychological problems among flood disaster victims are limited economic resources (Wilson et al., 2018) due to the high needs among the victims involved.

Instability of Social Routine

The studies have found that flood disasters have caused the victim's daily social routine to become erratic and less stable. In relation to this, one victim aged 49 explained her situation as follows:

Before the flood, we were all busy with our everyday life. We knew what to do, where to go, what we were looking for. But after the disaster, we spend days and nights with thoughts of all of our troubles. We feel that we do not know what to do, where to go and what will happen. We then being forced to leave and stay in the evacuation centre.

The victims claimed that they had to spend their time in the evacuation centre without doing any activities until they were allowed to go home, as part of post-disaster recovery activities conducted by the authority. Post-disaster rehabilitation activities could encourage the victims to

recover after a disaster. This situation was found to exacerbate the emotional stress experienced by victims. There was concern among the victims when they often thought about their lives that have been partially destroyed due to the disaster. One of the woman victims aged 24 sadly narrated:

We did not know what to do at the evacuation centre... no activities for us. So, I have started to think about many unnecessary things. I was worried. Is everything safe, or there is nothing left for us? I could not go back home.

The flood disaster has disrupted the social routine of victims and other residents. The effects of the flood have caused the social instability of the community, especially those in flood-prone areas. Whenever a society faces a problem, there will be less stability in handling the situation due to the impact or threat from the problem. It meant that victims experienced various disturbances in everyday life as they failed to restore social stability before the flood. Hence, critical infrastructure needs to be overhauled, including electricity, water, gas and telecommunications (Moreno & Shaw, 2018), ensuring the community can live their daily lives as usual and maintain the existing social routine.

Collective Trauma

In addition, the social disruption of flood disasters has also caused victims to face psychological outcomes, like trauma. In large-scale natural disasters, many residents

suffered actual damage, including job loss or destruction of their residence (Lee et al., 2020). In this study, trauma is not only faced by the victims individually but collectively. Concerning trauma, society is often socialized with someone who has experienced a traumatic event and profoundly affects their emotional health. The unexpected flood disaster was found to cause the victim's readiness to be at a low level and insufficient. One of the victims, a 33 years old, woman described the situation as below:

I was traumatised and afraid that a flood like this will happen again in the future. I do not know what to do if the flood will come worse than this. When the monsoon season arrives, we start to panic, fear and trauma. We will immediately move the goods.

The 2014 flood disaster that occurred has affected the victim in terms of emotions. It destroyed housing, property loss, valuables, damage to infrastructure and physical resources facilities that directly affected the quality of life. Nygaard and Heir (2012) argued that the form and violence certainly affect psychological health and quality of life. A victim, 65 years old man, described the situation that related to emotions as follows:

I was sad when I saw the condition of our house—lots of damaged. Our village was almost destroyed. All facilities are damaged and no longer able to be used.

Our village is not like before. Lots of mud and rubbish everywhere. Our village is dirty. Our goods have also been carried away.

The trauma and emotional disruptions experienced by victims are depended on their vulnerability, resilience, and preparation to adapt to the situation or changes caused by the flood disaster. In outline, the results show that mental health outcome is a social disruption that victims need to face right after the flood disaster. However, it was directly or indirectly hidden in most of the emerged signs.

The findings show that the significant impact of the disaster on society is trauma when the victims begin to feel that their lives are ruined, and their future is blurred. Trauma usually occurs, especially to the victims who face significant physical destruction and damage due to flood disasters. Victims also experience a decline in quality of life and well-being until it plugged their motivation by reducing their ability to recover from such events. To rub salt into the wound, Malaysia has floods almost every year, which continue to disrupt and upset the lives of communities.

DISCUSSION

Heavy rains in Hulu Dungun are typically the cause of floods when the Northeast monsoon season arrives from November to March every year. Therefore, such flood phenomena are categorised as annual floods as they occur during the yearly monsoon season. The 2014 flood disaster that occurred

in Hulu Dungun was the worst since 1983. This phenomenon was unprecedented in the history of its existence. The physical impact of a flood disaster is usually the most evident and assessable. However, the social impact is difficult to measure. Therefore, there is a need for discussion to understand the social impact after the flood disaster, specifically social disruption and social resilience.

Flood Victims Facing Disruption

The research has identified significant issues after the 2014 flood disaster in several rural areas of Hulu Dungun. Thus, by analysing the perspectives of victims dealing with recovery, the research has provided an indispensable perspective on the most critical issues during the recovery process. Initially, social disruption is found to be the fundamental concept that is being explored throughout this study. The leading cause leads the victims to suffer from difficulties and weak social resilience, prolonging the recovery process.

Generally, managing and recovery from disasters is the best way to reduce the social disruption experienced by victims. Social recovery is an essential factor in disaster management. It refers to a collaborative process to support disaster-stricken communities. Moreover, it falls under the reconstruction of physical infrastructure and restoring their emotional, economic and social well-being. However, post-disaster recovery is an issue that still lacks attention among researchers, especially in studying natural hazards and disasters (Chang, 2010). The ineffectiveness of a post-disaster

recovery plan can exacerbate the disruption experienced by victims. For example, the flood disaster has disrupted social roles among victims. The fact states social roles as a set of that social expectations and obligations that society expects individuals to carry out (e.g., the victim's roles and responsibilities in the family institution).

In addition, flood disaster that occurred has brought other social disruption, such as uncertainty of employment. Flooding was evident clearly by leaving damage on properties, houses, crops, resources, drinking water, sanitation equipment and transportation routes. These had caused vulnerable groups to have no access, unable to go to work, which resulted in a loss of income (Wisitwong & MacMillan, 2010). However, some victims acknowledge that providing employment infrastructure is an action that can be taken to enable them to return to everyday life. To that end, the importance of restoring the jobs of local communities at risk should be given as a priority. Besides, the flood disaster also caused a change in daily social routine among the victims. Disaster studies from a social perspective show that sudden disasters can disrupt routines, and action to overcome the disruption is highly required (Albrecht, 2017). This research also reveals that flood disasters involve many types of losses, including serious injuries or deaths, health problems and social dysfunctions that finally contribute to collective trauma. Therefore, resilience is seen to be a function to show the spirit of solidarity with the community of belonging despite being plugged by the crisis (Md. Akhir et al., 2020).

Building Social Resilience after Flood Disaster

The finding indicated that the presence of protective elements was significant in social development by building social resilience among the victims. This role is usually demonstrated by a close family member, social strength around, and social support from the local authorities. The flood disaster has profoundly impacted the victims, disrupting their physical, economic, social and emotional well-being. The building of social resilience among victims facing such disruption is undoubtedly obtained from close family members.

Some victims stated that the social support they received from family members was able to build positive resilience. For example, a victim, 22 years old woman, said, "My family helped a lot at that time. I felt moved when people around me were willing to help me. I felt even more enthusiastic. I was delighted and grateful."

Meanwhile, studies have found that the victims living alone cannot obtain adequate social support from family members. As alleged by a 70 years old elderly victim who lives alone, he could only wait until help from the authorities or the public arrived, especially from the aspect of rescue and food supply, "I can't do anything. I live alone. I can only wait for people, let's just help then... I can't even save myself. I felt sad and resigned."

This situation can further increase the stress and grief experienced by the victims due to the disability they face. Furthermore, the age factor and health problems faced

by the victims also restraining them from evacuating during the floods. Lack of social support due to misunderstandings among family members can cause them to drown in symptoms of emotional disturbances such as feeling sad, depressed and worried about the future, prefer to be alone and often cry. The experience often faced by the victims is about the loss of physical property. However, it also traces into a social relationship.

Good relationships and social trust in the community help victims regain their strength to return to 'normal' and 'stable' life after the flood disaster. The intelligent community is also able to influence the building of victim's resilience. However, social capital is vital to form a good relationship between members of the community. Strong cooperation, trust, helpfulness and cooperation between the victims with the help of community members were found to aid the victims in recovering from the disaster that occurred beyond their expectations and preparations. Nevertheless, the role of too much social capital is alleged to cause the victims to be unprepared to face the risks, dangers and flood disasters.

It means that the social support from the social networks that exist in a community can minimise the effects of the flood disaster, and in turn, maximise the resilience of the victims to recover after the flood disaster. Nonetheless, the impact of vulnerability does not occur in all communities but rather depends on the changes experienced by a community, their accessibility to livelihood assets such as social, natural, physical,

financial, and human capital. In addition, a community that can deal with disasters is the one who experienced the situation and can recover quickly to rise from the pain as they refuse to suffer from such traumatic events for an extended period (Imperiale & Vanclay, 2016).

Sometimes, the assistance needs to be channelled to the victims, even with experience and knowledge. Some victims are panic and afraid, as they do not know how to cope with the flood disaster. In the early stages, after the flood disaster, the level of resilience of victims is usually low, thus causing help from other parties, especially members of their community, to help them (Moreno et al., 2018). As noted earlier, the victims also face difficulties to carry out the social routine that they usually do every day calmly. In addition, some victims do not realise that they face emotional problems that make it difficult for them to survive after the disaster.

The research found that social support from the local authorities is also one-factor influencing social resilience building. The sharp increase in the number of victims in the 2014 floods disaster has meant that more humanitarian assistance is needed to deal with the situation. Therefore, it is significant for the authorities, especially those at the local level, to contribute their time, skills, and resources to help. As we all know, local authorities consist of people with various backgrounds, careers and skills. They are also the people closest to the victims and have different experiences in delivering disaster relief, which is defined as an activity

that involves rescue assistance, finding missing victims and rehabilitation assistance (Dobashi et al., 2014).

Results strongly support that even in minor issues related to the community, the victims should be asked to get their ideas and input on post-disaster recovery. They are also asked to engage in aspects of reconstruction and redevelopment to prevent victims from feeling left out and increasingly resilient to recover after the flood. The current researchers believe that if most of the planning is based on a top-down approach, this could cause the victims to feel frustrated and lacked a sense of belonging and ownership, regardless of the efforts in helping them. Therefore, the victims need to be posited as actors who need to actively play a role or down-top approach in disaster management where their resilience is strengthened.

When asked, a 55 years old male victim admitted that the support of the authorities was very important to avoid dissatisfaction and feelings of exclusion.

Support from authorities is very important. Everything, if possible, should involve the locals... so that they do not feel left out. Actually, feeling left out may make the victims more resilient. They can't get help, and nobody wants to hear their problems. Sometimes, the problems of the locals can be solved when the authorities listen to the voices of the locals themselves.

In addition, victims claimed that the social support shown by local authorities in helping them during and after the flood

disaster facilitated their process to return to normal unknowingly. For example, a victim, a 22 years old man, reflected the situation as below:

The village head here always comes to visit us. We feel strong to wake up when 'big people' always pay attention... he takes it seriously. In terms of aid, it is also divided fairly. There is no favouritism.

In the less 'stable' situation, the cooperation of local authorities such as flood disaster management committees, local agencies, the government, local leaders, non-governmental organizations and individuals can help the victims to recover from the disruption. For instance, the transparent distribution of disaster relief, solid social and emotional support from the various parties during and after the flood disaster was beneficial. Hence, post-disaster recovery involves the reconstruction of infrastructure in the affected areas and involves restoring the lives of victims and building their social resilience after the disaster.

CONCLUSION

Social issues in particular such as social disruption, are hidden. However, they are significant to be catered to in every post-disaster. Therefore, focusing on these issues enables victims to regain their everyday lives, social development and increase social resilience after the disaster. According to the results, policymakers are proposed to change their perceptions of the post-disaster recovery process, by involving a

linear and outcome-oriented approach to continuous, prolonged and comprehensive. Meanwhile, flood management plans also need to consider the social issues proposed by policymakers, especially those discussed in this study. In addition, trained disaster management teams need to be expanded by using a participatory approach in social work after a disaster, such as a community-based approach that can strengthen social capital in flood-prone areas and increase social resilience among victims.

Therefore, future studies can be conducted using quantitative analysis to delve into the social disruption experienced by the victims caused by extreme or traumatic events. It can also able to formulate solutions to reduce the vulnerability of the flood risk while maximising public safety. To gain better insight, future researchers should collect data in a more overall sample size to support the generalisation of the findings. It is also essential to increase the number of disaster-related programs or campaigns to develop communities to understand flood vulnerabilities and strategies to manage flood risk without relying on external entities.

ACKNOWLEDGEMENT

The authors acknowledge the research fund provided by the Faculty of Science Social and Humanities, Universiti Kebangsaan Malaysia. In addition, the authors would like to express gratitude to the late Prof. Dr Rahimah Abdul Aziz. She has contributed many invaluable ideas in the publication of this paper.

REFERENCES

- Albrecht, F. (2017). *The social and political impact of natural disaster: Investigating attitudes and media coverage in the wake of disaster* [Doctoral dissertation, Uppsala University]. Digital Comprehensive Summaries of Uppsala Dissertations. <http://uu.diva-portal.org/smash/get/diva2:1090236/FULLTEXT01.pdf>
- Alias, N. A., Mohd Idris, M. D., Siwar, C., Md Mahmudul, A., & Yasar, M. (2021). Community preparation and vulnerability indices for floods in Pahang State of Malaysia. *Land, 10*(198), 1-23. <https://doi.org/10.3390/land10020198>
- Bănică, A., Kourtit, K., & Nijkamp, P. (2020). Natural disaster as a development opportunity: A spatial economic resilience interpretation. *Review of Regional Research, 40*(3), 223-249. <https://doi.org/10.1007/s10037-020-00141-8>
- Burnes, B. (2009). *Managing change: A strategic approach to organizational dynamics*. Pearson Education.
- Chang, S. E. (2010). Urban disaster recovery: A measurement framework and its application to the 1995 Kobe earthquake. *Disasters, 34*(2), 303-327. <https://doi.org/10.1111/j.1467-7717.2009.01130.x>
- Creswell, J. W. (2014). *Research design: Qualitative, quantitative and mix methods approaches*. Sage Publication.
- Dobashi, K., Nasmine, M., Shigemaru, J., Tsunoda, T., Shimizu, K., Yoshino, A., & Nomuro, S. (2014). Psychological effects of disaster relief activities on Japan ground self-defense force personnel following the 2011 great east Japan earthquake. *Psychiatry, 77*(2), 190-198. <https://doi.org/10.1521/psyc.2014.77.2.190>
- Elfithri, R., Halimshah, S., Abdullah, M. P., Mokhtar, M., Toriman, M. E., Embi, A. H., Abdullah, M., Heng, L. K., Ahmad Maulud, K. N., Salleh, S., Maizan, M., & Ramzan, N. M. (2017). Pahang flood disaster: The potential flood drivers. *Malaysian Journal Geoscience, 1*(1), 34-37. <https://doi.org/10.26480/mjg.01.2017.34.37>
- Imperiale, A. J., & Vanclay, F. (2016). Experiencing local community resilience in action: Learning from post-disaster communities. *Journal of Rural Studies, 47*(Part A), 204-219. <https://doi.org/10.1016/j.jrurstud.2016.08.002>
- Isahak, A., Reza, M. I. H., Siwar, C., Ismail, S. M., Sulaiman, N., Hanafi, Z., Zainuddin, M. S., & Taha, M. R. (2018). Delineating risk zones and evaluation of shelter centres for flood disaster management along the Pahang River Basin, Malaysia. *Jàmbá: Journal of Disaster Risk Studies, 10*(1), 1-7. <https://doi.org/10.4102/jamba.v10i1.501>
- Jurjanos, M., & Seekamp, E. (2018). Rural coastal community resilience: Assessing a framework in eastern North Carolina. *Ocean and Coastal Management, 162*, 137-150. <https://doi.org/10.1016/j.ocecoaman.2017.10.010>
- Lee, J. Y., Kim, S. W., & Kim, J. M. (2020). The impact of community disaster trauma: A focus on emerging research of PTSD and other mental health outcomes. *Channam Medical Journal, 56*(2), 99-107. <https://doi.org/10.4068/cmj.2020.56.2.99>
- Liamputtong, P. (2010). Cross-cultural research and qualitative inquiry. *Turkish Online Journal of Qualitative Inquiry, 1*(1), 1-83.
- Madhuri, M., Tewari, H. R., & Bhowmick, P. K. (2014). Livelihood vulnerability index analysis: An approach to study vulnerability in the context of Bihar. *Jamba: Journal of Disaster Risk Studies, 6*(1), 1-13. <https://doi.org/10.4102/jamba.v6i1.127>
- McDermott, B. M., & Cobham, V. E. (2012). Family functioning in the aftermath of a natural disaster. *BMC Psychiatry, 12*, Article 55. <https://doi.org/10.1186/1471-244X-12-55>
- Md. Akhir, N., Zakaria, S. M., Soh, O. K., & Amin, A. S. (2020). A review on the psychological issue

- and psychosocial intervention: Flood disaster in Malaysia. *International Journal of Psychosocial Rehabilitation*, 24(4), 4337-4349. <https://doi.org/10.37200/IJPR/V24I4/PR201539>
- Moreno, J., & Shaw, D. (2018). Women's empowerment following disaster: A longitudinal study of social change. *Natural Hazards*, 92, 205-224. <https://doi.org/10.1007/s11069-018-3204-4>
- Moreno, J., Lara, A., & Torres, M. (2018). Community resilience in response to the 2010 Tsunami in Chile: The survival of a small-scale fishing community. *International Journal of Disaster Risk Reduction*, 33, 376-384. <https://doi.org/10.1016/j.ijdr.2018.10.024>
- Morton, M. J., & Lurie, N. (2013). Community resilience and public health practice. *American Journal of Public Health*, 103(7), 1158-1160. <https://doi.org/10.2105/AJPH.2013.301354>
- Norris, F. H., Tracy, M., & Galea, S. (2009). Looking for resilience: Understanding the longitudinal trajectories of responses to stress. *Social Sciences and Medicine*, 68(12), 2190-2198. <https://doi.org/10.1016/j.socscimed.2009.03.043>
- Nygaard, E., & Heir, T. (2012). World assumptions, post traumatic stress and quality of life after a natural disaster: A longitudinal study. *Health and Quality of Life Outcome*, 10, Article 76. <https://doi.org/10.1186/1477-7525-10-76>
- Palekiencė, O., Bruneckienė, J., & Simanavičienė, Z. (2014). Critical analysis of loss and damage concepts under process of economic assessment. *Procedia-Social and Behavioral Sciences*, 156(2), 304-309. <https://doi.org/10.1016/j.sbspro.2014.11.193>
- Schlehe, J. (2010). Anthropology of religion: Disasters and the representations of tradition and modernity. *Religion*, 40(2), 112-120. <https://doi.org/10.1016/j.religion.2009.12.004>
- Tan, N. T. (2013). Policy and collaboration for social recovery after disaster. *Journal of Social Work in Disability and Rehabilitation*, 12(1-2), 145-157. <https://doi.org/10.1080/1536710X.2013.784606>
- Toland, J., & Carrigan, D. (2011). Educational psychology and resilience: New concept, new opportunities. *School Psychology International*, 32(1), 95-106. <https://doi.org/10.1177/0143034310397284>
- Vollmer, H. (2013). *The sociology of disruption, disaster and social change*. Cambridge University Press.
- Wilson, G. A., Hu, Z., & Rahman, S. (2018). Community resilience in rural China: The case of Hu Village, Sichuan Province. *Journal of Rural Studies*, 60, 130-140. <https://doi.org/10.1016/j.jrurstud.2018.03.016>
- Wisitwong, A., & MacMillan, M. (2010). Management of flood victims: Chainat Province, Central Thailand. *Nursing and Health Sciences*, 12, 4-8. <https://doi.org/10.1111/j.1442-2018.2009.00504.x>
- Wood, N. J., Burton, C. G., & Cutter, S. L. (2010). Community variations in social vulnerability to Cascadia-related tsunamis in the U.S Pacific Northwest. *Natural Hazards*, 52(2), 369-389. <https://doi.org/10.1007/s11069-009-9376-1>
- Yin, R. K. (2014). *Case study research design and methods*. Sage Publication.
- Yusoff, S., Abdul Aziz, R., & Yusoff, N. H. (2018). Impak sosioekonomi bencana banjir 2014: Tindakan penyesuaian dan kesiapsiagaan lokal [The socio-economic impact of the 2014 flood disaster: Local adaptation and preparedness]. *Geografia Online Malaysian Journal of Society and Space*, 14(4), 74-88. <http://ejournal.ukm.my/gmjss/article/view/27581>
- Zakour, M. J. (2010). Vulnerability and risk assessment: Building community resilience. In D. F. Gillespie & K. Danso (Eds.), *Disaster concepts and issues: A guide for social work education and practice* (pp. 15-60). Council on Social Work Education.

Review Article

“Please Stay, Don’t Leave!”: A Systematic Literature Review of Safeguarding Intangible Cultural Heritage in the Fourth Industrial Revolution

Wan Juliana Emeih Wahed^{1,2*}, Noorhayati Saad³, Saiful Bahari Mohd Yusoff¹ and Patricia Pawa Pital⁴

¹*Institute of Creative Arts and Technology (iCreaTe), Universiti Malaysia Sarawak, 94300, Kota Samarahan, Sarawak, Malaysia*

²*Faculty of Art & Design, Universiti Teknologi MARA Kampus Samarahan, Cawangan Sarawak, 94300, Kota Samarahan, Sarawak, Malaysia*

³*The Design School, Faculty of Innovation & Technology, Taylor’s University, 47500, Subang Jaya, Selangor, Malaysia*

⁴*Faculty of Sports Science and Recreation, Universiti Teknologi MARA Kampus Samarahan, Cawangan Sarawak, 94300, Kota Samarahan, Sarawak, Malaysia*

ABSTRACT

Intangible cultural heritage (ICH) has been recognised as an indicator of the tangible heritage’s cultural diversity, which contains inherent characteristics of the community’s knowledge, practices, expressions and skills. Thus, various actions of support and collaboration to safeguard the global cultural diversity were conducted, preventing the deterioration and destruction of intangible heritage, which paved the way for the Fourth Industrial Revolution (IR 4.0). This study aimed to examine the safeguarding of ICH

relating to a range of heritage objects, including textiles, design motifs, and crafts. Nine papers on ICH published between 2014 and 2020 were collected from several reputable databases. These articles were taken from Scopus (3 articles), Google Scholar (5 articles) and Dimensions (1 article) databases in various subject areas of social sciences using the Preferred Reporting Items Systematic reviews and Meta-Analysis (PRISMA) method. Currently, the most sophisticated means of safeguarding

ARTICLE INFO

Article history:

Received: 13 March 2021

Accepted: 22 June 2021

Published: 21 September 2021

DOI: <https://doi.org/10.47836/pjssh.29.3.14>

E-mail addresses:

wanjuliana@uitm.edu.my (Wan Juliana Emeih Wahed)

noorhayati.saad@taylors.edu.my (Noorhayati Saad)

mysaiful@unimas.my (Saiful Bahari Mohd Yusoff)

patriciapawa@uitm.edu.my (Patricia Pawa Pital)

*Corresponding author

ICH comprised eliminating knowledge barriers, incorporating diverse cultures and technology, collaborations between organisations, eco-friendly materials and versatility in promotional strategies. The findings will contribute to the Malaysian Sustainable Development Goals (SDG 4) by providing high-quality education on intangible knowledge to industry players, tourists, and local communities. Moreover, the integration of art, knowledge, and technology have enabled deeper perception among the varied audience, providing a fundamental understanding of intangible knowledge. Lastly, this idea will enhance the sustainability of traditional human values, hoping that cultural heritage will survive and remain long-term.

Keywords: Fourth industrial revolution, intangible cultural heritage, safeguard, systematic literature

INTRODUCTION

An intangible cultural heritage (ICH) is recognised as the primary source of cultural diversity, aiming to safeguard cultural diversity worldwide (Aikawa, 2005). Various debates revolve around who creates and preserves the intangible culture (Laleye, 2005). The questions include whether it is the influence of governments or the people of parties that determine how a community is founded. Governments and non-governmental organisations have made a variety of attempts to address the issue of culture and heritage. For instance, the convention on the World Cultural and

Natural Heritage protection was organised in 1972. A few decades later, the 2003 United Nations Educational, Scientific, and Cultural Organisation (UNESCO) Convention for the Safeguarding of ICH was introduced to ensure cultural sustainability.

Accordingly, UNESCO defined ICH as the collective definition of knowledge, practices, expressions, and skills carried by communities that recognise these features as part of their cultural heritage. Also called living cultural heritage, it is usually expressed in one of several forms. These forms include oral traditions, performing arts, social practices, rituals, and festive events. Furthermore, this idea can be extended to the knowledge and practices that concern nature, the universe and traditional craftsmanship (D'Orville, 2005).

Several innovations and systematic methods were implemented under the convention and the Agreement (1972), including a reasonable basis for preserving the various cultural heritage components. Notably, the extinction of any aspect of ICH may affect the growth of the global cultural plurality. Therefore, it is imperative to have more dialogue, collective understanding, and unity on the particular matter (D'orville, 2005). Nevertheless, ICH continues to be at risk and is gradually disappearing due to the lack of protection, dysfunctional government (D'orville, 2005), and accelerated globalisation (Arai, 2005). In Tokyo's International Conference on Globalisation and ICH, Arai revealed that the Japanese government made efforts

to safeguard ICH. Unfortunately, due to globalisation's rapid progress, he claimed that they had lost the 'fight' for maintaining their intangible cultural identity (Arai, 2005).

The latest developments indicate that a new form of media transition occurs through incorporating arts into education, especially into subjects such as Science, Technology, Engineering and Maths (STEM; Bandelli, 2018). Currently, the curricula are becoming increasingly creative in an integrated learning atmosphere (Ho, 2020). According to Adendorff and colleagues (2018), the growth of communication and knowledge-based societies characterises the 21st century. Moreover, the incorporation of Cultural and Creative Industries (CCIs) into the Fourth Industrial Revolution (IR 4.0) has minimised the skill deficit, which encouraged social integration, cultural diversity and human growth (Adendorff et al., 2018). Lastly, digital art designs enable science and art to be integrated, communicated, and complemented. Notably, the possession of digital art, information technology, and art revealed a connection to the expressive arts (Ye, 2016).

The impact of globalisation on the extinction of ICH can now be seen worldwide, especially in developing countries in Asia, Africa, and the Middle East (Arai, 2005). However, globalisation helps culture to develop more effectively in some countries like Korea. In this context, the Koreans have accommodated globalisation by merging digital tools and global networks into their ICH. This initiative reflects a

change in attitudes and lifestyles from the conventional to the new (Choe, 2005) by introducing cultural diversity.

According to the 2004 United Nations Development Programme (UNDP; 2004) in Human Development Report, "cultural diversity has its importance because it stimulates customer preference and improves mutual understanding" (p. 147). This topic exposed a fascinating discovery that runs right through human progress into a modernised environment. Our origins in ICH are what finally bring us together. Thus, it is essential to safeguard ICH because of the distinct existence of its equivalents. The critical difference with ICH is its temporary character, implying its loose existence. Instead, ICH is exclusively handed down or represented, which depends heavily on individuals and communities. Nevertheless, this group provides the intangible knowledge and aptitudes to be acquired that are continuously incorporated and disseminated (Smeets, 2005).

Numerous communities and countries have sought other approaches to preserve their intangible heritage, including integrating a digital technology platform. For example, the European Union (EU) has funded research networks with built-in technology of a multimedia environment. This idea enhances music education and promotes a new music training method, which provided essential knowledge to the younger generation (Alivizatou-Barakou et al., 2017). On the same note, the Oral Traditions Project of the Vanuatu Cultural Centre has brilliantly innovated with the

'heritage for development' project for indigenous groups and tribal communities using technologies (Huffman, 1996). This collaborative project is aimed to invent a 'memory bank' of the traditional culture and cultural expressions with various representatives of different communities. Moreover, this project is beneficial to various entities, including the museum and students, offering quality educational programmes for schools and future community development.

In China, motion capture technology was applied to protect China's national dances (Shen et al., 2011), similar to Jamaican dances (Brown et al., 2005). In addition, a study collected 183 Jamaican dancers to evaluate their phenotypical quality, albeit not for ICH preservation purposes. In another study by Dobrian and Bevilacqua (2003), it was found that ICH could be transmitted successfully via game-like applications. In this context, the intangible culture can effectively promote and empower user experiences of culture with a consolidated trend in the technology-enhanced learning field (Dobrian & Bevilacqua, 2003). Given these points, numerous games were created to appeal to the younger generation, such as (i) *Icura*, a 3D realistic game about Japanese culture and etiquette (Stone, 1990); (ii) *Discover Babylon*, which highlighted the contributions of cultures from the ancient Mesopotamians to the modern-day (Engwall, 2004); and (iii) *Papakwaqa*, a game paying tribute to the Atayal minority in Taiwan (Troup et al., 2006).

Various studies and projects have utilised the advantages of digital technology

to sustain the ICH in IR 4.0. Thus, this study aimed to review the approaches in various studies examining the safeguarding of ICH in IR 4.0. This idea aligned with the research question, "How can we safeguard ICH in the Fourth Industrial Revolution (IR 4.0)?"'. Accordingly, the directions for future studies are outlined at the end of this review paper.

METHODOLOGY

This section outlines the method used to retrieve articles related to safeguarding ICH in IR 4.0 from relevant studies. The reviewers utilised the Preferred Reporting Items Systematic reviews and Meta-Analysis (PRISMA) method from three databases (Scopus, Google Scholar, and Dimensions). This method was used to run the systematic reviews, eligibility and exclusion criteria, review process steps (identification, screening, and eligibility), and data abstraction and analysis.

PRISMA

The review was guided by the PRISMA Statement (Moher et al., 2009), which offers exclusive advantages. These advantages include 1) defining specific research questions that allow for systematic investigation and 2) specifies the criteria for inclusion and exclusion. Lastly, 3) the method attempts to look at a massive database of scientific literature in a certain amount of time (Sierra-Correa & Kintz, 2015). This approach allows for a rigorous search of terms related to safeguarding ICH from different perspectives. Lastly, the method can monitor global practice from

various countries in preserving the ICH in IR 4.0.

Resources

This review relied on Scopus, Google Scholar, and Dimensions as the primary journal databases. In this study, the data was extracted using the keywords, covering over one thousand peer-reviewed literature items. Finally, each database consists of varied subject areas, such as social sciences, art, culture, and humanities.

Eligibility and Exclusion Criteria

The justifications for implementing the eligibility and exclusions criteria includes achieving the core values of a comprehensive literature review and removing unnecessary criteria. Firstly, the early stage of this systematic review comprised the selection of relevant literature, namely, articles published in journals, lectures, and published theses. However, the selection excluded review articles, book series, and book chapters.

Secondly, articles exclusively published in English were selected, and those in other languages were excluded. The reason was to avoid difficulties in understanding and the need to translate the writings. Thirdly, a period of seven years, specifically between 2014 and 2020, was chosen to track the production of research and publications. Finally, since the analysis phase relies on safeguarding intangibles, articles indexed in social sciences that centre on traditional textiles or clothes were selected to align with the objective of this work (Table 1).

Systematic Review Process

The systemic review process involved three primary phases, namely, identification, screening, and eligibility procedures. In May 2020, the search process was conducted with keyword identification in the first phase. Previous studies developed a search string based on keywords close to 'safeguarding', such as 'preserving', 'conserving' and 'protecting'. These items were syndicated

Table 1

Inclusion and exclusion criteria

Database		Inclusion	Exclusion
Scopus, Google Scholar, Dimensions	Year	2020 – 2014	Before 2014
	Language	English	Non-English
	Article type	Article journal, conference proceeding and published thesis	Review article, book series, book and chapter in book, monograph
	Subject area	Social Sciences	Hard Science, Engineering Mathematics

with the terms 'ICH' and 'visual art', culminated in 479 published documents from Scopus and 1,100 documents from Google Scholar in 0.08 seconds. The same search terms were used with the Dimensions database, identifying 89 papers (Table 2).

Table 2
The search string

Database	Keywords used	Findings
Scopus	((("safeguarding" OR "preserving" OR "conserving") AND ("intangible cultural heritage") AND ("textile" OR "cloth"))	479 results
Google Scholar	"safeguarding" OR "preserving" OR "conserving" AND "intangible cultural heritage" AND "textile" OR "cloth"	1,100 results
Dimensions	((("safeguarding" OR "preserving" OR "conserving") AND ("intangible cultural heritage") AND ("textile" OR "cloth"))	89 results

The second phase established the screening procedure to narrow the search string and concentrate on the study's aim. Therefore, keywords similar to 'safeguarding' were removed. At this stage, a total of 36 documents were eligible to be reviewed, with nine documents (Scopus), 12 documents (Google Scholar), and fifteen documents (Dimensions) from the three databases. The screening involved selecting papers published in English from published journals vis-à-vis social sciences, anthropology, arts, culture, and heritage. However, only research journals, conference proceedings, and published theses were selected, excluding review journal articles (Table 3).

Table 3
The search string for screening

Database	Keywords used	Findings
Scopus	((("safeguarding") AND ("intangible cultural heritage") AND ("textile" OR "cloth"))	9 results
Google Scholar	"safeguarding" AND "intangible cultural heritage" AND "textile" OR "cloth"	12 results
Dimensions	((("safeguarding") AND ("intangible cultural heritage") AND ("textile") OR ("cloth"))	15 results

The eligibility of the documents was thoroughly evaluated. In this approach, three articles from Scopus, five from Google Scholar and one from the Dimensions database were examined. The eligibility process found twenty duplicate documents from repositories of Scopus, Google Scholar, and Dimensions. Meanwhile, seven articles

were detected in all databases using different eligibility criteria. Thus, these articles were excluded considering that these articles are books, chapters in books, reviews, not in English, restricted access, or covered unnecessary topics. Figure 1 presents a flow diagram of the systematic paper selection under review.

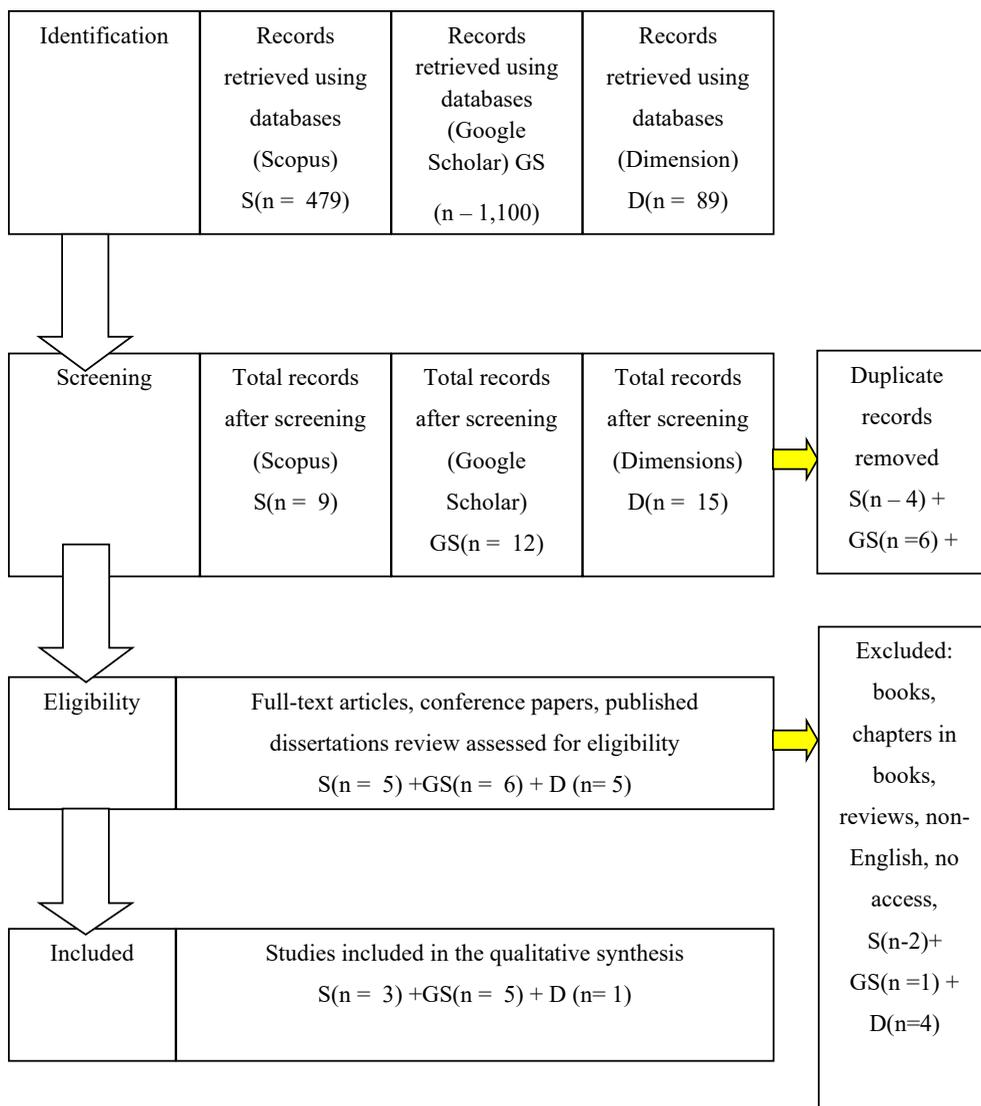


Figure 1. The flow diagram of the systematic review

RESULTS

There are certain similarities and differences in the nine studies. These similarities and differences were divided into five outcome sections: subjects, categories, and locations; identification of the issues and study objective; methods; research findings; and gaps between all studies.

Subjects, Categories, and Locations

The meta-analysis of the nine articles identified that the subject is divided into two categories, namely, textiles and craft. For textiles, a range of types has been identified in the studies, which include Sumba weaving (Untari et al., 2020), Indian sarees (Mathew, 2018), design motifs (Mawuli, 2019), and batik (Hidayat & Fatmahwaty, 2014; Sardjono et al., 2015; Tresnadi & Sachari, 2015). Meanwhile, the craft product was categorised as leathercraft (Sugiarti et al., 2019) or anonymous handicraft (Y. Yang et al., 2018). These research projects examining cultural heritage originate from different nations, including Indonesia (Hidayat & Fatmahwaty, 2014; Sardjono et al., 2015; Sugiarti et al., 2019; Tresnadi & Sachari, 2015; Untari et al., 2020); Jordan (Siamwalla, 2019), Ghana (Mawuli, 2019), Pakistan (Y. Yang et al., 2018), and India (Mathew, 2018).

In Mathew (2018) and Mawuli's (2019) study, the use of African and Ghana Adinkra design motifs were discussed to safeguard the knowledge of its design motifs by adapting them into different mediums. Furthermore, 700 Adinkra symbols were identified, enriched by a complex set

of narratives based on ritual, tradition, and belief. Additionally, a similar study on safeguarding design motifs reported integrating Indonesian batik ornaments as part of the content in the interactive game, Nitiki (Tresnadi & Sachari, 2015). These studies highlighted the importance of assessing design motifs accurately by correcting aesthetic perceptions and instilling proper knowledge.

Identification of the Issues and Study Objective

Overall, in the Table 4, the nine studies identified several critical issues related to heritage, which were the primary reasons for conducting the studies. One of these issues is the knowledge barrier that exists between ICH and the perceivers. In addition, according to Mawuli (2019), the younger generations' growing usage of Adinkra design motifs disconnected them from their roots, contributing to the misuse of the motifs. Therefore, the study was performed to correct an aesthetic perception so that ICH could be retained.

The second study highlighted the knowledge barrier as a similar issue associated with the Indonesian batik ornaments (Tresnadi & Sachari, 2015). Therefore, public appreciation of batik's ICH was required to understand the interpretation, beliefs, and symbols transmitted through the ornaments. Specifically, this appreciation is vital to disseminate specific values to the millennial generation. Hence, the adaptation of batik ornaments as visual content in the online game Nikiti was studied.

A study by Y. Yang et al. (2018) discovered that handicraft heritage is gradually losing its existence. Hence, urgent attention is needed to preserve its cultural heritage and transfer its art knowledge to the next generation (T. Yang et al., 2019). Next, Siamwalla (2019) revealed a knowledge barrier in the products' development by established companies without the help of craftsmen. Therefore, the study was carried out to build a collaborative design that unites the manufacturing skills of craftsmen, the Jordan River Foundation (JRF), and renowned companies such as IKEA (Siamwalla, 2019).

The EU market has rejected imported Indonesian batik seeing that they were an environmentally unfriendly product made from artificial dyes. As a result, a study examined the making of an ecologically friendly batik, ensuring that the problem was resolved (Hidayat & Fatmahwaty, 2014). Meanwhile, Mathew (2018) found that the handloom sector in India faced high competition from the advancement of electronic looms. In this context, it was suggested that the Adinkra African design motif is to be revived by applying them to the traditional Indian saree. Therefore, such efforts would perceivably enable the commercialisation of the Adinkra design motifs and stimulate the aesthetic values of the Indian saree.

A lack of marketing strategy has become an issue in safeguarding ICH. One such case was exposed in Kampung Batik Laweyan, Solo, Indonesia, where most batik artisans did not establish their collective trademarks.

These trademarks are critical as a strategy to compete with imported printed batik and preserve its traditional batik cultural heritage (Sardjono et al., 2015). Similarly, in Magetan, east of Java, Indonesia, the leather industry's tourism development and stakeholders did not take advantage of the opportunity to establish craft tourism. This approach includes tourists searching for leathercraft in educational tourism (Sugiarti et al., 2019).

Another study has highlighted a further issue, namely, the gender disparity in the Indonesian Sumba weaving production. Women have long been identified as the primary gender that continues their societies' traditional knowledge and development skills. Contrastingly, the men's capacity to lead local entrepreneurship, economic growth, and preserve intangible heritage was not recognised. Hence, the modern forces of globalisation on local gender norms are viewed as a complex relationship that empowers women. Finally, Untari et al. (2020) reported that while females are recognised locally for their expertise and experience, it is crucial to examine the integration and effect of Sumbanes cloth makers in world markets and gender roles in various societies.

Method

All nine studies used a qualitative approach, three of them conducted fieldwork (Mawuli, 2019; Untari et al., 2020), and two studies were descriptive (Sugiarti et al., 2019; Tresnadi & Sachari, 2015). Meanwhile, another two utilised case studies (Hidayat

& Fatmahwaty, 2014; Sardjono et al., 2015), one being experimental (Mathew, 2018) and another with a narrative approach (Siamwalla, 2019).

For data collection, all the studies used an observational approach. Furthermore, five studies employed interviews (Hidayat & Fatmahwaty, 2014; Siamwalla, 2019; Sugiarti et al., 2019; Tresnadi & Sachari, 2015; Untari et al., 2020; Y. Yang et al., 2018), and one used a survey (Sardjono et al., 2015). Additionally, three studies conducted focus group discussions (Mawuli, 2019; Siamwalla, 2019; Sugiarti et al., 2019), while two studies referred to documents as secondary data collection (Sugiarti et al., 2019; Y. Yang et al., 2018).

Research Findings

Untari et al. (2020) identified a change from domestic to small-scale weaving, which required a move from consumption value to global market value. Nevertheless, the differences in gender concerning cloth production have led to possible shifts in cultural expectations vis-à-vis gender roles and processes. For example, even though women were locally respected and honoured for their expertise and knowledge, they were not appreciated as men in leading and managing businesses and organisations. Moreover, cell phone usage and social networking by young women and men can help raise global awareness of cultural heritage products (Untari et al., 2020).

In addition, Siamwalla's (2019) study highlighted the knowledge of collaborative design development in textile crafts, linking

multiple new spaces in textile management and transforming knowledge of specific skills into a competitive advantage for the organisations involved. Findings also determined that tangible and intangible qualities can be enhanced through collective research in the production of textile crafts (Siamwalla, 2019).

The results of the Mawuli's (2019) study found that more effective ways to protect the intangible cultural heritage of Adinkra motifs were needed, in collaboration with the Adinkra fabric manufacturers and academics, such as organising exhibitions and workshops to foster knowledge and raise awareness among audiences. However, it was noted that more funding from the government and stakeholders was needed to ensure that the intangible cultural heritage of Ghana could be preserved in perpetuity (Mawuli, 2019). Another study by Mathew (2018) revealed the adaptation of Adinkra design motifs in silk linen sarees, a traditional Indian costume. It was suggested that the values of aesthetic appearance had been increased by the embodiment of two different cultural values in one medium. This idea, it was suggested, became an innovative, handcrafted, eco-friendly traditional attire that matched every mood, occasion and budget (Mathew, 2018).

Moreover, Siamwalla's (2019) study highlighted the knowledge of collaborative design development in textile crafts, linking multiple new spaces in textile management. This idea transformed the understanding of specific skills into a competitive advantage for the organisations involved. Additionally,

the findings determined that the tangible and intangible qualities can be enhanced through collaborative research in the production of textile crafts (Siamwalla, 2019).

Another study suggested that more effective ways to protect ICH of Adinkra motifs were needed (Mawuli 2019). One approach can be achieved by collaborating with the Adinkra fabric manufacturers and academics, such as organising exhibitions and workshops to raise awareness among audiences. However, more funding from the government and stakeholders was needed to ensure the perpetual preservation of Ghana's ICH (Mawuli, 2019). Similarly, Mathew (2018) revealed the adaptation of Adinkra design motifs in silk linen sarees, a traditional Indian costume. It was suggested that the values of aesthetic appearance were increased by the embodiment of two different cultural values in one medium. This idea became an innovative, handcrafted, eco-friendly traditional attire that matched every mood, occasion, and budget (Mathew, 2018).

Sugiarti et al. (2019) found that local government, craftsmen, and entrepreneurs supported tourists who bought leather goods. However, no recent leathercraft design has met market trends and high-quality demand. Even though locals can serve as entrepreneurs by establishing leather home industries that manufacture souvenirs for tourists and improve the local economy. Therefore, it was suggested to involve stakeholders by including tourists seeking local leather goods in educational tourism, which would later lead to the

remarkable preservation of tangible cultures globally (Sugiarti et al., 2019).

The findings of T. Yang et al. (2019) found a way to protect cultural heritage by having specific policies that can promote, develop, and maintain traditional heritage skills and practices. Moreover, these policies may benefit artists by reviving their businesses, generating sustainable income and employment opportunities. Furthermore, a study revealed that tourists who bought leather goods supported the local government, craftsmen, and entrepreneurs (Sugiarti et al., 2019). The locals can potentially serve as entrepreneurs by establishing leather home industries that manufacture souvenirs for tourists and improve the local economy. However, no recent leathercraft design has met market trends and high-quality demand. Therefore, the stakeholder's engagement in this process is suggested. This idea may increase tourists seeking local leather goods in educational tourism, subsequently preserving tangible cultures globally (Sugiarti et al., 2019).

Next, Tresnadi and Sachari (2015) suggested two key findings to preserve the batik ornaments' ICH. This idea can be achieved by integrating traditional or heritage content into the online game, Nitiki's digital interface. The findings can be summed up as (i) the principles of the batik ornaments in the game that demonstrate the survival of traditional batik heritage in Indonesian society. Furthermore, the game features the versatility of batik in the digital environment. The preservation method is extended (ii) by incorporating cultural ideals

into the game features such as identity, life, and social integrity (Tresnadi & Sachari, 2015).

In a study by Sardjono et al. (2015), it was suggested that a collective trademark for the batik makers should be established. This approach could then protect and strengthen the local batik industry while competing with imported batik goods. Moreover, the trademark would indicate the batik's origins, allowing consumers to fully appreciate its cultural values (Sardjono et al., 2015). Finally, Hidayat and Fatmahwaty (2014) showed that while UNESCO recognised Indonesian batik as a form of national ICH, its export to the European market was rejected due to the ecologically unfriendly use of artificial dyes. Consequently, the harmful batik waste substances from chemical colourings were removed and substituted with naturally derived dyes. For instance, the Kanawida batik (Green batik) was named after the invention of natural batik dyes. Moreover, the street children were taught how to turn Kanawida batik into an environmentally friendly means of gaining awareness and knowledge of their cultural heritage (Hidayat & Fatmahwaty, 2014). In essence, this method is idealised to ensure that the understanding of Kanawida batik can last for the next generations.

The Gaps Between the Studies

After reviewing the papers, five significant correlations were discovered between those and previous studies, which are shown as follows:

i. The knowledge barrier between perceivers should first be eliminated to preserve intangible forms of cultural heritage and to ensure that the perceivers can effectively reach the values and principles of their cultural heritage (Siamwalla, 2019; Sugiarti et al., 2019; Tresnadi & Sachari, 2015; Y. Yang et al., 2018).

ii. Another alternative for supporting the ICH's sustainability was introducing different motifs from other cultures and integrating them with the digital technological approach (Mathew, 2018; Tresnadi & Sachari, 2015).

iii. Safeguarding tangible and ICH is not one person's mission but includes collaboration with multiple organisations, stakeholders and governments (Mawuli, 2019; Sardjono et al., 2015; Siamwalla, 2019; Sugiarti et al., 2019; Untari et al., 2020; Y. Yang et al., 2018).

iv. The sustainability of cultural heritage products should be based on environmentally friendly materials (Hidayat & Fatmahwaty, 2014; Mathew, 2018).

v. The versatility of promotional approaches, such as exhibitions, workshops, social media, knowledge sharing, and tourism education, will foster knowledge and safeguard the cultural heritage for future generations (Mawuli, 2019; Sugiarti et al., 2019; Untari et al., 2020; Y. Yang et al., 2018).

The gaps in these nine studies highlighted the growth of the ICH's dissolution in every piece of art. Initially, policymakers, industry players, and communities can minimise knowledge barriers, encourage social

integration and cultural diversity, and enrich tourists' experiences with the government's support. This idea can be achieved through cultural tourism with a proper promotional approach. As a result, tourism has positively affected cultural exchange, improving the levels of understanding and direct

participation of local communities in safeguarding their traditional values. These positive impacts will gradually lead to their global preservation and the protection of the intellectual property rights of communities concerning ICH.

Table 4

Data extraction table referring to included studies

Author	Issue and Objective	Method	Findings
Untari et al., 2020	Issue: Women are not chosen to lead and manage businesses, although they are known locally for their skills and experience. Objective: Examine the integration and impact of Sumbanese cloth makers in world markets and gender roles in the community.	Study Design: Qualitative, fieldwork. Data collection: Observation, interview. Subject: Sumba weaving. Location: Indonesia.	1.Changes in the context of gender in cloth production led to possible shifts in cultural expectations about gender roles and processes. 2. The use of cell phones and social networking by a variety of young women and men.
Siamwalla, 2019	Issue: Lack of knowledge of what form of collaborative design to use in the development of goods. Objective: Investigate and recognise the collaborative production of craft makers, the Jordan River Foundation (JRF) and IKEA.	Study Design: Qualitative and narrative. Data collection: Observation, interview and focus group. Subject: Textiles. Location: Jordan.	1.The collaborative design in textile crafts connects multiple new spaces in management and transforms skills knowledge into a competitive advantage for the organisations involved.

Table 4 (Continued)

Author	Issue and Objective	Method	Findings
Mawuli, 2019	<p>Issue: Knowledge barrier to the usage of Adinkra symbols among the young generations.</p> <p>Objective: To investigate the Adinkra symbols in modern Ghana and their usage and to safeguard the knowledge of Adinkra.</p>	<p>Study Design: Qualitative, fieldworks.</p> <p>Data collection: Participants' observation, Group discussion.</p> <p>Subject: Design motif.</p> <p>Location: Ntansa and Asante, Ghana.</p>	<ol style="list-style-type: none"> 1. Adinkra fabric manufacturers and academics may organise exhibitions to foster knowledge of the Adinkra symbol. 2. Organised workshops to increase awareness. 3. Further funds are required.
Sugiarti et al., 2019	<p>Issue: Stakeholders did not use the opportunity to establish craft tourism by including tourists seeking leathercraft goods in educational tourism.</p> <p>Objective: To examine how the leathercraft industry contributes to tourism development in Magetan, East Java, Indonesia.</p>	<p>Study Design: Qualitative, descriptive.</p> <p>Data collection: Site observation, interview, document review, focus group discussion.</p> <p>Subject: Leathercraft industry.</p> <p>Location: Magetan East Java Indonesia.</p>	<ol style="list-style-type: none"> 1. Tourists support the industry by purchasing the products. 2. No latest design that meets the market trend and the quality demand. 3. Locals can serve as entrepreneurs by establishing leather home industries that manufacture tourist souvenirs.
Y. Yang et al., 2018	<p>Issue: Handicraft heritage is gradually losing its existence and needs urgent attention.</p> <p>Objective: Explore traditional craft in developing countries so that traditional craft traditions and knowledge can be transferred.</p>	<p>Study Design: Qualitative, fieldwork.</p> <p>Data collection: document review, observation.</p> <p>Subject: Pakistani handicraft.</p> <p>Location: Pakistan.</p>	<p>They suggest policies to promote, develop and maintain traditional heritage skills and practices, as well as helping artisans revive their businesses and generate sustainable income and employment opportunities.</p>

Table 4 (Continued)

Author	Issue and Objective	Method	Findings
Mathew, 2018	<p>Issue: The handloom sector confronts intense competition from the electronic loom, which means handloom weavers need to introduce innovative and attractive patterns.</p> <p>Objective: To revive the African and Indian traditional wear while popularising the African motifs and aesthetical values in the Indian saree.</p>	<p>Study Design: Experimental.</p> <p>Data collection: Ten Adinkra motifs and five saree layouts were developed with different placement of motifs.</p> <p>Subject: Indian saree.</p> <p>Location: India.</p>	<ol style="list-style-type: none"> 1. Embodied cultural values in silk linen sarees through the adaptation of Adinkra motifs. 2. Incorporated aesthetic innovation based on the traditional with additions from other traditions. 3. The saree became a handcrafted, eco-friendly traditional form of attire to match every occasion and budget.
Tresnadi & Sachari, 2015	<p>Issue: Knowledge barrier among the public, especially in appreciation.</p> <p>Objective: Identify the values found in Indonesian batik ornaments adapted to the Nitiki game as visual content.</p>	<p>Study Design: Qualitative descriptive.</p> <p>Data collection: Observation, interview.</p> <p>Subject: Indonesian batik ornaments.</p> <p>Location: Indonesia.</p>	<ol style="list-style-type: none"> 1. The integration of batik ornaments in the Nitiki game demonstrates versatility in the digital world. 2. Incorporating cultural ideals into the game symbolises the ideological concept of contemporary tradition.
Sardjono et al., 2015	<p>Issue: Prior research has shown that the respective trademark was not used efficiently to support Small Medium Enterprises (SMEs) batik in Java.</p> <p>Objective: Establish collective trademarks as a strategy to compete with imported printed batik and preserve local products.</p>	<p>Study Design: Qualitative, Case study.</p> <p>Data collection: Survey.</p> <p>Subject: Batik.</p> <p>Location: Kampung Batik Laweyan, Solo, Indonesia.</p>	<ol style="list-style-type: none"> 1. The mutual trademark system has benefits at the lowest expense of registration and promotion. 2. By having a collective trademark, local batiks can use an indicator of their origins and also be protected and strengthened while competing with imported batik.

Table 4 (Continued)

Author	Issue and Objective	Method	Findings
Hidayat & Fatmahwaty, 2014	Issue: The European Union market has rejected importing Indonesian batik due to the environmentally unfriendly way the product is made. Objective: To make an ecologically friendly batik.	Study Design: A case study. Data collection: In-depth interview. Subject: Kanawida batik (Green batik). Location: Banten & Jakarta, Indonesia.	1. Toxic batik waste production had been eliminated and replaced with natural dyes. 2. Street children were taught to turn Kanawida batik into an environmentally friendly way to gain knowledge of their heritage.

DISCUSSION

This review identified a growing body of literature engaged in various types of research into safeguarding the intangible and, to a lesser extent, tangible cultural heritage. The studies on ICH require a different approach than the studies on the tangible method. Various issues were established concerning the findings of this study, signifying the practical strategies to match any ICH object at its finest. Scholars have touched on this issue, albeit there remains a lack of research to investigate the safeguarding of intangible heritage. Hence, to bridge this gap, this paper offers two sophisticated approaches to safeguard Malaysia's ICH, in line with those suggested in this review by several scholars.

Art Knowledge Contributes to a Greater Aesthetic Perception

Most barriers occur due to the lack of art knowledge, misleading the aesthetic perception of heritage objects. In this sense, any misconception about ICH objects

would have a long-term beneficial or detrimental impact on future generations. In the challenging and advancing era, so-called "good taste" is considered a combination of the intellectual and personal taste of the beholder (Myszkowski et al., 2018).

Grüner and colleagues (2019) stated that the perceivers' art knowledge possessed is treated as a foundation to help them form a better understanding of art. Those without basic art knowledge require extra effort to comprehend the visual art displayed to them (Grüner et al., 2019). Furthermore, in any culture, a passionate feeling for art combines a person's knowledge and appreciation for art (Bourdieu et al., 1991). Therefore, the earlier a person's exposed to arts, the more dynamic relationships can be built, resulting in better constructions of aesthetic perception.

The analysis of a cultural heritage object through observation and to achieve some form of understanding, which can be inherently understood. The aesthetic expression of human feelings is related to

the mechanism of perception (Ellsworth & Scherer, 2003). When the sensation is evaluated as something that can be grasped, it forms a point of human interest (Silvia, 2005). Notably, human understanding and sensitivity led to positive perceptions (Fayn et al., 2015). By having the appropriate knowledge of a particular subject, one's interest and curiosity can be explored. Additionally, those with exposure to art possess a greater degree of aesthetic perception. The knowledge of cultural heritage objects should be shared with the younger generations so their appreciation does not disappear with time.

ICH on Digital Platform

In recent years, digital technology has exponentially increased and has invaded every aspect of life. Thus, it has often affected how developing societies experience heritage, be it their own or others. Moreover, cultural heritage has always been a relevant subject. However, the general awareness of and disposition towards this subject form our sense of placing it. It also shapes our understanding, especially in the increasingly globalised world (Economou, 2015). Due to their inherent nature, the elements of ICH are constantly evolving. They combine with their surroundings and sometimes disappear without enjoying an appropriate level of recognition and appreciation (Smeets, 2005).

People experience sites and monuments gradually and learn about the past through digital media in the context of visual reconstructions, digital artefact

documentation, online images (Economou, 2015), higher education (Kong, 2020), and many more. This idea is consistent with the IR 4.0 theory, which explains developments such as artificial intelligence, quantum physics, 3D printing, and the internet (Schulze, 2019), especially younger generations. In tandem with the creative innovation or 'creativity capital' of 2020, this idea will become the third significant capability required to thrive and prosper in the IR 4.0 (Adendorff et al., 2018).

In a 2012 survey conducted by the Pew Research Centre into the Internet and American life, it was suggested that technology would efficiently enhance people's lives, boosting engagement among perceivers. For example, in art, technology could attract larger audiences to appreciate drawings, paintings, and sculptures while simultaneously diversifying its audiences. It is understood that the internet plays a significant contribution in breaking the barriers that once blocked art from numerous people's views (Thomson et al., 2013).

Information and communication technology (ICT) and visual culture are two essential elements of modern life that affect and mould professional and personal identity (Bajardi et al., 2015). Therefore, the medium used to deliver knowledge on the cultural heritage object was transmitted using a digital technology approach, in line with IR 4.0. A popular modern belief is that digital technology is the easiest way of transferring knowledge and delivering information to people (Sedera et al., 2016). According to Adendorff et al. (2018), the 21st century has

been marked by expanding information and knowledge-based economies. Therefore, implementing Cultural and Creative Industries (CCIs) in IR 4.0 can decrease the skill gap while promoting social inclusion, cultural diversity, and human development (Adendorff et al., 2018).

Many factors cause the knowledge gap faced by most perceivers when dealing with ICH art pieces. The correct method of managing this gap will contribute to the richness of the knowledge pool, eliminate unresolved barriers, and contribute to positive aesthetic perceptions. Moreover, ICH is closely related to every culture, as it encapsulates customs, origins, thinking, taboos and legends. Nevertheless, these elements are slowly being forgotten by many due to the lack of understanding, knowledge, and exposure. Therefore, positive aesthetic perceptions form the foundation of an effective way of preserving ICH, using digital technology as the medium to channel information. With the help of the cultural tourism sector, the ICH of all communities can be preserved.

CONCLUSION

This concept paper outlined the pattern of recent studies on safeguarding multiple forms of ICH from various global angles and significant cultural heritage objects. Researchers have attempted to find the optimal and most effective formula to implement the approach. Moreover, this safeguard method can ultimately maximise the benefit for future generations. However, the most critical issue is the correct aesthetic

perceptions that must be transferred to the perceivers to ensure that ICH endures long-term. Hence, the authentication of ICH would bridge the gaps in perceivers' art knowledge, safeguarding this form of intangible heritage in the IR 4.0 and contribute to the existing knowledge pool. Furthermore, it is believed that the justification of every perception varies, and it is either a pleasant or unpleasant feeling depending on the perceiver's art knowledge. Therefore, possessing accurate ICH knowledge can eliminate the knowledge gap concerning the art piece. In other words, everyone will perceivably have the same thoughts, opinions and aesthetic perceptions when assessing a tangible cultural heritage product.

Safeguarding the tangible and ICH is not one person's mission but must involve collaboration between multiple organisations, stakeholders, and governments. Therefore, cooperation between communities and the tourism and heritage sectors is required to preserve ICH worldwide. Moreover, science and technology mapped the way to keep 'unspoken' knowledge using blockchain certificates for copyright protection, preventing the piracy of digital media content. These methods will lead to the global preservation of 'unspoken' knowledge and the intellectual property rights of communities over their cultural heritage. Finally, this issue should be dealt with immediately for the sustainability of traditional human values, ensuring the critical conservation of the various forms of ICH.

ACKNOWLEDGEMENT

The authors would like to thank the reviewers for their time, comments and suggestions, which contributed to preparing the final version of this paper for publication.

REFERENCES

- Adendorff, C., Lutshaba, U., & Shelver, A (2018). *Policy implications of the 4th industrial revolution for the cultural and creative economy*. Nelson Mandela University.
- Aikawa, N. (2005). The international convention for the safeguarding of the intangible cultural heritage: Addressing threats to intangible cultural heritage. In L. Wong (Ed.), *International Conference Globalization and Intangible Cultural Heritage* (pp. 80-83). United Nations Educational, Scientific and Cultural Organization. http://archive.unu.edu/hq/library/Collection/PDF_files/UNESCO/UNU-UNESCO_2004.pdf
- Alivizatou-Barakou, M., Kitsikidis, A., Tsalakanidou, F., Dimitropoulos, K., Giannis, C., Nikolopoulos, S., Al Kork, S., Denby, B., Buchman, L., Adda-Decker, M., Pillot-Loiseau, C., Tillmane, J., Dupont, S., Picart, B., Pozzi, F., Ott, M., Erdal, Y., Charisis, V., Hadjidimitriou, S., ... Grammalidis, N. (2017). Intangible cultural heritage and new technologies: challenges and opportunities for cultural preservation and development. In M. Ioannides, N. Magnenat-Thalmann & G. Papagiannakis (Eds.), *Mixed reality and gamification for cultural heritage* (pp. 129-158). Springer. https://doi.org/10.1007/978-3-319-49607-8_5
- Arai, S. (2005). Japan and the preservation of intangible cultural heritage. In L. Wong (Ed.), *International Conference Globalization and Intangible Cultural Heritage* (pp. 26-29). United Nations Educational, Scientific and Cultural Organization. http://archive.unu.edu/hq/library/Collection/PDF_files/UNESCO/UNU-UNESCO_2004.pdf
- Bajardi, A., Della Porta, S. G., Álvarez-Rodríguez, D., & Francucci, C. (2015). Id@rt experience: A transnational blended learning project founded on visual culture. *International Journal of Emerging Technologies in Learning*, 10(2), 17-23. <https://doi.org/10.3991/ijet.v10i2.4283>
- Bandelli, A. (2018). *4 ways art is sculpting the Fourth Industrial Revolution*. <https://www.weforum.org/agenda/2018/03/here-s-how-art-activates-the-fourth-industrial-revolution/>
- Bourdieu, P., & Darbel, A., & Schapper, S. (1991). *The love of art: European art museums and their public*. Polity Press.
- Brown, W. M., Cronk, L., Grochow, K., Jacobson, A., Liu, C. K., Popović, Z., & Trivers, R. (2005). Dance reveals symmetry especially in young men. *Nature*, 438(7071), 1148-1150. <https://doi.org/10.1038/nature04344>
- Choe, J. H. (2005). *Problems of globalization and the transmission of intangible cultural heritage in Korea*. In L. Wong (Ed.), *International Conference Globalization and Intangible Cultural Heritage* (pp. 104-107). United Nations Educational, Scientific and Cultural Organization. http://archive.unu.edu/hq/library/Collection/PDF_files/UNESCO/UNU-UNESCO_2004.pdf
- Dobrian, C., & Bevilacqua, F. (2003). Gestural control of music: Using the vicon 8 motion capture system. *Proceedings of the 2003 conference on New interfaces for musical expression*. <https://music.arts.uci.edu/dobrian/motioncapture/NIME03DobrianBevilacqua.pdf>
- D'Orville, H., (2005). Intangible cultural heritage: A global public good of a special kind. In L. Wong (Ed.), *International Conference Globalization and Intangible Cultural Heritage* (pp. 142-151). United Nations Educational, Scientific and Cultural Organization. http://archive.unu.edu/hq/library/Collection/PDF_files/UNESCO/UNU-UNESCO_2004.pdf

- Economou, M. (2015). Chapter 15: Heritage in the digital age. In W. Logan, M. N. Crait, & U. Kockel (Eds.), *A companion to heritage studies* (pp. 215-228). <https://doi.org/10.1002/9781118486634.ch15>
- Ellsworth, P. C., & Scherer, K. R. (2003). Appraisal processes in emotion. In R. J. Davidson, K. R. Scherer, & H. H. Goldsmith (Eds.), *Series in affective science. Handbook of affective sciences* (pp. 572-595). Oxford University Press.
- Engwall, O. (2004). From real-time MRI to 3D tongue movements. *INTERSPEECH 2004 : ICSLP 8th International Conference on Spoken Language Processing, 1*, 109-1112. <http://urn.kb.se/resolve?urn=urn:nbn:se:kth:diva-51810>
- Fayn, K., MacCann, C., Tiliopoulos, N., & Silvia, P. J. (2015). Aesthetic emotions and aesthetic people: Openness predicts sensitivity to novelty in the experiences of interest and pleasure. *Frontiers in Psychology, 6*, 1877. <https://doi.org/10.3389/fpsyg.2015.01877>
- Grüner, S., Specker, E., & Leder, H. (2019). Effects of context and genuineness in the experience of art. *Empirical Studies of the Arts, 37*(2), 138-152. <https://doi.org/10.1177/0276237418822896>
- Hidayat, J., & Fatmahwaty, F. (2014). The art and sustainable aspects of natural dyeing in KANAWIDA hand drawn batik (green batik). *IPTEK Journal of Proceedings Series, 1*(1), 136-143. <https://iptek.its.ac.id/index.php/jps/article/view/207>
- Ho, S. (2020). Culture and learning: Confucian heritage learners, social-oriented achievement, and innovative pedagogies. In C. Sanger & N. W. Gleason (Eds.), *Diversity and inclusion in global higher education* (pp. 117-159). Springer. https://doi.org/10.1007/978-981-15-1628-3_5
- Huffman, K. (1996). The fieldworkers of the Vanuatu cultural centre and their contribution to the audiovisual collections. In J. Bonnemaïson (Ed.), *Arts of Vanuatu* (pp. 290-293). Crawford House Publishing.
- Kong, F. (2020). Application of artificial intelligence in modern art teaching. *International Journal of Emerging Technologies in Learning, 15*(13), 238-251. <https://doi.org/10.3991/ijet.v15i13.15351>
- Laleye, I. P. (2005). Safeguarding intangible cultural heritage in an era of globalization. In L. Wong (Ed.), *International Conference Globalization and Intangible Cultural Heritage* (pp. 108-111). United Nations Educational, Scientific and Cultural Organization. http://archive.unu.edu/hq/library/Collection/PDF_files/UNESCO/UNU-UNESCO_2004.pdf
- Mathew, L. T. (2018). *Cultural value addition of silk-linen sarees through the adaptation of African Adinkra textile design motifs*. <http://assumptioncollege.in/fusion/uploads/2018/05/Minor-Project-Report.pdf>
- Mawuli, C. A. (2019). *Transmission and embodiment of heritage: An analysis of Adinkra symbology on traditional clothing in Ghana* [Master's thesis, Central European University]. http://www.etd.ceu.edu/2019/mawuli_cynthia.pdf
- Moher, D., Liberati, A., Tetzlaff, J., Altman, D. G., & Group, P. (2009). Preferred reporting items for systematic reviews and meta-analyses: The PRISMA statement. *PLOS Medicine, 6*(7), Article e1000097. <https://doi.org/10.1371/journal.pmed.1000097>
- Myszkowski, N., Çelik, P., & Storme, M. (2018). A meta-analysis of the relationship between intelligence and visual "taste" measures. *Psychology of Aesthetics, Creativity, and the Arts, 12*(1), 24-33. <https://doi.org/10.1037/aca0000099>
- Sardjono, A., Prastyo, B. A., & Larasati, D. G. (2015). Development of collective trademark for batik industry in kampung Batik Laweyan (Laweyan Batik's Village), Solo. *Indonesia Law Review, 5*(1), 33-50. <https://doi.org/10.15742/ilrev.v5n1.136>

- Schulze, E. (2019, January 22). Everything you need to know about the Fourth Industrial Revolution. *CNBC.com*. <https://www.cnbc.com/2019/01/16/fourth-industrial-revolution-explained-davos-2019.html>
- Sedera, D., Lokuge, S., Grover, V., Sarker, S., & Sarker, S. (2016). Innovating with enterprise systems and digital platforms: A contingent resource-based theory view. *Information & Management*, 53(3), 366-379. <https://doi.org/10.1016/j.im.2016.01.001>
- Shen, Y., Wu, X., Lü, C., & Cheng, H. (2011). National dances protection based on motion capture technology [C]. *Proceedings of 2011 international conference on computer science and information technology (ICCSIT)*, (Vol. 51, pp. 78-81). IACSIT Press.
- Siamwalla, J. J. (2019). *Textile craft producer Jordan River Foundation's collaborative design development with IKEA* [Master's thesis, University of Borås]. <http://urn.kb.se/resolve?urn=urn:nbn:se:hb:diva-22071>
- Sierra-Correa, P. C., & Kintz, J. R. C. (2015). Ecosystem-based adaptation for improving coastal planning for sea-level rise: A systematic review for mangrove coasts. *Marine Policy*, 51, 385-393. <https://doi.org/10.1016/j.marpol.2014.09.013>
- Silvia, P. J. (2005). What is interesting? Exploring the appraisal structure of interest. *Emotion*, 5(1), 89-102. <https://doi.org/10.1037/1528-3542.5.1.89>
- Smeets, R. (2005). Globalization and the convention for the safeguarding of the intangible cultural heritage. In L. Wong (Ed.), *International Conference Globalization and Intangible Cultural Heritage* (pp. 42-47). United Nations Educational, Scientific and Cultural Organization. http://archive.unu.edu/hq/library/Collection/PDF_files/UNESCO/UNU-UNESCO_2004.pdf
- Stone, M. (1990). A three-dimensional model of tongue movement based on ultrasound and X-ray microbeam data. *The Journal of the Acoustical Society of America*, 87(5), 2207-2217. <https://doi.org/10.1121/1.399188>
- Sugiarti, R., Margana, M., Muthmainah, M., & Fauzia, L. R. (2019). Leather craft industry and tourism: A symbiotic relationship? (A case study of Magetan East Java Indonesia). *Harmonia: Journal of Arts Research and Education*, 19(2), 141-151. <https://doi.org/10.15294/harmonia.v19i2.21124>
- Thomson, K., Purcell, K., & Rainie, L. (2013). *Arts organizations and digital technologies*. <https://www.pewresearch.org/internet/2013/01/04/arts-organizations-and-digital-technologies/>
- Tresnadi, C., & Sachari, A. (2015). Identification of values of ornaments in Indonesian batik in visual content of Nitiki game. *Journal of Arts and Humanities*, 4(8), 25-39. <https://doi.org/10.18533/journal.v4i8.797>
- Troup, G. J. F., Griffiths, T. L., Schneider-Kolsky, M. E., & Finlayson, T. R. (2006). Ultrasound observation of vowel tongue shapes in trained singers. In M. Avdeev (Ed.), *30th Annual Condensed Matter and Materials Meeting* (pp. 1-4). Australian Institute of Physics.
- United Nations Development Programme. (2004). *Human Development Report 2004: Cultural Liberty in Today's Diverse World*. <http://hdr.undp.org/en/content/human-development-report-2004>
- Untari, R., Gajjala, R., & Sanjaya, R. (2020). The making of "asli" Sumba woven cloth: How globalising "intangible heritage" impacts women's roles. *Development in Practice*, 30(8), 1094-1104. <https://doi.org/10.1080/09614524.2020.1759509>
- Yang, T., Silveira, S., Paolini, M., Pöppel, E., Sander, T., & Bao, Y. (2019). Aesthetic experiences across cultures: Neural correlates when viewing traditional Eastern or Western landscape paintings. *Frontiers in Psychology*, 10, 798. <https://doi.org/10.3389/fpsyg.2019.00798>

- Yang, Y., Shafi, M., Song, X., & Yang, R. (2018). Preservation of cultural heritage embodied in traditional crafts in the developing countries. A case study of Pakistani handicraft industry. *Sustainability*, *10*(5), 1336. <https://doi.org/10.3390/su10051336>
- Ye, Y.-T. (2016). Design and implementation of digital art teaching system based on interactive virtual technology. *International Journal of Emerging Technologies in Learning (IJET)*, *11*(11), 49-54. <https://doi.org/10.3991/ijet.v11i11.6254>

Perceived Competence as a Mediator in Parental Engagement in Speech Therapy

Nurfariha Mdshah*, Zainal Madon and Nellie Ismail

Department of Human Development and Family Studies, Faculty of Human Ecology, Universiti Putra Malaysia, 43400 UPM Serdang, Selangor, Malaysia

ABSTRACT

Parental engagement has been recognised as a critical factor in providing optimal speech therapy services to children. However, it continues to be challenging for clinicians to effectively engage parents in speech and language intervention for their children. Therefore, this study was conducted to investigate the roles of parental expectation and parent-therapist communication on parental engagement in speech therapy and to determine the contribution of the parent's perceived competence as a mediator. A total of 389 respondents were selected from government hospitals in Malaysia for this cross-sectional study. Four instruments were administered: Parental Expectation Scale, Therapist-Parent Communication Questionnaire, Perceived Competence Scale, and Parent Home-programme Compliance Questionnaire. In addition, descriptive, bivariate, and mediation analyses were performed using SPSS and Smart-PLS software to address the study objectives. The results showed that perceived competence partially mediated the relationship between communication and expectation on parental engagement. Thus, it can be concluded that to ensure parental engagement in a

child's intervention which is vital for a better outcome. Parents need to be competent and believe strongly in their capabilities to practise in speech and language intervention. Moreover, policymakers and clinicians should focus on strategies that can improve parental expectations and communication.

Keywords: Competence, parental engagement, speech and language disorder, speech therapy

ARTICLE INFO

Article history:

Received: 28 March 2021

Accepted: 6 July 2021

Published: 21 September 2021

DOI: <https://doi.org/10.47836/pjssh.29.3.15>

E-mail addresses:

rihashah@gmail.com (Nurfariha Mdshah)

zainalm@upm.edu.my (Zainal Madon)

nellie@upm.edu.my (Nellie Ismail)

*Corresponding author

INTRODUCTION

The involvement of family members, especially parents, is one of the key principles upheld by many professional speech-language pathology associations (American Speech-Language-Hearing Association, 2008). Parental involvement is considered the best practice in children's early intervention (Division for Early Childhood, 2014). The amount of practice received by children can be increased by involving and engaging parents in the intervention so that the relevant speech and language activities can be implemented with their children at home (Sugden et al., 2019). Furthermore, parents involvement in their children's intervention can maintain the targeted development during their daily communication at home (Skeat & Roddam, 2019).

Parental engagement is a complex and multifaceted process in early speech therapy intervention. There is no single path that ensures engagement or disengagement. Parental engagement is frequently associated with parental factors such as their expectation, competence, and parent-therapist communication (King et al., 2021; Phoenix et al., 2018; Sugden et al., 2019). When these factors are adequately addressed, a positive outcome can be expected throughout the therapy session, and an active partnership or collaboration with the therapists throughout the intervention process (King et al., 2021; Melvin et al., 2021).

During the initial session of speech therapy intervention, parents need to be

enlightened about their child's treatment to set a clear expectation between what they anticipate about the service and what is experienced in reality. Such consistency in expectation increased parental engagement (Davies et al., 2017; Phoenix et al., 2018). Nevertheless, mismatched expectations about the service provided by speech therapists often arise among the parents, subsequently affecting the parents' engagement (Klatte et al., 2019). Therefore, good communication between the practitioners and parents to establish expectations early in the intervention process is crucial to ensure ongoing engagement. Apart from that, effective communication and engagement can also enhance parents' knowledge and competence, subsequently empowering them to be more confident in applying the therapy at home with their children (Oono et al., 2018; Pickard et al., 2016; Stahmer et al., 2016). Furthermore, when practitioners create the necessary support to enhance parental competence and facilitate setting achievable goals, it will produce optimal parental engagement and assist parents in experiencing success (D'Arrigo et al., 2017).

In Malaysia, the data over the past decade from the Ministry of Health (MOH) showed an annual increase of 10 to 20 per cent in speech and language disorders among children. Untreated speech and language disorders often predispose to a high risk of behavioural, emotional, and psychosocial difficulties, as well as poorer mental health and reduced employment prospects (Bercow, 2018; Johnson et al.,

2010; Qi et al., 2020; Toseeb et al., 2020). In view of the rising cases and associated risks of untreated speech and language disorders in Malaysia, necessary strategies need to be established to assist these individuals. Hence, this study aimed to determine the critical factors affecting the roles of parents in the treatment of children's speech and language disorders.

Theories and Conceptual Framework

This study was guided by the Phoenix Theory of Attendance, Participation, and Engagement (PTAPE; Phoenix et al., 2019). The theory explains essential factors that affect parents' attendance, participation, and engagement in children's rehabilitation services. Additionally, the Engagement Capacity Model (Sieck et al., 2019) was also adopted to understand the capacity for patient engagement. The theories were then integrated to determine parental engagement in speech therapy.

The Phoenix Theory of Attendance, Participation, and Engagement. The Phoenix Theory of Attendance, Participation, and Engagement (PTAPE) was developed using a constructivist grounded theory study that applied constant comparison and theoretical sampling. The theory referred to the Family Stress Theory to define high-risk families, i.e. families of children with disabilities, in describing the types of services typically offered. Based on Figure 1, PTAPE comprehensively covers all the conditions that facilitate or inhibit families from attending, participating, and

engaging in children's rehabilitation services (ABCDEF). Firstly, the theory outlines the factors from the perspective of (A) the family composition that includes adults and child factors, such as parents' age or the number of children in the family; (B) the health complexity that is about the physical and mental health of the family members; and (C) service complexity that represents the organisation and professionals involved. The ABC factors were the main barriers that can negatively impact parents' attendance, participation, and engagement. Under the PTAPE, (D) encompasses six factors, including logistics, values and beliefs, knowledge, feelings, skills, and relationship with the professionals. Next, (E) refers to the therapy process factors: expectations, motivation, communication, resources, and timing. These factors can either enhance or decrease attendance, participation, and engagement. Finally, (F) indicates the child's destination, which is for most parents to have a healthy and happy child.

The Engagement Capacity Model. The Engagement Capacity Model (ECM; Sieck et al., 2019) conceptualises the engagement capacity based on the Albert Bandura Social Cognitive Theory (Bandura, 1986). The theory describes the various ways that an individual acquires behaviour. It is believed that persons, environments, and behaviours are interconnected, influencing one another. A good understanding of this concept will assist the clinicians in patient engagement.

Based on Figure 2, The ECM revolves around the person-environment-behaviour concept that encompasses four elements.

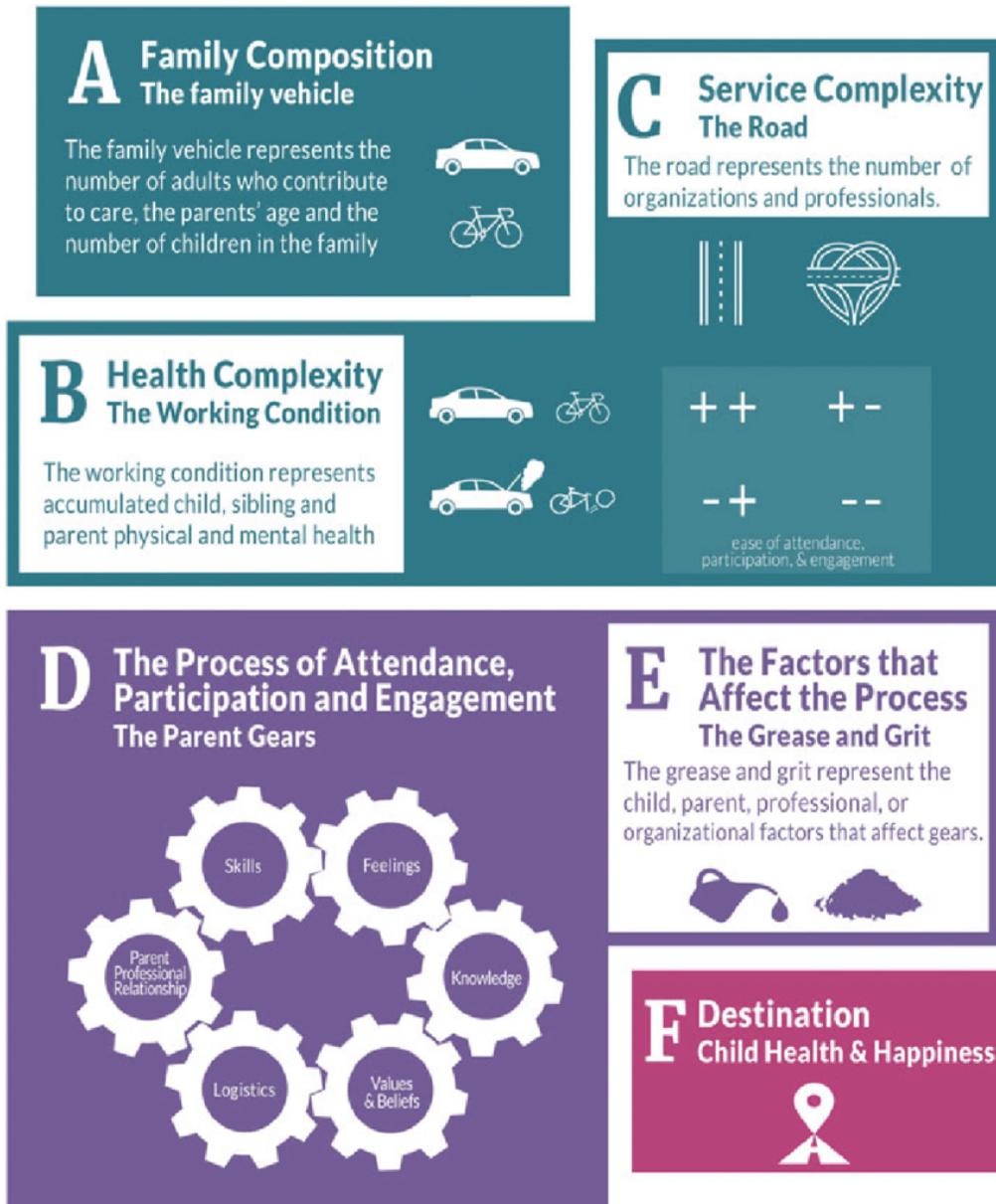


Figure 1. The Phoenix Theory of Attendance, Participation and Engagement (Phoenix et al., 2019)

The first concept, self-efficacy, is the individuals' belief in their capability to perform a behaviour. The model believes that improvement in self-efficacy leads to better adherence to treatment procedures. The second element is resources, including financial resources, access-related resources, and person-related resources that support the individuals to participate in treatment. The model explains that patients who lack resources are less likely to engage fully

in their treatment. The third element is willingness. It is related to the patient's preparedness to proceed or take action. For example, a patient's ability to engage may be inhibited by his unwillingness to share information. Finally, all the three elements mentioned above are supported by patients' knowledge, understanding, and skills, collectively refer as capabilities in this model that enable them to act.



Figure 2. The Engagement Capacity Model (Sieck et al., 2019)

Integration of Theories. There was no single theory that can explain the predictors and mediators of parental engagement. Therefore, a theoretical framework was developed in this study. Figure 3 illustrates the theoretical framework for the study that attempts to explore parental engagement in speech therapy for children with speech and language disorders. The framework incorporates the differences and similarities between the PTAPE and the ECM based on

the current literature findings of the theory and model mentioned above.

In the ECM, behaviours such as engagement are influenced by two elements, namely person and environment. Hence, any changes in these elements may change the degree of engagement. It is also applicable to the features in the PTAPE. In this study, child-related factors under (A) Family composition (the child’s sibling or the number of children in the family)

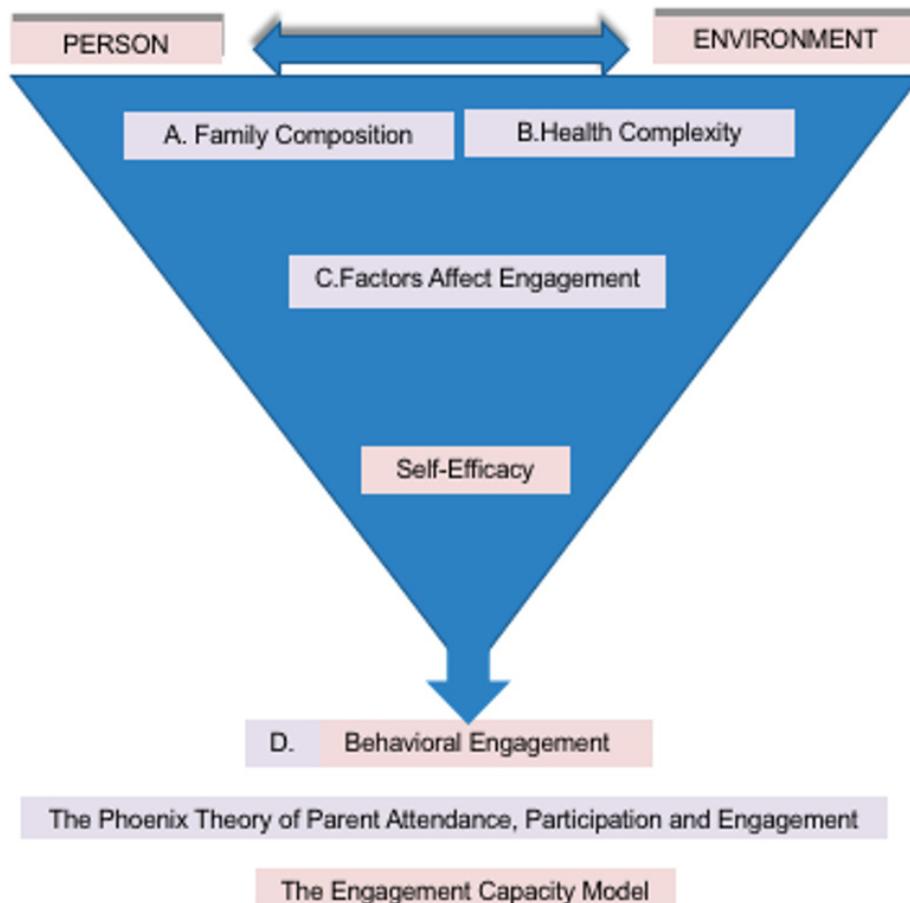


Figure 3. The theoretical framework for the study

and (B) Health complexity (the child’s medical diagnosis) appeared to be essential antecedent variables that affected parental engagement. Armed with this information, clinicians can categorise parents into different groups and customise the strategies based on the level of parental engagement. For this study, only two factors in the group of service complexity (C) were selected, namely: parental expectation for speech therapy and parent-therapist communication during therapy. Both factors are highly associated with the ability to facilitate or limit parental engagement. In addition, the component of self-efficacy in the ECM indicates whether the parents perceived that they are competent in speech therapy. Finally, all the factors are presumed to be related to one another. Therefore, any changes in one element can lead to a decreased or increased level of Behavioural

Engagement (D), i.e. parental engagement during speech therapy.

Conceptual Framework. The conceptual framework in this study was constructed based on the PTAPE (Phoenix et al., 2019) and the ECM (Sieck et al., 2019). As illustrated in Figure 4, expectation, communication, and competence were assumed to contribute to parental engagement directly. Additionally, competence is expected to be mediating the expectation and communication. Considering the direct effect of competence on engagement, it can play a mediating role between the predictors and parental engagement. Finally, the difference in the number of children in the family and the severity of the child’s medical condition was also postulated to result in different levels of parental engagement.

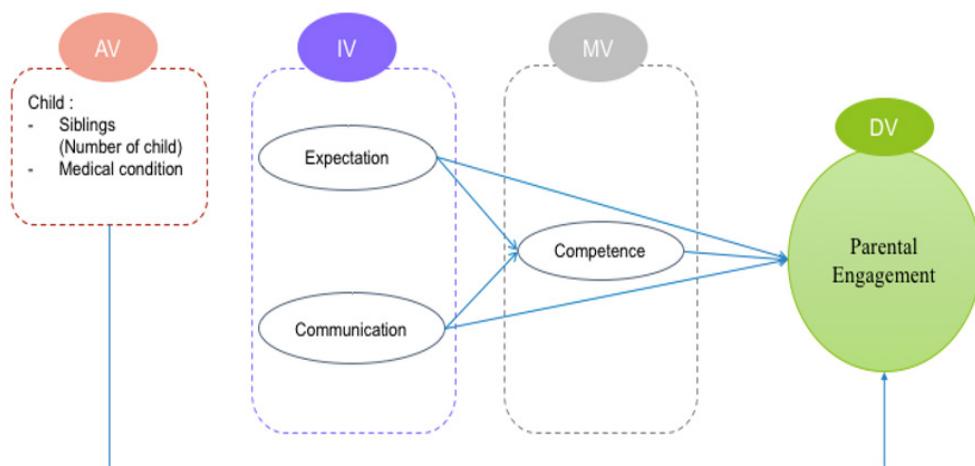


Figure 4. Conceptual framework for the study

Based on the conceptual framework, the study objectives include:

Objective 1: To compare the parental engagement between parents with one child and more than one child in the family. Ha1: There is a significant difference in parental engagement between parents with one child and more than one child in the family.

Objective 2: To compare the parental engagement between parents with a child without a medical condition and parents with a child with a medical condition. Ha2: There is a significant difference in parental

engagement between parents with a child without a medical condition and parents with a child with a medical condition.

Objective 3: To examine the mediating effects of competence on expectation, communication, and parental engagement in speech therapy. Ha3: Competence mediates the relationship between expectation and parental engagement in speech therapy. Ha4: Competence mediates the relationship between communication and parental engagement in speech therapy.

Table 1
Frequency distribution of parents' background information (N=389)

Variables	Freq.	Percent
Parents		
Father	65	17
Mother	319	82
Others (individual who have legal rights on the child e.g. step parent)	5	1
Age		
17 years and below	13	3
18-29 years old	47	12
30-49 years old	327	84
50 years and above	2	1
Race		
Malay	363	93
Chinese	19	5
Indian	3	1
Others	4	1
Academic qualification		
High School	100	26
Certificate	18	5
Diploma	112	29
Degree	144	37
Master / PhD	15	4

Table 1 (Continued)

Variables	Freq.	Percent
Household Income		
Less than RM1005	29	8
RM1006-3955	152	39
RM3956-12235	197	51
More than RM12235	11	3

METHOD

Participants

This study recruited 389 parents as participants. They were either mother or father with a child below 18 years old attending speech therapy sessions in government hospitals. Table 1 displays the sociodemographic characteristics of the participants. Most of them were mothers (82%) and Malays (93%). Every four out of five (84%) respondents were between 30 to 49 years old. According to the World Bank Classification of income levels, more than half (51%) earned more than RM 3956 monthly (upper-middle-income group). In comparison, 36% were categorised under the lower-middle-income group (RM 1006-3955).

Table 2 shows the background information of the participants' children. Most of the children were males (72%). More than half (57%) of the children were between two to four years old, followed by five to seven-year-old children (33%). Most children have more than one sibling (83%), while the rest (17%) were the only child. Less than half (41%) of the children did not have any medical conditions. In comparison, the rest had either Autism (24.9%), Downs

Syndrome (7%), Hearing Impairment (4%), Cerebral Palsy (4%), Cleft Lip and Palate (2%), ADHD (2%) and other medical conditions (16%).

Procedures

This study involved a survey using a self-administered questionnaire. First, the original questionnaire in the English language was translated into Malay, the national language of Malaysia. The Malay version of the questionnaire would help the respondents to understand the questions better. Then, the researcher did back-translation of the original English questionnaire into Malay, followed by translating Malay to English by another bilingual professional in the related field without referring to the original text (Shigenobu, 2007). Finally, all the items in the instrument were evaluated and validated by a bilingual psychologist from the Ministry of Health. Prior to data collection, a pilot study was conducted among 30 participants. The items in the questionnaire were modified based on their comments and suggestions. This study received ethics approval from the Medical Research Ethics Committee of the Ministry of Health Malaysia and permission from

the hospital directors and Clinical Research Centre of all study sites. The parents were given the option to fill in the online version or hard copy of the questionnaire that took around 30-40 minutes to complete. All the participants were given a free e-book as a token of appreciation once they returned the completed questionnaires.

Table 2
Frequency distribution of childs' background information (N=389)

Variables	Freq.	Percent
Gender		
Male	280	72
Female	109	28
Age		
Below 2 years old	10	3
2-4 years old	223	57
5-7 years old	127	33
More than 7 years old	29	8
Siblings		
No sibling	65	17
1-2 siblings	165	42
3-4 siblings	134	34
More than 4 siblings	25	6
Medical Diagnosis		
No medical condition	158	41
Autism	97	25
Hearing Impairment	16	4
Downs Syndrome	28	7
Cerebral Palsy	14	4
Cleft Lip & Palate	7	2
ADHD	7	2
Others	62	16

Measures

Standardised instruments in questionnaires were used to assess respondents'

demographic background (parent and child), parents' competence, communication, expectation, and parental engagement.

Perceived Competence Scale. The competence of the parents was assessed using the Perceived Competence Scale (PCS). It was specially adapted to fit the relevant domain in this study. The PCS examined the perceived competence among the participants in terms of their ability to engage or follow through on some commitment. For example, the individuals' adherence to healthier behaviours or their participation in activities related to child development. PCS is one of the instruments with a high level of face validity for assessing the constructs of competence. It consists of four items on a 7-point Likert scale. Some examples of the items are "I feel confident in my ability to learn this material" and "I can achieve my goals in this course". The alpha measure of internal consistency for the perceived competence items in the previous study was above 0.80, thus indicating that the scale had good reliability (Williams et al., 1998).

Therapist-Parent Communication Questionnaire. In this study, communication was measured using the Dimensions of Therapist-Parent Communication Questionnaire. The 15-item questionnaire was created based on the Parent Satisfaction with Children's Medical Care Questionnaire developed by Lewis et al. (1986) and The Medical Interview Satisfaction Scale developed by Wolf et al. (1978). The scale was rephrased based on the evaluation of the clinicians' behaviour. It uses an eight-point Likert scale between 1-"absolutely do not agree" to 8-"absolutely agree". The

items are categorised into three dimensions of communication using varimax rotation: caring (6 items), interest (5 items), and collaboration (4 items) with internal reliability alpha-value of 0.88, 0.79, and 0.83, respectively. Some examples of items are "The therapist cares about us" under the dimension of caring; "The therapist shows interest in our life at home" under the dimension of interest; and "The therapist decides without us and gives us his decision" under the dimension of collaboration (Bachner et al., 2006).

Parental Expectation Scale. Next, the parental expectation for therapy was measured using an adapted survey of the Expectations for Speech-Language Therapy developed by Macintyre (2018). The survey included questions focused on investigating parents' expectations of speech-language therapy in New Zealand based on previous research (Auert et al., 2012; Carroll, 2010; Lyons et al., 2010). The validation of the items in the survey was done through expert review. Firstly, the questions were discussed between the researcher and the professor in the related field. Then, ten practising Speech Therapists reviewed the questionnaire to check if the items were appropriate and relevant. Finally, the survey was piloted, and any changes were made accordingly. The questionnaire consists of four items on a seven-point Likert scale. Some examples of the items are "I expected to be involved in my child's speech-language therapy" and "I expected to be given home practice to do with my child".

Parent Home-Programme Compliance Questionnaire. Lastly, parental engagement in speech therapy was assessed using the Parent Home-Programme Compliance Questionnaire. It consists of four items that assess their comfort, knowledge, and ability to carry out the home programme. It is measured using a five-point Likert scale, ranging from 1-strongly disagree to 5-strongly agree. Some examples of the items are “I felt that I was skilful in carrying the home programme” and “I was able to carry out the programme as often as expected.”

The scale was validated in a study that evaluated community professionals’ compliance with consultants’ recommendations for developmentally disabled children (Cadman et al., 1986). In that study, the scale was 0.7 using weighted kappa statistics, thus indicating a good test-retest reliability. In addition, the agreement between the client’s self-reporting score on the questionnaire and independent observation was calculated. The weighted kappa was greater than 0.9, showing excellent agreement. Hence, validity was supported (Law & King, 1993).

Data Analysis

Data entry and data analysis were performed using SPSS and SMART-PLS. Data analysis started with data cleaning, followed by descriptive analysis, bivariate analysis, and PLS-SEM analysis. In the evaluation of PLS-SEM, two stages were involved. Stage one involved the reflective model evaluation

or formative model evaluation. The process continued with evaluating the structural model in stage two after the measurement quality was supported (Hair et al., 2017) by testing the proposed hypotheses and addressing the relationships between the latent variables.

RESULTS AND DISCUSSIONS

Comparison Between Parents with One Child and More Than One Child in the Family

Independent samples t-test analysis was conducted to compare the differences in parental engagement between parents with one child and more than one child in the family. The results revealed significant mean difference [$t(387) = 3.321, p = 0.001$]. The mean parental engagement score for parents with one child ($M = 4.042, SD = 0.650$) was slightly higher than those with more than one child in the family ($M = 3.746, SD = 0.657$). The effect size (d) was 0.451, indicating a small effect. The results supported the conclusion that the parental engagement between one child and more than one child in the family was significantly different. Thus, hypothesis one (H_{a1}) was accepted. Based on the findings, parents with one child in the family had a higher engagement than parents with more than one child. This finding was comparable with other studies that found families with more than one child were associated with lower program enrollment and engagement (Eisner & Meidert, 2011). The difference could be attributed to having multiple children placing additional strains on parents’ time,

energy, and finances (McConnell et al., 2014).

Comparison Between Parents with Child without Medical Condition and Parents with Child with Medical Conditions

Independent samples t-test analysis was employed to test the differences in parental engagement between parents with a child without medical conditions and parents with a child with medical conditions. There was a significant mean difference [$t(387) = 2.390, p = 0.017$] between the parental engagement of those with a child without medical condition ($M = 3.892, SD = 0.680$) and with medical condition ($M = 3.729, SD = 0.647$). However, the effect size ($d=0.247$) was small, indicating a small effect. The results concluded that the parental engagement between parents with a child without a medical condition and parents with a child with a medical condition was significantly different. Thus, hypothesis two (Ha2) was accepted. Parents who have a child without a medical condition showed higher engagement than parents whose child had a medical condition. This result was aligned with previous works by Haine-Schlagel and Walsh (2015) and Mauricio et al. (2014), whereby families whose children had more severe symptoms were less likely to engage in therapy. On the contrary, some other studies reported that the child's symptom severity predicted greater engagement, likely due to a greater perceived need for treatment (Baydar et al., 2003; Garbacz et al., 2017).

Mediation of Parental Engagement

In order to analyse the indirect effect, the direct effect must be established first. The PLS-SEM path coefficient showed the results below: Competence ($\beta = .373, p < 0.01$), Communication ($\beta = .283, p < 0.01$), and Expectation ($\beta = .168, p < 0.01$). Thus, all showed a significant direct contribution towards parental engagement. Table 3 shows the results of the mediation analysis. The bootstrapping procedure showed the significant indirect effects for Ha3 ($\beta = 0.194$) and Ha4 ($\beta = 0.068$) with t-values of 6.062 and 3.480 respectively. The 95% confidence intervals of [LL=0.134, UL=0.260] and [LL=0.032, UL=0.109] did not include the value zero in between, thus indicating a mediation role of both variables (Preacher & Hayes, 2008). The results concluded that all the mediation effects were statistically significant. Hence hypothesis 3 (Ha3) and hypothesis 4 (Ha4) were accepted.

Based on the findings, Ha3 was accepted, thus indicating that competence partially mediated the relationship between expectation and parental engagement in the child's speech therapy. In other words, parents with less expectation are likely to have lower competence, leading to lower engagement. Thus, even though the expectation is necessary, parents' competence also plays a significant role in determining the outcome of parental engagement. The Social Cognitive Theory (Bandura, 1986) also reported that parents with high self-efficacy strongly believe in their capabilities to achieve their

Table 3

Hypothesis testing on mediation analysis

Hypotheses	Relationship	Std. Beta	Std. Error	t-value	Confidence Interval (BC)		Decision
					LL	UL	
Ha3	Expectation <Competence> Engagement	0.194	0.032	6.062**	0.134	0.260	Accepted
Ha4	Communication <Competence> Engagement	0.068	0.020	3.480**	0.032	0.109	Accepted

Note. **p<0.001

expectations. They are also more motivated to complete tasks as they are more adaptive to challenging situations. Similarly, Arellano et al. (2019) examined the association between mothers' sense of competence and future expectations. They reported that higher maternal expectations of their child's future were associated with a more positive parenting sense of competence. Subsequently, this was linked with an increased engagement in their development activities.

Finally, Ha4 was also accepted based on the findings whereby parental competence partially mediated the relationship between communication and parental engagement in speech therapy for children with speech and language disorders. As a result, communication affected parental engagement both directly and indirectly through competence. Very often, parents who maintained good communication with their clinicians displayed a higher level of parental engagement. Furthermore, good parent-clinician communication

also improved parental competence and subsequently fostered better parental engagement. This finding was also supported by past studies in which positive communication with service providers led to a higher competence (Davies et al., 2017) that subsequently increased parental engagement in the intervention (Freckmann et al., 2017).

Additionally, Melvin et al. (2019) also recommended that speech therapists support parents by building a trusting relationship and working closely with them during intervention sessions. Such rapport can improve parental competence to make them more engaged in early intervention for speech pathology. Such findings were justifiable because parents are often responsible for initiating and practising at home. Furthermore, parents had higher competence levels when they had a strong working relationship through good communication with the clinicians (Ebert, 2018). To improve the confidence and competence of parents in guiding their

child's development, therapists should discuss the issues that affect parents' attitudes and feelings towards therapy, and offer adequate support and guidance to them.

CONCLUSION

Speech and language disorders are one of the leading development concerns in childhood. Timely speech therapy intervention can produce better outcomes for the children. However, it can be hindered by poor parental engagement in practising the intervention strategies at home. To increase parental engagement in these programmes, we need to understand the crucial role of parental engagement better. Hence, this study contributed to the literature gaps by providing empirical evidence on the association between expectation, communication, competence, and parental engagement in speech therapy for children with speech and language disorders. Moreover, the quantitative method in this study enabled the researcher to produce objective findings on the associated factors of parental engagement.

Additionally, the study findings also led to significant theoretical contributions. Based on the PTAPE (Phoenix et al., 2019), competence, expectation, and communication are among the factors that facilitate or inhibit the process of parental engagement. If these factors are limited, parents may attend therapy inconsistently or entirely withdraw from the therapy. The current findings showed that expectation, communication, and

competence significantly contribute to parental engagement. These findings were in line with PTAPE (Phoenix et al., 2019).

Meanwhile, the Engagement Capacity Model (Sieck et al., 2019) focuses more on patients capabilities, self-efficacy, or competence. These elements need to be enhanced to improve the clinicians' ability in helping the patients to engage. The present study results highlighted that parental competence mediated the relationship between communication, expectation, and parental engagement. Moreover, competence exerted the biggest influence on parental engagement compared to other factors, as highlighted by the Engagement Capacity Model (Sieck et al., 2019).

The current policy in speech therapy services centres on the child with speech and language disorder but often neglects significant others such as parents and family members. Hence, this study highlighted to policymakers the importance of prioritising strategies on improving parental competence, expectation, and parent-therapist communication. These features can ensure necessary actions for highly parental engagement in speech therapy.

Lastly, it is vital to customise treatment programmes attuned to each parent and family to achieve optimal parental engagement. Study findings have highlighted the importance of identifying parents at risk of low engagement for therapy, including those with more than one child in the family and those whose child has a more severe medical condition. Thus, to increase the engagement in these groups,

intervention should emphasise providing adequate information on the importance and credibility of speech therapy to establish an acceptable expectation for the rate and magnitude of their child's improvement.

Overall, this study identified the critical factors that affected parental engagement. Parental engagement in speech therapy for the paediatric population is a complex interaction between multiple factors, namely competence, expectation, and communication. By addressing these contributing factors of parental engagement, researchers, policymakers, and clinicians can better understand, plan, develop, and practise the most effective treatment strategies for children and family members involved in speech therapy.

ACKNOWLEDGEMENTS

The authors would like to acknowledge the funding from the Ministry of Health and support from all hospital staff, parents and families. Without their cooperation and participation, this study could not have been completed.

REFERENCES

- American Speech-Language-Hearing Association. (2008). Roles and responsibilities of speech-language pathologists in early intervention: Guidelines. *Early communication intervention*. <https://doi.org/10.1044/policy.GL2008-00290>
- Arellano, A., Denne, L. D., Hastings, R. P., & Hughes, J. C. (2019). Parenting sense of competence in mothers of children with autism: Associations with parental expectations and levels of family support needs. *Journal of Intellectual and Developmental Disability*, 44(2), 212-218. <https://doi.org/10.3109/13668250.2017.1350838>
- Auert, E. J., Trembath, D., Arciuli, J., & Thomas, D. (2012). Parents' expectations, awareness, and experiences of accessing evidence-based speech-language pathology services for their children with autism. *International Journal of Speech-Language Pathology*, 14(2), 109-118. <https://doi.org/10.3109/17549507.2011.652673>
- Bachner, Y. G., Carmel, S., Lubetzky, H., Heiman, N., & Galil, A. (2006). Parent-therapist communication and satisfaction with the services of a child development center: A comparison between Israeli parents - Jews and Bedouins. *Health Communication*, 19(3), 221-229. https://doi.org/10.1207/s15327027hc1903_4
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Prentice-Hall, Inc.
- Baydar, N., Reid, M. J., & Webster-Stratton, C. (2003). The role of mental health factors and program engagement in the effectiveness of a preventive parenting program for head start mothers. *Child Development*, 74(5), 1433-1453. <https://doi.org/10.1111/1467-8624.00616>
- Bercow. (2018). Bercow : Ten years on. *Royal College of Speech and Language Therapists, March*, 1-6. <https://www.bercow10yearson.com/wp-content/uploads/2018/04/Bercow-Ten-Years-On-Summary-Report-.pdf>
- Cadman, D., Rosenbaum, P., Walter, S., & McNamee, J. (1986). Community professionals' compliance with consultants' recommendations for developmentally disabled children. *Journal of Developmental and Behavioral Pediatrics*, 7(1), 21-26. <https://doi.org/10.1097/00004703-198602000-00004>
- Carroll, C. (2010). It's not everyday that parents get a chance to talk like this: Exploring parents'

- perceptions and expectations of speech-language pathology services for children with intellectual disability. *International Journal of Speech-Language Pathology*, 12(4), 352-361. <https://doi.org/10.3109/17549500903312107>
- D'Arrigo, R., Ziviani, J., Poulsen, A. A., Copley, J., & King, G. (2017). Child and parent engagement in therapy: What is the key? *Australian Occupational Therapy Journal*, 64(4), 340-343. <https://doi.org/10.1111/1440-1630.12279>
- Davies, K. E., Marshall, J., Brown, L. J. E., & Goldbart, J. (2017). Co-working: Parents' conception of roles in supporting their children's speech and language development. *Child Language Teaching and Therapy*, 33(2), 171-185. <https://doi.org/10.1177/0265659016671169>
- Division for Early Childhood. (2014). *DEC recommended practices in early intervention/early childhood special education*. <https://www.dec-sped.org/dec-recommended-practices>
- Ebert, K. D. (2018). Parent perspectives on the clinician-client relationship in speech-language treatment for children. *Journal of Communication Disorders*, 73(March), 25-33. <https://doi.org/10.1016/j.jcomdis.2018.03.005>
- Eisner, M., & Meidert, U. (2011). Stages of parental engagement in a universal parent training program. *Journal of Primary Prevention*, 32(2), 83-93. <https://doi.org/10.1007/s10935-011-0238-8>
- Freckmann, A., Hines, M., & Lincoln, M. (2017). Clinicians' perspectives of therapeutic alliance in face-to-face and telepractice speech-language pathology sessions. *International Journal of Speech-Language Pathology*, 19(3), 287-296. <https://doi.org/10.1080/17549507.2017.1292547>
- Garbacz, S. A., McIntyre, L. L., & Santiago, R. T. (2017). Family involvement and parent-teacher relationships for students with autism spectrum disorders. *School Psychology Quarterly*, 31(4), 478-490. <https://doi.org/10.1037/spq0000157>
- Haine-Schlagel, R., & Walsh, N. E. (2015). A review of parent participation engagement in child and family mental health treatment. *Clinical Child and Family Psychology Review*, 18(2), 133-150. <https://doi.org/10.1007/s10567-015-0182-x>
- Hair, J. F., Hult, J. G. T. M., Ringle, C. M., & Sarstedt, M. (2017). A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM). *Journal of Chemical Information and Modeling*, 8(9), 1-58.
- Johnson, C. J., Beitchman, J. H., & Brownlie, E. B. (2010). Twenty-year follow-up of children with and without speech-language impairments: Family, educational, occupational, and quality of life outcomes. *American Journal of Speech-Language Pathology*, 19(1), 51-65. [https://doi.org/10.1044/1058-0360\(2009/08-0083\)](https://doi.org/10.1044/1058-0360(2009/08-0083))
- King, G., Chiarello, L. A., Ideishi, R., Ziviani, J., Phoenix, M., McLarnon, M. J. W., Pinto, M., Thompson, L., & Smart, E. (2021). The complexities and synergies of engagement: an ethnographic study of engagement in outpatient pediatric rehabilitation sessions. *Disability and Rehabilitation*, 43(16), 2353-2365. <https://doi.org/10.1080/09638288.2019.1700562>
- King, G., Chiarello, L. A., McLarnon, M. J. W., Ziviani, J., Pinto, M., Wright, F. V., & Phoenix, M. (2021). A measure of parent engagement: Plan appropriateness, partnering, and positive outcome expectancy in pediatric rehabilitation sessions. *Disability and Rehabilitation*, 1-10. <https://doi.org/10.1080/09638288.2020.1864036>
- Klatte, I. S., Harding, S., & Roulstone, S. (2019). Speech and language therapists' views on parents' engagement in Parent-Child Interaction Therapy (PCIT). *International Journal of Language & Communication Disorders*, 54(4), 553-564. <https://doi.org/10.1111/1460-6984.12459>

- Law, M., & King, G. (1993). Parent compliance with therapeutic interventions for children with cerebral palsy. *Developmental Medicine & Child Neurology*, 35(11), 983-990. <https://doi.org/10.1111/j.1469-8749.1993.tb11580.x>
- Lewis, C. C., Scott, D. E., Pantell, R. H., & Wolf, M. H. (1986). Parent satisfaction with children's medical care. *Medical Care*, 24(3), 209-215. <https://doi.org/10.1097/00005650-198603000-00003>
- Lyons, R., O'Malley, M. P., O'Connor, P., & Monaghan, U. (2010). "It's just so lovely to hear him talking": Exploring the early-intervention expectations and experiences of parents. *Child Language Teaching and Therapy*, 26(1), 61-76. <https://doi.org/10.1177/0265659009349975>
- Macintyre, S. (2018). *Parents' expectations and experiences of child-focused speech-language therapy in New Zealand* (Issue August) [Master's thesis, University of Canterbury]. <http://doi.org/10.26021/8155>
- Mauricio, A. M., Tein, J. Y., Gonzales, N. A., Millsap, R. E., Dumka, L. E., & Berkel, C. (2014). Participation patterns among Mexican-American parents enrolled in a universal intervention and their association with child externalizing outcomes. *American Journal of Community Psychology*, 54(3-4), 370-383. <https://doi.org/10.1007/s10464-014-9680-0>
- McConnell, D., Savage, A., & Bretkreuz, R. (2014). Resilience in families raising children with disabilities and behavior problems. *Research in Developmental Disabilities*, 35(4), 833-848. <https://doi.org/10.1016/j.ridd.2014.01.015>
- Melvin, K., Meyer, C., & Scarinci, N. (2019). What does "engagement" mean in early speech pathology intervention? A qualitative systematised review. *Disability and Rehabilitation*, 42(18), 2665-2678. <https://doi.org/10.1080/09638288.2018.1563640>
- Melvin, K., Meyer, C., & Scarinci, N. (2021). Exploring the complexity of how families are engaged in early speech-language pathology intervention using video-reflexive ethnography. *International Journal of Language & Communication Disorders*, 56(2), 360-373. <https://doi.org/10.1111/1460-6984.12609>
- Oono, I. P., Honey, E. J., & McConachie, H. (2018). Parent-mediated early intervention for young children with autism spectrum disorders (ASD). *Cochrane Database of Systematic Reviews*, 10(4), 1-12. <https://doi.org/10.1002/14651858.CD009774>
- Phoenix, M., Jack, S. M., Rosenbaum, P. L., & Missiuna, C. (2018). A grounded theory of parents' attendance, participation and engagement in children's developmental rehabilitation services: Part 2. The journey to child health and happiness. *Disability and Rehabilitation*, 42(15), 1464-5165. <https://doi.org/10.1080/09638288.2018.1555618>
- Phoenix, M., Jack, S. M., Rosenbaum, P. L., & Missiuna, C. (2019). Parents' attendance, participation and engagement in children's developmental rehabilitation services: Part 1. Contextualizing the journey to child health and happiness. *Disability and Rehabilitation*, 42(15), 1464-5165. <https://doi.org/10.1080/09638288.2018.1555618>
- Pickard, K. E., Kilgore, A. N., & Ingersoll, B. R. (2016). Using community partnerships to better understand the barriers to using an evidence-based, parent-mediated intervention for autism spectrum disorder in a medicaid system. *American Journal of Community Psychology*, 57(3-4), 391-403. <https://doi.org/10.1002/ajcp.12050>
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator

- models. *Behavior Research Methods*, 40(3), 879-891. <https://doi.org/10.3758/BRM.40.3.879>
- Qi, C. H., Van Horn, M. L., Selig, J. P., & Kaiser, A. P. (2020). Relations between language skills and problem behaviour in preschool children. *Early Child Development and Care*, 190(16), 2493-2504. <https://doi.org/10.1080/03004430.2019.1588264>
- Shigenobu, T. (2007). Evaluation and usability of back translation for intercultural communication. In *Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics): Vol. 4560 LNCS* (Issue Part 2, pp. 259-265). https://doi.org/10.1007/978-3-540-73289-1_31
- Sieck, C. J., Walker, D. M., Retchin, S., & McAlearney, A. S. (2019). The patient engagement capacity model: What factors determine a patient's ability to engage? *NEJM Catalyst*, 1-10. <https://catalyst.nejm.org/patient-engagement-capacity-model/>
- Skeat, J., & Roddam, H. (2019). What do parents think about their involvement in speech-language pathology intervention? A qualitative critically appraised topic. *Evidence-Based Communication Assessment and Intervention*, 13(1-2), 15-31. <https://doi.org/10.1080/17489539.2019.1600293>
- Stahmer, A. C., Brookman-Frazee, L., Rieth, S. R., Stoner, J. T., Feder, J. D., Searcy, K., & Wang, T. (2016). Parent perceptions of an adapted evidence-based practice for toddlers with autism in a community setting. *Autism*, 21(2), 217-230. <https://doi.org/10.1177/1362361316637580>
- Sugden, E., Munro, N., Trivette, C. M., Baker, E., & Williams, A. L. (2019). Parents' experiences of completing home practice for speech sound disorders. *Journal of Early Intervention*, 41(2), 159-181. <https://doi.org/10.1177/1053815119828409>
- Toseeb, U., Gibson, J. L., Newbury, D. F., Orlik, W., Durkin, K., Pickles, A., & Conti-Ramsden, G. (2020). Play and prosociality are associated with fewer externalizing problems in children with developmental language disorder: The role of early language and communication environment. *International Journal of Language & Communication Disorders*, 55(4), 583-602. <https://doi.org/10.1111/1460-6984.12541>
- Williams, G. C., Freedman, Z.R., & Deci, E. L. (1998). Perceived competence scales. *Diabetes Care*, 21(1996), 3. <https://selfdeterminationtheory.org/perceived-competence-scales/>
- Wolf, M. H., Putnam, S. M., James, S. A., & Stiles, W. B. (1978). The medical interview satisfaction scale: Development of a scale to measure patient perceptions of physician behavior. *Journal of Behavioral Medicine*, 1(4), 391-401. <https://doi.org/10.1007/BF00846695>



Unpaid Domestic Work and Gender Inequality in the Time of COVID-19 in Malaysia

Harn Shian Boo

Anthropology and Sociology Section, School of Social Sciences, Universiti Sains Malaysia 11800 Pulau Pinang, Malaysia

ABSTRACT

The COVID-19 pandemic affected how we spend our time in the workplace and at home. Moreover, it caused employed couples to simultaneously work from home and deal with unpaid work due to Malaysia's Movement Control Order (MCO). What happens to housework and childcare responsibilities when women and men are required to work from home due to an abrupt lockdown? Who is doing the housework and childcare? Who should be responsible for unpaid domestic work? What are the factors that affect men's share in housework and childcare? This paper reports the early results of an online survey conducted on Malaysian men and women during the nationwide imposed lockdown in May 2020. In addition, it discusses how the pandemic affected unpaid housework and childcare time and responsibilities in Malaysia. The findings suggest that women spend more time on housework and childcare than men and are responsible for most unpaid domestic work during COVID-19. These findings are consistent with those obtained before the COVID-19 pandemic. The findings also suggest that the time availability perspective

affects men's share in housework and that the relative resources perspective affects their share in childcare during COVID-19. Overall, the results call for policy attention to the factors that narrow gender inequality in unpaid domestic work.

Keywords: COVID-19, gender inequality, Malaysia, unpaid domestic work

ARTICLE INFO

Article history:

Received: 30 March 2021

Accepted: 22 June 2021

Published: 13 September 2021

DOI: <https://doi.org/10.47836/pjssh.29.3.16>

E-mail address:

booharnshian@usm.my

INTRODUCTION

The COVID-19 pandemic significantly changed how we live. Workplace lockdowns caused employees to work from home. School and daycare closure caused children to stay at home, thus increasing the time for childcare. Dining restrictions also caused people to cook more frequently because no dine-in is allowed in restaurants and food stalls. It indicates that people are spending more time together at home during the COVID-19 pandemic.

There is a major shift from the working sphere to the private sphere when employed men and women must work from home because of the restrictions. According to a survey conducted by JobStreet Malaysia (2020), 67% of employees have worked from home during the restrictions. The survey further reported that the time spent on paid work when employed men and women work from home varies depending on the employers' attitudes in small and large organisations. As a result, some employees are contributing few hours in paid employment when working from home. Similarly, a survey conducted by the Department of Statistics Malaysia (2020b) also reported that 43.7% of the employees were required to work from home. About 16.2% were working shorter hours in the workplace during the restrictions. Both survey reports indicate that employed men and women spend more time at home and less time in the workplace or in paid work-related matters.

The public working sphere and private domestic spheres become difficult to

distinguish when paid work and unpaid domestic work are performed simultaneously in the same place. The convergence of working and private spheres also causes the paid work and home responsibilities to be performed simultaneously when employed men and women spend most of the time at the same space, which is at home (see López-Garza [2002] for an overview). Research in Malaysia shows that most employed men and women find it easier to cope with domestic responsibilities when working from home. However, women still carry more responsibilities and burdens than men during the pandemic (United Nations Development Programme [UNDP], 2020). The UNDP survey (2020) reported gender differences in the difficulty in managing domestic responsibilities during the COVID-19 pandemic. The survey reported that women aged 35 to 44 years old carry more significant domestic burdens than men. It implies that women were still responsible for most of the unpaid domestic work even though men pitched in more during the COVID-19 pandemic in Asia and the Pacific (Mercado et al., 2020; United Nations Entity for Gender Equality and the Empowerment of Women, 2020).

According to previous research, two theoretical perspectives dominate the empirical literature on the gender division of household labour: (1) time availability and (2) relative resources (see Bianchi et al. [2000], and Lachance-Grzela & Bouchard [2010] for an overview). These scholars claim that the two theoretical perspectives have different explanatory

power in the division of household labour. For example, in Malaysia, a study shows that the time availability and relative resources perspectives are essential factors affecting men's share in housework and childcare before COVID-19 (Boo, 2018).

Thus, in Malaysia, who is doing and is responsible for housework and childcare during the COVID-19 pandemic? Is there any gendered line in the housework and childcare responsibility when couples stay home together even if they are still employed? What are the factors that affect men's share in housework and childcare? This paper reports early results of an online survey ($N = 467$) conducted between 11 May and 5 June 2020 on how COVID-19 affected paid work, housework and childcare in Malaysia. This online survey investigated whether COVID-19 affected gender differences in (i) the time spent in paid work, housework and childcare, (ii) employment status and location of work and (iii) housework and childcare responsibilities. Moreover, this online survey investigated the factors that affect men's share in housework and childcare during the COVID-19 pandemic.

As context for the findings, a brief overview of the government response to the pandemic and prior gendered patterns in housework and childcare responsibilities in Malaysia are provided.

Government Response to COVID-19

Malaysia's first recorded case of COVID-19 was in late January 2020. The numbers of daily new cases were in single or double

digits. However, a massive spike in local cases in late February and early March led to a nationwide lockdown, referred to as 'Movement Control Order (MCO)' (Prime Minister's Office of Malaysia, 2020b). The MCO was implemented between 18 March and 31 March 2020 and further extended until 12 May 2020. Malaysia enforced (i) preventive measures; (ii) social distancing measures; (iii) national and state border closures; (iv) religious, sport, social and cultural places closures; (v) all government and private premises closures (except for essential services) and (vi) all government and private nursery centres, kindergartens, primary schools, secondary schools, pre-university and higher education institutions closures (Povera et al., 2020). During the MCO, the work-from-home arrangement has been required for all workers, except for essential workers. Malaysia had implemented the 'Conditional Movement Control Order (CMCO)' in May 2020. It changed to 'Recovery Movement Control Order (RMCO)' in June 2020. By the end of June, 8,639 cases and 121 deaths had been reported (Ministry of Health Malaysia, 2020).

During the pandemic and the MCO, the Malaysian government announced the PRIHATIN Rakyat Economic Stimulus Package worth RM250 billion to support individuals, households and businesses (Prime Minister's Office of Malaysia, 2020a). For example, the government provides one-off cash assistance to medium-income (RM1000) and low-income (RM1600) households. The government also

introduced the Wage Subsidy Programme to help employers retain their workers, with a salary of RM600 per month given to every employee for three months. However, no childcare subsidy was given on this Economic Stimulus Package.

The government has started to recognise the care burden after three months of the MCO. To assist working parents during this crisis, the government finally introduced several incentives during the RMCO in June 2020 (Povera et al., 2020). Examples of these incentives are vouchers for mobile childcare services and income tax relief for parents using childcare services. Likewise, the government gave a one-off grant for registered childcare centres to comply with the healthcare Standard of Procedures (SOPs) as a way to encourage parents to send their children to childcare centres during the COVID-19 pandemic.

Gendered Patterns in Unpaid Work

Housework and childcare most often refer to unpaid domestic work and are dominant tasks for women despite their high educational attainment and increases in labour force participation (Choong et al., 2019; Ministry of Women, Family and Community Development and the United Nations, 2014). Performing unpaid domestic work is a burden, especially for married working women as they are mainly responsible for unpaid housework and childcare (Abdullah et al., 2008; Boo, 2018; Choong et al., 2019; Choong & Tan, 2018; DaVanzo & Lee, 1978; Ng, 1999; Noor, 1999). Owing to the burden and difficulties

in juggling work and family responsibilities, most unemployed women chose family responsibilities as the main reason to stay out of employment in 2019 (Department of Statistics Malaysia, 2019).

In Malaysia, outsourcing housework and childcare can reduce the housework and childcare responsibilities among couples (Choong & Tan, 2018). For example, couples can seek outside help from live-out or live-in foreign domestic helpers. Likewise, couples can outsource childcare by sending children to nannies, public and private childcare centres or immediate family members. However, housework and childcare outsourcing can only be afforded by a small number of families in Malaysia.

In short, these findings generally suggest that most of the unpaid domestic work is performed by women in Malaysia. Studies on housework in Malaysia generally reported that women perform most of the housework, with men spending only a tiny amount of time doing housework (Abu Bakar, 2009; Boo, 2018; Choong et al., 2019; DaVanzo & Lee, 1978; Noor, 1999). On average, women spend almost twice as much time each week doing housework as men (Boo, 2018). Apart from housework, studies on childcare in Malaysia generally found that mothers spend significantly more time on childcare than fathers (Boo, 2018; DaVanzo & Lee, 1978; Juhari et al., 2013; Noor, 1999). On average, studies found that women spend almost 65.5% more time on childcare than men (Boo, 2018). The findings in past research are consistent with the findings in the pilot time-use survey,

which was conducted by Choong and colleagues (2019). They found that women spend almost 63.6% more time on unpaid housework and childcare than men.

METHODS

An online survey, 'Housework and Childcare During the Time of the COVID-19 Pandemic', was developed and conducted between 11 May and 5 June 2020. The respondents were given information on the research, information related to informed consent, the expected time needed to complete the survey and the researcher's contact details before taking part in this online survey. The study protocol was approved by the Human Research Ethics Committee USM (Protocol number: USM/JEPeM/COVID19-05).

This online survey drew 467 responses from a non-probability sample of current Malaysian residents. A sample size of 467 respondents is good, which exceeds the required number of 384 for a population survey at a 95% confidence level and 5% confidence interval using Cochran's formula (Cochran, 1977). This online survey used a purposive sampling design to target couples with children living in households with housework and childcare responsibilities. The respondents were identified through social media. Couples who are working or not working are eligible to take part in this study. Participants were self-selected into the study.

The respondents were asked to provide demographic information and employment arrangement during the pandemic.

Demographic information includes age, ethnicity, educational attainment and monthly income of each of the couple, and household compositions include additional adults, age and the number of children during the COVID-19 pandemic. Employment arrangement includes employment status and location during the pandemic.

The online survey asked the respondents the average hours they spend in a week on (1) paid work, (2) housework and (3) childcare. Housework includes meal preparation, dishwashing, laundry, ironing, house cleaning, buying groceries, paying bills, gardening and throwing garbage. Childcare includes feeding, bathing, dressing, soothing, carrying, telling stories, reading, helping children learn, talking with children, teaching, putting children to bed, playing games and supervising games. For both housework and childcare, the respondents estimated the time allocated for the component tasks in housework and childcare separately. The online survey questions were adopted from the International Social Survey Programme (International Social Survey Programme Research Group, 2016). The instrument has gone through numerous pilot studies to make it a valid and reliable instrument. Furthermore, it should be noted that the ISSP approved the use of this questionnaire.

To determine whether gender differences were statistically significant in the paid work, housework and childcare time during the COVID-19 pandemic, t-tests were conducted based on the respondents' reported time. Moreover, two Chi-squared tests were

conducted. First, a Chi-squared test was conducted to determine whether gender differences were statistically significant in the employment status and paid work location during the COVID-19 pandemic. Second, Chi-squared tests were conducted based on the respondents' response to the question 'Who should be responsible for doing housework/childcare during the COVID-19 pandemic?' to determine whether gender differences were statistically significant in housework and childcare responsibilities. Ordinary least-square (OLS) regression models were run to test the factors affecting men's share in housework and childcare based on the predictors used in the most gendered division of housework and childcare (see Lachance-Grzela & Bouchard [2010] for an overview). The OLS regression models accounting for couples and household characteristics: age, monthly income, women's proportion of household income, education (tertiary = 1, no tertiary = 0) and paid work hours; control

variables of age, the number of children at home (one child [omitted]/two children/three children), children aged below 12 years old (yes = 1) and parents/parents-in-law/maid living in the household (yes=1).

RESULTS

Respondents' Characteristics

A total of 467 responses have been obtained in this online survey. The sample characteristics are listed in Table 1. The proportion of Malay, Chinese and Indian respondents is similar to that of ethnic groups in Malaysia (Department of Statistics Malaysia, 2020a). However, the sample was skewed towards employed women and those with higher educational attainment. Moreover, the sample was skewed towards nuclear families and those households with children aged below 12. These characteristics align with most online surveys (Craig & Churchill, 2020; Kellner, 2004).

Table 1
Sample description (means and proportions)

Variable	Women	Men
Ethnicity		
<i>Malay</i>	59.6	68.6
<i>Chinese</i>	27.2	19.6
<i>Indian</i>	7.0	9.8
<i>Others</i>	6.3	2.0
Household composition ^a		
<i>Living with parents/parents-in-law</i>	24.0	21.6
<i>Living with maid</i>	6.0	2.0
<i>Living with children aged below 12</i>	82.0	70.6

Table 1 (Continued)

Variable	Women	Men
Average number of children in household	2.4	2.6
Average number of people in household	4.7	4.8
Average monthly earnings during the COVID-19 pandemic	3779.6	5940.2
Average age of respondents	35.3	40.3
Employment status during the COVID-19 pandemic ^a		
<i>Full-time</i>	65.4	78.4
<i>Part-time</i>	9.1	13.7
<i>Not working</i>	25.5	7.8
Employment location during the COVID-19 pandemic ^a		
<i>At home</i>	55.0	66.7
<i>At the workplace</i>	45.0	33.3
Highest level of educational qualifications		
<i>Master's degree or PhD</i>	15.1	33.3
<i>Bachelor's degree</i>	38.9	39.2
<i>Graduate Certificate or Diploma</i>	25.7	23.5
<i>Pre-university or below</i>	20.2	3.9

Notes. ^a Percentages do not add up to 100. Source: Author's survey, Housework and Childcare in the Time of COVID-19 (Movement Control Order)

Time in Paid Work, Housework and Childcare During the COVID-19 Pandemic

Table 2 presents the time allocation to paid work, housework and childcare during the

time of the COVID-19 pandemic. The *t*-tests show significant differences between men and women in housework and childcare times but not paid work time.

Table 2

Respondents' mean hours a week in paid work and unpaid work during the COVID-19 pandemic

Activity	Women	Men	Sig diff
Paid work	18.3	22.1	n.s
Housework	18.6	11.7	***
Childcare	22.4	14.5	**

Note. ***, ** denote statistical significance at the 1% and 5% levels, respectively. Source: Author's survey, Housework and Childcare in the Time of COVID-19 (Movement Control Order)

Women spent significantly more hours per week on housework than men (18.6 and 11.7, respectively). As expected, women averaged more time each week doing housework than men during the time of the COVID-19 pandemic. This finding is consistent with previous research in Malaysia that women averaged more time on housework than men before COVID-19 (Boo, 2018; Choong et al., 2019; DaVanzo & Lee, 1978; Noor, 1999). According to previous research, women spent an average of about 11 hours per week on housework and men about 5 hours per week (Boo, 2018). More importantly, this finding is consistent with previous research in Malaysia that there are gender differences in terms of housework time before COVID-19 (Boo, 2018; Choong et al., 2019). According to Boo (2018), women averaged almost twice as much time each week doing housework than men at the time of the survey. However, this study demonstrates that women averaged approximately 1.5 times each week doing housework than men during the COVID-19 pandemic.

As was the case for childcare, women averaged significantly more hours per week than men (22.4 and 14.5, respectively). This finding is consistent with previous research in Malaysia that demonstrated that women spent more time on childcare than men (Boo, 2018; Choong et al., 2019; DaVanzo & Lee, 1978). In addition, past research found that, on average, women spent almost twice as much time each week doing childcare as men (Boo, 2018). However, Table 2 demonstrates that women spent almost 1.5

times more than men on childcare during the pandemic.

It has been recognised that making a conclusion based on the findings of this study and the previous one is not definite for at least one reason. The respondents who participated in this study may not be the same person who participated in the previous research. Therefore, it would be inaccurate to claim conclusively that the gender gap in housework and childcare time has become narrower during the COVID-19 pandemic than before the pandemic based on the online survey. Nonetheless, it is worth noting that the crisis may encourage men to pitch in more when they spend more time together with their partners at home. Hence, the gender gap slightly becomes narrower.

Employment Status and Location of Paid Work During the COVID-19 Pandemic

During the COVID-19 pandemic, about 78.4% of men and 65.4% of women were in full-time employment, and 13.7% of men and 9.1% of women were in part-time employment. No significant differences were observed in gender for employment status (results not shown). As was the case for paid work, there were no significant differences in gender for the work location (at home or the workplace) (results not shown). These suggest minimal differences between men and women in terms of the employment status and work location during the COVID-19 pandemic. This result might be related to the restrictions during the pandemic, which can be applied to men and women.

Housework and Childcare Responsibilities During the COVID-19 Pandemic

Table 3 presents the housework and childcare responsibilities during the time

of COVID-19. The Chi-squared tests demonstrate significant differences between men and women regarding who should be responsible for housework and childcare during the pandemic.

Table 3

Respondents' housework and childcare responsibilities during the COVID-19 pandemic (%)

	Women	Men
Housework responsibility		
<i>Me</i>	41.6	19.6
<i>My spouse</i>	4.8	19.6
<i>Equal</i>	45.7	54.9
<i>Others</i>	7.9	5.9
Chi-sq test		***
Childcare responsibility		
<i>Me</i>	47.6	29.4
<i>My spouse</i>	8.9	19.6
<i>Equal</i>	36.8	45.1
<i>Others</i>	6.7	5.9
Chi-sq test		*

Note. ***, **, * denote statistical significance at the 1%, 5% and 10% levels, respectively. Source: Author's survey, Housework and Childcare in the Time of COVID-19 (Movement Control Order)

About 41.6% of women perceived housework as their sole responsibility, whereas 45.7% perceived it as a shared responsibility between spouses. Less than 5% of women perceived that their husbands should be responsible for the housework. Conversely, 54.9% of men perceived housework as a shared responsibility between spouses. However, less than one-fifth of men perceived that housework as

their sole or their wives' responsibility. These results indicate most women perceive that housework is their sole responsibility or the responsibility between them and their spouses. Contrarily, the majority of the men tend to perceive housework as a shared responsibility between spouses.

In terms of childcare, most women perceived it as their sole responsibility. In contrast, about 36.8% perceived it as a

shared responsibility between spouses. Less than 9% of women perceived childcare as their husbands' responsibility. Conversely, about 45.1% of men perceived childcare as a shared responsibility between spouses; moreover, one-third of men perceived it as their sole responsibility. However, less than 6% of men perceived that others should bear the childcare responsibility.

Table 2 demonstrates that most women tend to perceive housework and childcare as their sole responsibility or a shared responsibility with their spouses. Contrarily, most men perceive that housework and childcare responsibilities should be shared between spouses. These findings are consistent with previous research that women tend to perform unpaid domestic work alone and that men tend to share it with their spouses (Choong et al., 2019).

It is important to note that a small number of men and women perceived that housework and childcare should be performed by other people, such as domestic helpers, nannies or immediate family members. It is in line with previous research indicating that only a small number of households can afford to outsource housework (live-in and live-out foreign domestic helpers) and childcare (immediate family members and nannies) in Malaysia (Choong & Tan, 2018).

It is saddening to see that even though the COVID-19 restrictions required men and women alike to stay at home, most women still perceived unpaid domestic work as their sole responsibility. However, less than one-fifth and less than one-third

of men perceive housework and childcare, respectively, as their sole responsibility. Hence, it is applauding to see a small number of men taking up the housework and childcare responsibilities during the COVID-19 pandemic.

In addition, it is essential to note that the sample is skewed towards those women who have tertiary educational qualifications. It is not surprising that they may have a more egalitarian gender role ideology than those who do not have tertiary education qualifications (see Coverman [1985] and Presser [1994] for an overview on the relationship between education and gender role attitudes). Women who have more egalitarian gender ideology believe in equal sharing among couples in unpaid domestic work. However, most of them believe that housework and childcare should be shared among couples. This finding may only be specific to the sample of this study due to sample skewness.

Predictors

In Table 4, OLS regression models were run on men's share in housework and childcare on the whole sample. Again, all else equal, the factors that affect men's share on housework and childcare are different.

Net of covariates, men who have children below aged 12 years old perform a higher share of housework than those who have children aged above 12 years old in the household. Also, men perform a higher share of housework when their wives spend long hours in paid employment. However, men reduce their share in housework when they

Table 4

OLS regression estimates for men's share in housework and childcare

	housework		childcare	
	<i>B</i>	<i>Sig</i>	<i>B</i>	<i>Sig</i>
Men's age	-0.78		-0.24	
Number of Children (ref-one child)				
<i>Two children</i>	-0.86		-0.53	
<i>Three or more children</i>	3.25		-0.75	
Household contains				
Children above 12 years old	-5.78	*	-1.31	
Maid	-2.04		-0.78	
Parents/parents-in-law	-0.71		-2.53	
Women's paid work hours	0.13	*	0.03	
Men's paid work hours	-0.15	**	-0.06	
Men's monthly income	0.00		0.00	
Women's proportion of household income	0.08		0.11	**
Men's education (ref: no tertiary education)				
Has tertiary qualifications	1.26		2.18	
Constant				
R-square	0.05		0.05	

Note. ***, **, * denote statistical significance at the 1%, 5% and 10% levels, respectively.

spend longer hours in paid employment. These factors are associated with the time availability perspectives emphasising that those who have more time will do more housework regardless of gender (see Coverman [1985] for an overview). These findings are consistent with Malaysia's past research indicating that these factors

influence men's share in housework before the COVID-19 pandemic (Boo, 2018; DaVanzo & Lee, 1978).

In terms of childcare, men perform more childcare tasks when their wives contribute more monthly income to the household. Table 4 presents a positive relationship between women's proportion of household

income and men's share in childcare. It indicates that men perform a higher share of childcare (11%) when their wives contribute more monthly income to households than them. This factor is associated with the relative resources perspective emphasising that those with more resources can bargain into or out from a task (see Bittman et al. [2003] for an overview). The result hints that power dynamics (women who contribute more income to the household are likely to use their bargaining power to bargain out of childcare and get their spouses to get more involved in childcare tasks) are relevant to the division of childcare in Malaysian families. This finding is consistent with the finding of the previous study in Malaysia (Boo, 2018).

It is important to note that OLS regression models demonstrate that the factors affecting men's share in housework differed from men's share in childcare. The time availability perspective has a predictive power for men's share in housework. The coefficients associated with men's paid work hours are negative and statistically significant. In contrast women's paid work hours are positive and statistically significant. Relative resources measured by women's proportion of household income has a predictive power for men's share in childcare but not for housework. The coefficients associated with women's proportion of household income are positive and statistically significant. These differences suggest that men and women perceive housework and childcare differently. This empirical evidence supports

the scholars' claim that housework and childcare should be analysed as distinct owing to their different nature (Bianchi & Raley, 2005; Hewitt et al., 2011).

DISCUSSION AND RECOMMENDATION

The COVID-19 pandemic has caused men and women to juggle paid employment, housework and childcare simultaneously in the same place. The lockdowns had generated more housework and childcare tasks for couples, especially women. Women are responsible for most of the unpaid work during the pandemic. It is similar to the research focusing on unpaid domestic work during the pandemic (Craig & Churchill, 2020; Mercado et al., 2020; United Nations Entity for Gender Equality and the Empowerment of Women, 2020; UNDP, 2020).

First, the results indicate inequality. When men and women spent time together at home during the restrictions, women shouldered most housework and childcare. Although men pitched in the housework and childcare during the COVID-19 pandemic, there were still gender differences in time spent on the responsibilities (as shown in Table 2). This finding is consistent with previous research in Malaysia that women averaged more time on housework than men before COVID-19 (Boo, 2018; Choong et al., 2019; DaVanzo & Lee, 1978; Noor, 1999).

Second, between housework and childcare responsibilities, most women tend to perceive housework and childcare

as either their sole responsibility or a shared responsibility with their spouses. In contrast, most men perceive that housework and childcare should be shared between spouses (as shown in Table 3). These findings are consistent with previous research that women tend to perform unpaid domestic work alone and that men tend to share it with their spouses (Choong et al., 2019). Interestingly, more men tend to perceive childcare as their sole responsibility than housework. It might be because childcare is more rewarding and fun than housework (Connell, 2009; Oakley, 1974). For example, men spend more time on fun and play activities compared with women. In terms of housework, more men tend to perceive it as a shared responsibility because, for many, they are more inclined to join in, backup rather than be the sole charging of housework.

In addition, these results could be related to the traditional gender roles that still affect the way men and women divide housework and childcare although. The pandemic warranted most men and women to work from home. The traditional gender roles are related to how men and women are socialised into male and female gender roles and are expected to behave accordingly (Cunningham, 2001; Epstein & Ward, 2011). For example, additional housework burdens brought about by children are not necessarily perceived as men's responsibility but women's (Bianchi et al., 2000; Coltrane, 2000). Moreover, women may do more housework because 'the cleanliness of one's home is a reflection

on women's competence as a "wife and mother", but not men's competence as a "husband and father"' (Bianchi et al., 2000, p. 195). Thus, the traditional gender norms seem to influence the division of household labour during the pandemic.

Third, even though employed men and women juggle work and unpaid work during the work-from-home arrangement, men only increase their share in housework when they spend less time in paid employment. Also, men increase their share in childcare only if women contribute more household income than them (as shown in Table 4). It indicates that women's higher relative income relatively induced more equality in households. The two predictive factors indicate that men's long hours spent in paid employment impede gender equality at home. Moreover, if women earn less than men, men can bargain out from childcare, impeding gender equality at home. These findings are similar to those of previous studies in Malaysia conducted before the COVID-19 pandemic (Boo, 2018).

Therefore, moving towards an equal division of labour in the household, recognising the importance of unpaid domestic work, changing traditional gender norms regarding women's and men's responsibilities, reducing the number of time men spend on paid work and increasing women's income seem crucial to achieving greater gender equality in households. In this context, housework recognition may shift the traditional gender norms around domestic work as housework is women's work. It should be emphasised

that housework is essential and needs to be performed to maintain a family, keep it functioning and avoid reassertion of femininity. Also, shifting the traditional gender norms that champion the traditional male-breadwinner and female-homemaker model seems crucial in encouraging men to share the burden.

Likewise, the work-from-home arrangement may be suitable for men to spend more time at home and less time in paid work. It demonstrates the need for the Malaysian government to encourage work-from-home practices for men after the pandemic to narrow the gender inequality gap in unpaid domestic work. It should be highlighted that the 11th Malaysia Plan (2016-2020), the most recent plan at the time of this publication, emphasised flexible working and work-from-home arrangements; however, these initiatives are targeted at women and not men (Ministry of Economic Affairs, 2018). It is recommended that the 12th Malaysian Plan should include men as one of the targeted groups in enjoying these initiatives so that men can share the unpaid work with their spouses. In this regard, the lockdowns have demonstrated that working from home is feasible for most jobs.

Also, family-friendly policies that allow women to balance work and family should be emphasised by policymakers because earnings are crucial for women to get their spouses involved in childcare. In the 11th Malaysia Plan, initiatives including flexible working, work-from-home and returning to work are essential in encouraging women

to continue working in the labour force (Ministry of Economic Affairs, 2018). These initiatives should be continued and highlighted because by encouraging women to stay in the workforce, they can earn income, negotiate with their spouses, and get them to participate in childcare. In addition, the government of Malaysia could encourage public and private sectors to provide flexible working and work-from-home arrangements to support women in balancing work and family responsibilities.

This study has methodological limitations, such as using the purposive sampling technique and the small sample size. Although the findings may not be generalised to the broad population, they provide preliminary results on the gender inequality in unpaid domestic work during the COVID-19 pandemic in the Malaysian context. It should be noted that the restrictions during the pandemic made it difficult for research to be conducted; hence, only a small sample size can be achieved.

CONCLUSION

In conclusion, women are responsible for most of the unpaid domestic work during the pandemic. Most women perceive housework and childcare as their sole responsibility or shared responsibility with their spouse. In contrast, most men perceive housework and childcare are being shared between spouses. The study's findings suggest that men's paid work hours and women's earnings are two critical factors in narrowing the gender gap in the division of household labour among heterosexual couples.

These findings contribute to the literature on the gendered division of household labour during the COVID-19 pandemic. This study emphasises that gender inequality in household labour persists even though couples spend more time together during the restrictions. The findings indicate that the gendered division of household labour changed little during the COVID-19 pandemic. However, this pandemic provides an opportunity to narrow the gender inequality gap when men and women spend more time at home.

Recommendations for future research include gender differences in unpaid work before and during the COVID-19 pandemic. Investigating the division of household labour before and during COVID-19 would be valuable to examine the gender gaps before and during the pandemic. Moreover, couples' subjective experiences in household labour division during the COVID-19 pandemic are worth examining as they can add value to quantitative research.

ACKNOWLEDGEMENT

This work was supported by Universiti Sains Malaysia [Short Term Grant: No. 304/PSOSIAL/6315358].

REFERENCES

- Abdullah, K., Noor, N. M., & Wok, S. (2008). The perceptions of women's roles and progress: A study of Malay women. *Social Indicators Research, 89*(3), 439-455. <https://doi.org/10.1007/s11205-008-9242-7>
- Abu Bakar, N. R. H. (2009). Faktor-faktor yang mempengaruhi segregasi pekerjaan mengikut gender di Malaysia: Satu ilustrasi mikro dari Seremban, Negeri Sembilan [Factors that influence the gender segregation in work force: A micro illustration from Seremban, Negeri Sembilan]. *Geografia-Malaysian Journal of Society and Space, 5*(2), 45-54.
- Bianchi, S. M., Milkie, M. A., Sayer, L. C., & Robinson, J. P. (2000). Is anyone doing the housework? Trends in the gender division of household labor. *Social Forces, 79*(1), 191-228. <https://doi.org/10.2307/2675569>
- Bianchi, S. M., & Raley, S. B. (2005). Time allocation in families. In S. M. Bianchi, L. M. Casper, & R. B. King (Eds.), *Work, family, health, and well-being*. Taylor & Francis.
- Bittman, M., England, P., Folbre, N., Sayer, L., & Matheson, G. (2003). When does gender trump money? Bargaining and time in household work. *American Journal of Sociology, 109*(1), 186-214. <https://doi.org/10.1086/378341>
- Boo, H. S. (2018). *Ethnicity and religiosity in the gender division of housework and childcare in Malay and Chinese households in Malaysia* [Doctoral Dissertation, University of New South Wales]. <https://unsworks.unsw.edu.au/fapi/datastream/unsworks:51104/SOURCE2?view=true>
- Choong, C., Firouz, A. M. M., Jasmin, A. F., Noor, N. M., & Gong, R. (2019). *Time to care: Gender inequality, unpaid care work and Time Use Survey*. Khazanah Research Institute.
- Choong, C., & Tan, T. T. (2018). *The unsung labour: Care migration in Malaysia*. Khazanah Research Institute.
- Cochran, W. G. (1977). *Sampling techniques* (3rd ed.). Wiley.
- Coltrane, S. (2000). Research on household labor: Modeling and measuring the social embeddedness of routine family work. *Journal of Marriage and Family, 62*(4), 1208-1233. <https://doi.org/10.1111/j.1741-3737.2000.01208.x>

- Connell, R. W. (2009). *Gender: An introduction* (2nd ed.). Polity, London.
- Coverman, S. (1985). Explaining husbands' participation in domestic labor. *The Sociological Quarterly*, 26(1), 81-97. <https://doi.org/10.1111/j.1533-8525.1985.tb00217.x>
- Craig, L., & Churchill, B. (2020). Working and caring at home: Gender differences in the effects of Covid-19 on paid and unpaid labor in Australia. *Feminist Economics*. <https://doi.org/10.1080/13545701.2020.1831039>
- Cunningham, M. (2001). Parental influences on the gendered division of housework. *American Sociological Review*, 66(2), 184-203. <https://doi.org/10.2307/2657414>
- DaVanzo, J., & Lee, D. L. P. (1978). *The compatibility of child care with labor force participation and nonmarket activities: Preliminary evidence from Malaysian Time Budget Data*. RAND Corporation.
- Department of Statistics Malaysia. (2019). *Labour force survey report*. <https://www.dosm.gov.my/v1/index.php?r=column/pdfPrev&id=TIVMbEtBVXBGTi80VjdqZ1JUdVRHdz09>
- Department of Statistics Malaysia. (2020a). *Current population estimates, Malaysia 2020*. https://www.dosm.gov.my/v1/index.php?r=column/cthemeByCat&cat=155&bul_id=OVByWjg5YkQ3MWFZRTN5bDJiaEVhZz09&menu_id=L0pheU43NWJwRWVVSZklWdzQ4TlhUUT09
- Department of Statistics Malaysia. (2020b). *Report of special survey on effects of COVID-19 on economy & individual (Round 1)*. https://www.dosm.gov.my/v1/index.php?r=column/cone&menu_id=d3pnMXZ4ZHJjUnpnYjNyUnJhek83dz09
- Epstein, M., & Ward, L. M. (2011). Exploring parent-adolescent communication about gender: Results from adolescent and emerging adult samples. *Sex Roles*, 65(1), 108-118. <https://doi.org/10.1007/s11199-011-9975-7>
- Hewitt, B., Baxter, J., Givans, S., Murphy, M., Myers, P., & Meiklejohn, C. (2011). *Men's engagement in shared care and domestic work in Australia*. <https://www.dss.gov.au/our-responsibilities/women/publications-articles/economic-independence/mens-engagement-in-shared-care-and-domestic-work-in-australia>
- International Social Survey Programme Research Group. (2016). *International social survey programme: Family and changing gender roles IV -ISSP 2012 (ZA5900)*. <https://doi.org/10.4232/1.12661>
- JobStreet Malaysia. (2020). *COVID-19 job report*. <https://www.jobstreet.com.my/en/cms/employer/wp-content/themes/jobstreet-employer/assets/loa/report/my/JobStreet-COVID-19-Job-Report-Malaysia-Sept-2020.pdf>
- Juhari, R., Yaacob, S. N., & Talib, M. A. (2013). Father involvement among Malay Muslims in Malaysia. *Journal of Family Issues*, 34(2), 208-227. <https://doi.org/10.1177/0192513X12461339>
- Kellner, P. (2004). Can online polls produce accurate findings? *International Journal of Market Research*, 46(1), 3-22. <https://doi.org/10.1177/147078530404600102>
- Lachance-Grzela, M., & Bouchard, G. (2010). Why do women do the lion's share of housework? A decade of research. *Sex Roles*, 63(11), 767-780. <https://doi.org/10.1007/s11199-010-9797-z>
- López-Garza, M. (2002). Convergence of the public and private Spheres: Women in the informal economy. *Race, Gender & Class*, 9(3), 175-192.
- Mercado, L., Naciri, M., & Mishra, Y. (2020). Women's unpaid and underpaid work in the times of COVID-19. *UN Women, Asia Pacific*. <https://asiapacific.unwomen.org/en/news-and-events/stories/2020/06/womens-unpaid-and-underpaid-work-in-the-times-of-covid-19>
- Ministry of Economic Affairs. (2018). *Mid-term review of the Eleventh Malaysia Plan 2016-*

2020. <https://www.epu.gov.my/en/economic-developments/development-plans/rmk/mid-term-review-eleventh-malaysia-plan-2016-2020>
- Ministry of Health Malaysia. (2020). *Updates on the coronavirus disease 2019 (COVID-19) situation in Malaysia*. [http://covid-19.moh.gov.my/terkini/062020/situasi-terkini-30-jun-2020/Kenyataan_Akhbar_KPK_COVID-19_\(30_Jun_2020\)_-EN.pdf](http://covid-19.moh.gov.my/terkini/062020/situasi-terkini-30-jun-2020/Kenyataan_Akhbar_KPK_COVID-19_(30_Jun_2020)_-EN.pdf)
- Ministry of Women, Family and Community Development and the United Nations. (2014). *Study to support the development of national policies and programmes to increase and retain the participation of women in the Malaysian labour force: Key findings and recommendations*. https://www.my.undp.org/content/malaysia/en/home/library/womens_empowerment/women-in-malaysian-labour-force-study-with-undp-2013.html
- Ng, C. (1999). *Positioning women in Malaysia: Class and gender in an industrializing state*. Palgrave Macmillan UK. https://doi.org/10.1007/978-1-349-27420-8_1
- Noor, N. M. (1999). Roles and women's well-being: Some preliminary findings from Malaysia. *Sex Roles*, 41(3), 123-145. <https://doi.org/10.1023/A:1018846010541>
- Oakley, A. (1974). *Sociology of housework*. Pantheon New York.
- Povera, A., Harun, H. N., & Yuus, A. (2020, June 5). Government announces incentives for working parents. *New Straits Times*. <https://www.nst.com.my/news/nation/2020/06/598209/government-announces-incentives-working-parents>
- Presser, H. B. (1994). Employment schedules among dual-earner spouses and the division of household labor by gender. *American Sociological Review*, 59(3), 348-364. <https://doi.org/10.2307/2095938>
- Prime Minister's Office of Malaysia. (2020a). *Prihatin Rakyat Economic Stimulus Package (PRIHATIN)*. <https://www.pmo.gov.my/2020/03/speech-text-prihatin-esp/>
- Prime Minister's Office of Malaysia. (2020b). *The Prime Minister's special message on COVID-19*. <https://www.pmo.gov.my/2020/03/perutusan-khas-yab-perdana-menteri-mengenai-covid-19-16-mac-2020/>
- United Nations Development Programme. (2020). *How we worked from home. Report prepared by UNDP Accelerator Lab Malaysia*. <https://www.undp.org/content/undp/en/home/librarypage/crisis-prevention-and-recovery/how-we-worked-from-home.html>
- United Nations Entity for Gender Equality and the Empowerment of Women. (2020). *Surveys show that COVID-19 has gendered effects in Asia and the Pacific | UN Women Data Hub*. <https://data.unwomen.org/resources/surveys-show-covid-19-has-gendered-effects-asia-and-pacific>



Dimensions of National Ethos among Educated Youths in Malaysia

Mohd Mahadee Ismail^{1*}, Nor Azlili Hassan², Azlina Abdullah³, Hairol Anuar Mak Din⁴, Marzudi Md Yunus⁵ and Mansor Mohd Noor⁶

¹*Department of Government and Civilizational Studies, Faculty of Human Ecology, Universiti Putra Malaysia, 43400 UPM Serdang, Selangor, Malaysia*

²*Faculty of Creative Industries, Universiti Tunku Abdul Rahman, 43000 Sg Long, Selangor, Malaysia*

³*Anthropology and Sociology Program, Research Center in Development, Social and Environment, Faculty of Social Sciences and Humanities, Universiti Kebangsaan Malaysia, 43600 Bangi Selangor, Malaysia*

⁴*Department of Nationhood and Civilization, Selangor International Islamic College University, Bandar Seri Putra, 43000 Kajang, Selangor, Malaysia*

⁵*Department of Socio-Culture/Malay Art, Academy of Malay Studies, Universiti Malaya, 50603 Kuala Lumpur, Malaysia*

⁶*Institute of Ethnic Studies, Universiti Kebangsaan Malaysia, 43600 Bangi Selangor, Malaysia*

ABSTRACT

This article focuses on dimensions of national ethos among educated youths in Malaysia by developing a confirmatory factor analysis (CFA) model. The main objective is to evaluate national ethos dimensions and develop a CFA model of the national ethos formation. These objectives are achieved by applying four main dimensions to confirm the formation of national ethos: values, feelings and spirit, beliefs and identity dimensions. The study was conducted using a quantitative approach through survey techniques involving 431 students of Universiti Putra Malaysia, comprising 241 Malay and 190 Chinese youth groups. The data analysis used the SEM-AMOS approach to develop a CFA model of the national

ethos. The results confirm national ethos of educated youth is formed through the four main dimensions measured. The CFA model has achieved a good level of compatibility based on the set indicators (CMIN = 600.947, DF = 115, CMIN / DF = 5.226, $p = 0.000$, SRMR = 0.0937, RMSEA = 0.099, CFI = 0.927 and PNFI = 0.771). This study implies a CFA model as a new approach in national ethos formation among educated youths in Malaysia. A future evaluation of

ARTICLE INFO

Article history:

Received: 02 March 2021

Accepted: 06 July 2021

Published: 24 September 2021

DOI: <https://doi.org/10.47836/pjssh.29.3.17>

E-mail addresses:

mahadee@upm.edu.my (Mohd Mahadee Ismail)

azlili@utar.edu.my (Nor Azlili Hassan)

azlina_ab@ukm.edu.my (Azlina Abdullah)

hairolanuar@kuis.edu.my (Hairol Anuar Mak Din)

marzudi@um.edu.my (Marzudi Md Yunus)

mansormohdnoor@yahoo.com (Mansor Mohd Noor)

* Corresponding author

a non-educated youth group should also be implemented to assure that this model becomes a holistic model.

Keywords: Confirmatory factor analysis, educated youths, national ethos, Universiti Putra Malaysia

INTRODUCTION

National ethos is an abstract element. Various dimensions have been used by researchers in measuring the formation of national ethos regardless of the context of society, community, group, youth, or state. Certainly, the important elements of the national ethos are very closely related to the local environment or locality in which a study is conducted. Different environments allow for the existence of different national ethos. In Malaysia's context, its multicultural society has become a catalyst for forming the national ethos that has been built. Although it is quite challenging to determine what elements are shared in the Malaysian community, this study has scrutinised the suitability of each dimension used to measure the formation of national ethos, especially among the educated youth. This study is designed specifically to evaluate the factors of national ethos formation based on the dimensions of values, feelings and spirit, beliefs and identity, and to develop a CFA model of the national ethos. The form of analysis used is an inferential analysis based on the four levels of Mulaik and Millsap (2000) and Schumacker and Lomax (2010).

Malaysian society, characterised by ethnic, religious, linguistic and cultural diversity, has faced various nation-state

challenges. Now, there is a new generation who has the experience of sharing life in various aspects, primarily through education. The young generation considers themselves as 'Malaysian born' and accepted the idea of 'Malaysian nation' (Embong, 2006). The current reality shows that the educated youths of various ethnic groups live peacefully and harmoniously without critical problems or blood tragedy threatening the country's stability (Ismail, 2015). In line with the philosophy of 'unity in diversity' and 'celebrating diversity' through the approach of 'tolerance' and 'acceptance', it has been possible to prevent ethnic conflict and strengthening inter-ethnic integration, especially among the young generation. This situation shows there was national ethos among the youth groups. Hence, what dimensions contributed to the formation of national ethos? The study is designed to evaluate the dimension which formed the national ethos among educated youths in Universiti Putra Malaysia (UPM). UPM students *have become* the main target of the study due to the students are getting enough interethnic communication and diversity engagement experiences.

National Ethos Concept

National ethos is defined as a unique characteristic of the local community that binds one individual to another, and binds individuals to the state (Ismail, 2015). Specifically, national ethos refers to the character, attitude, ethics, personality and beliefs in some matters (Mohd Noor et al., 2006) that describe the characteristic spirit

of a community (Burchard, 2005; Soanes & Stevenson, 2004) based on the locality. Etzioni (2009) states that national ethos refers to the particular values, traditions, identity, and vision of a nation's future (or destiny). Meanwhile, according to Bar-Tal (2000), national ethos can explain a society's basic norms and social behaviour. The national ethos also explains the specific configuration that is the centre of society's beliefs, attitudes, and sustainable values and shared by most members of society, which are focused on the current and future society (Bar-Tal, 2000; Oren, 2009). A national ethos in an individual can reflect on the national sentiments centred on the national platform.

Value

Value refers to an element that leads to goodness (Williams, 1967) and becomes a lasting belief for an individual (Rokeach, 1973) and the local community. Significantly, values are embodied in human behaviour, but not all behaviours reflect the values (Williams, 1967). Besides, values are an important component of cause and effect on individual behaviour and the functioning of social systems (Williams, 1967) and include multidimensional standards that guide an individual's behaviour (Rokeach, 1973). Rokeach (1973) has defined values in two forms, namely terminal values and instrumental values. Terminal values have characteristics closely related to the desire to achieve happiness at the end of human life. In contrast, instrumental values are

closely related to an individual's character (Haneef et al., 2002). Values also have a very close relationship with the morals, religion, culture and norms of society. Etzioni (2009) explained that "communities are social collectivities whose members are tied to one another by bonds of affection and at least a core of shared values" (p. 127). In this study, values refer codes of conduct held by individuals and the local community to live a peaceful and harmonious life among Malaysian multicultural youth. The values held by the local community form an ethos that encourages the existence of stronger ties between members of the community. There are five main values evaluated namely, (i) value of cooperation (Donnelly, 2000; McLaughlin, 2005); (ii) value of respect (Schwaninger, 2006); (iii) value of tolerance (McClosky & Brill, 1983; Oren, 2009); (iv) value of self-discipline (ethics) (Burchard, 2005; Mohd Noor et al., 2006); and (v) value of democracy (Jalaluddin et al., 2004; McClosky & Zaller 1984). Thus, democracy is an important element in various literature on Asian values (Payette & Chien, 2020).

Feelings and Spirits

Young generations must have a solid and unbendable inner spirit which is the strong soul of nationalism. Each individual ought to and must have this soul inside them, making up an individual's character. Nation states such as Japan, Korea and China still maintain their own respective nations' characteristics so that other nations realise that they can depict their states

(Yusoff, 2005). This need also exists in Malaysian individuals. Malaysia should not be too arrogant to compete with other countries and merely pursue progress while lacking national identity and patriotism. For example, patriotism is the power of the Chinese nation that relies upon survival and development. It plays a significant role in the Chinese cultural value system that formed a unique national spirit with patriotism as the core (Liu & Sai, 2017). Therefore, the spirit of patriotism has become the necessary condition to promote cultural soft power

Feelings and spirits of national ethos refer to national sentiments that have permeated into the soul of an individual. This national sentiment is highlighted by characteristics such as love, loyalty, pride of the country (Kosterman & Feshbach, 1989), sacrifice, courage, volunteerism (Abd Rashid, 2004), and a sense of belonging. The country's emotion of feelings and spirit shows a collective attachment that explains the relationship between individuals and the country. Furthermore, as an element of patriotism that explains a primordial attachment to a region or society, it is also belonging and a feeling of an identity or a strong spirit of love for the homeland (Abdullah, 2005). In this study, three main dimensions of feelings and spirits used to indicate national ethos encompassing; (i) Feelings of belonging (Burchard, 2005; Jalaluddin et al., 2004); (ii) The spirit of patriotism and nationalism (Jalaluddin et al., 2004; Oren, 2009; Schwaninger, 2006); and (iii) Feelings of being a Malaysian citizen (Jalaluddin et al., 2003, 2004).

Beliefs

Belief refers to the confidence or guidance of an individual or group of individuals towards some matters. Belief is usually associated with something that is considered true or certain. In this context, national ethos belief involves the society's beliefs (Bar-Tal, 2000; Oren, 2009), which involves the belief in values, norms, and goals to be achieved jointly, such as security guarantees, democratisation, and peace (Oren, 2009). Besides, community belief also refers to past experiences or current circumstances experienced by the community (Oren, 2009).

Bar-Tal (2000), and Oren and Bar-Tal (2006) have studied the impact of beliefs held by society on changes in political behaviour and national policies. Their study focussed on Israeli society, which is constantly faced with conflict and violence. These two elements consistently have dominated and became the centre of trust of society. As a result, shared community beliefs became the determinant to the characteristic form of community or an ethos of Israeli society (Bar-Tal, 2000). However, ethos does not encompass all forms of beliefs in society but only involves dominant characteristics. These dominant elements become the core to the emergence of a sense of togetherness, and ultimately form the identity of society (Oren & Bar-Tal, 2006). Mutual beliefs have also shaped the characteristics of the Jewish community and led to the formation of the community's social identity. Bar-Tal (2000) and Oren (2009) concluded that sharing beliefs by

members of society, based on an ethos, brought a common worldview and fostered a high feeling of togetherness and cohesion.

Therefore, to explain the aspect of belief in the context of Malaysian national ethos, several dimensions have been used, namely (i) share history (Mahathir Mohamad, 1991, 1992); (ii) share the future (Jalaluddin et al., 2004; Mahathir Mohamad, 1992); (iii) national constitution and law (Swenson, 2008); (iv) national policies (Ismail, 2013, 2015); and (v) government and national leadership (Ismail, 2013, 2015).

Identity

Identity refers to unique aspects that can highlight a person's personality or identity. Identity can be defined as a set of relevant self-meanings and held as a standard for a group (Burke, 2006). In particular, identity is a set of enduring characteristics inherent in an individual that can be clearly distinguished from other individual groups (Schwaninger, 2006). The identity displayed by an individual indicates that he or she is from a particular group, society or country that is different from other groups. Identity also indicates similarity for a particular group, usually based on the same symbols (Schwaninger, 2006) shared collectively, especially understanding and perception (Burke, 2006). Thus, identity is layered in which an individual may cling to a multi-identity that shares the same meaning (Burke, 2006). Besides, the core aspects of identity involve the characteristics of thought, enduring values such as social norms (Schwaninger, 2006) and community

orientation (Burke, 2006). Identity is also a dynamic, non-static element and can change according to current circumstances and developments. If there is a change in identity, there is a change in self-meaning (Burke, 2006).

Sociologically, identity is a person's learned notion of self, combined with a sense of belonging expressed and experienced through values, ethnicity, language, nationality, locale, and the like, and is closely related to a sense of "we-ness". European Commission (2012) found that identities are remarkably stable over time on the relationship between regional, national, and European identities. Hoelscher and Anheier (2011) reviewed different facets of identity (geographical, cyber, citizenship, cultural, economic, and religious) and reached a similar conclusion. Huntington's (2004) explores the nature of American identity that stressed the United States is a "nation of immigrants". Huntington observes that the founders were settlers who brought with them the cultural kernels of what became the American creed, a unique creation of a dissenting Protestant culture based on the principles of liberty, equality, individualism, representative government, and private property. In addition, the Chinese value identity as the medium of national self-esteem, self-motivation and self-condensation (Liu & Sai, 2017). Chinese identification's process is long and not formed, but a constant change, development and construction. It is not only the individual value, group value, social value transformation and the process

of infiltration between foreign culture and native culture conflict, reference, and innovation. Long-term accumulation made patriotism the core spirit of the Chinese nation.

In this study, the identity used is more to the prominence of political identity as emphasised by Bernstein (2005) explained that political identity as a collective identity is based on social movement activism and not on ethnic status. The collective identity applied here is national to explain the construction of a national ethos. The dimensions used are based on several shared characteristics in the context of acceptance and recognition of (i) Malaysian nation (Mahathir Mohamad, 1992); (ii) *Bahasa Malaysia* (Mahathir Mohamad, 1992); (iii) national symbols (Jalaluddin et al., 2003, 2004); and (iv) buy Malaysian products (Jalaluddin et al., 2004).

METHODS

This study uses a quantitative approach through survey techniques using questionnaires. The respondents were among Universiti Putra Malaysia (UPM) youth from two ethnic groups, the Malays and Chinese. In this study, the determination of the sample size is based on the guidelines by Cohen (1969), and Krejcie and Morgan (1970), where the population of Malaysian students in UPM is about 15,000, then the required number is 375 respondents. The samples determination for the CFA SEM model formation uses the sample size ratio to model parameters number, which are the questionnaire's items with a minimum ratio

of 5:1 to 10:1 (Kline, 2005). The number of samples required in this study is between 250 respondents to 500. The total number of composite variables for this study is 41 x 10 respondents per item, making the total sample size required for this study about 410 respondents. Researchers have used a non-probability approach to distribute the questionnaires through two main techniques, namely convenience and snowball sampling. A total of 431 respondents was involved in this study, with 241 Malay students and 190 Chinese students. The study does not include Indian and other Bumiputera youth groups since previous studies show that the spirits of patriotism among the Malays, Indians, Thais, Bumiputera Sabah and Sarawak are in the same level of intensity compared with Chinese youth groups (Ismail, 2015, Ismail et al., 2009). Chinese youth groups prioritise their ethnic group over their country's interests (Ismail, 2015; Tee Abdullah, 2015).

The data analysis technique used in this study is an approach through SEM-AMOS. This approach combines the ability to analyse several statistical analyses such as factor analysis, multiple regression and route analysis simultaneously (Ishak, 2011; Sarkowi, 2012). In addition, this study has conducted Exploratory Factor Analysis (EFA) in the early stages to strengthen the reliability and validity of the study construct. EFA is also suggested as a basis for confirmatory factor analysis (CFA) when the study has a group of items that logically form a concept and do not have a well established theoretical model (Schumacker & Lomax, 2010). For example, a model of national ethos formation among educated

youths was successfully created through CFA based on the four main dimensions measured.

Confirmatory Factor Analysis (CFA)

CFA has been applied in determining the overall model of national ethos formation for both exogenous and endogenous variables, besides, to prove the convergence validity and construct discrimination validity. CFA is used as a validation test of the measurement theory required in the construction process and the definition of study variables (Hair et al., 2010). In addition, reliability assessment using CFA is required to ensure that all measures applied in this study are reliable, thus further convincing researchers that there is consistency in each measurement used (Hair et al., 2010). CFA is most appropriately applied to models that have been fully developed and their factor structures validated (Byrne, 2010). Furthermore, CFA should be employed in causal models to furnish the most informative mediation tests such as indirect effects, estimates of causal parameters and others (James & Brett, 1984). It provides a full range of indexes to evaluate the accuracy of data sets to theoretical models (Terblanche & Boshoff, 2008). In ensuring each CFA model achieves matching accuracy, the three indicators used are factor weighting value (λ) > 0.50, average variance extracted value (AVE) \geq 0.50, and construct reliability values (ρ_c) > 0.60 (Hair et al., 2010). Therefore, construct validity assessment is also done to ensure all the items contained have convergent validity.

RESULTS

Value Dimension Confirmatory Factor Analysis Model

Figure 1 shows a second stage CFA model of a value construct that has achieved good match accuracy. This model is a combination of all sub-dimensions of value constructs retained in a one-factor congeneric model. The model analysis in Table 1 shows the model formed has achieved a good level of compatibility based on the set indicators (CMIN = 740.155, DF = 204, CMIN / DF = 3.628, $p = 0.000$, SRMR = 0.0646, RMSEA = 0.078, CFI = 0.863, and PNFI = 0.725).

Value Construct Validity Assessment

Construct validity assessment is implemented by evaluating three main elements, namely factor weighting value (λ), Average Variance Extracted value (AVE) and construct reliability (ρ_c). Table 2 shows the weighting factor value (λ) for each item retained for all dimensions of value exceeding the set weighting value, which is above 0.30 (Hair et al., 2010). For example, the weighting factor of the cooperation sub-dimension is between 0.472 to 0.761, the respect sub-dimension is between 0.537 to 0.907, the tolerance sub-dimension is between 0.364 to 0.812, the self-discipline sub-dimension is between 0.502 to 0.700, and the sub-dimensions of democracy are between 0.408 to 0.608.

The mean value of the Average Variance Extracted (AVE) set is ≥ 0.5 (Hair et al. 2010) to achieve good matching accuracy. Through the analysis obtained, the value of the AVE for the sub-dimensions of

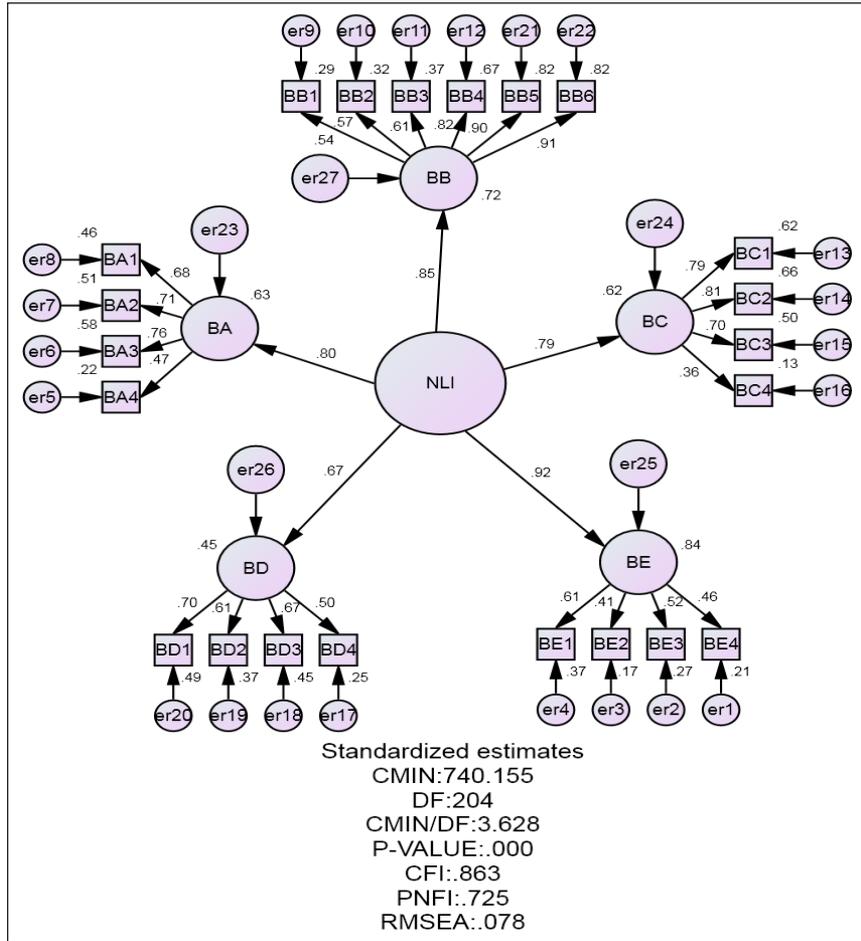


Figure 1. Value dimension confirmatory factor analysis model

Table 1
 Compatibility model indicators of Confirmatory Factor Analysis (CFA) value dimension

Indicator	Accepted Indicator Value	Confirmatory Factor Analysis
Absolute Fit Indices		
CMIN (X2)		740.155
DF		204
CMIN/DF	< 3	3.628
PROB (P-Val)	> 0.05	0.000
SRMR	< 0.08	0.0646
RMSEA	< 0.08	0.078
Incremental Fit Indices		
CFI	> 0.90	0.863
Parsimony Fit Indices		
PNFI	> 0.60	0.725

Table 2
Descriptive statistics and validity of dimension values construct

No	Sub-Dimension	Item	Min	Final Analysis				
				S.D	λ	SMC	AVE	ρ_c
1.	Cooperation	BA1	4.2691	0.53869	0.681	0.463	0.443	0.756
		BA2	4.3202	0.58631	0.713	0.509		
		BA3	4.3248	0.55933	0.761	0.578		
		BA4	3.9629	0.73041	0.472	0.223		
2.	Respect	BB1	4.6450	0.52537	0.537	0.288	0.547	0.874
		BB2	4.3852	0.60629	0.566	0.321		
		BB3	4.3364	0.55030	0.608	0.369		
		BB4	4.3759	0.55638	0.816	0.666		
		BB5	4.4316	0.57411	0.903	0.816		
		BB6	4.4223	0.56475	0.907	0.823		
3.	Tolerance	BC1	4.2529	0.58157	0.787	0.619	0.477	0.762
		BC2	4.3202	0.56613	0.812	0.660		
		BC3	4.2367	0.65390	0.704	0.496		
		BC4	3.0534	1.22927	0.364	0.133		
4.	Self-discipline	BD1	4.3619	0.54886	0.700	0.490	0.392	0.717
		BD2	3.9745	0.68322	0.609	0.371		
		BD3	4.0835	0.63793	0.673	0.454		
		BD4	4.1206	0.74354	0.502	0.252		
5.	Democracy	BE1	4.4664	0.58917	0.608	0.370	0.255	0.572
		BE2	4.0464	0.84506	0.408	0.166		
		BE3	4.1810	0.77442	0.521	0.272		
		BE4	4.0928	0.74129	0.458	0.210		

Note. λ = factor weighting, SMC = Squarred Multiple Correlations, AVE = Average Variance Extracted; ρ_c = constructive reliability.

cooperation (AVE = 0.443), sub-dimensions of respect (AVE = 0.547), sub-dimensions of tolerance (AVE = 0.477), sub-dimensions of self-discipline (AVE = 0.392), and the sub-dimensions of democracy (AVE = 0.255). Although the AVE value of the sub-dimension of cooperation (AVE = 0.443) sub-dimension of tolerance (AVE = 0.477), the sub-dimension of self-discipline (AVE = 0.392), and the sub-dimension of democracy (AVE = 0.255) did not reach the value 0.50 accurately, but all these sub-dimensions are retained because they

achieve an approximation value of 0.50. Construct reliability analysis (ρ_c) shows that all dimensions have good reliability values > 0.60 (Hair et al., 2010) between 0.572 to 0.874. The three indicators λ , AVE and ρ_c show that all the items contained in the CFA measurement model have convergent validity.

Discriminant Value Construct Validity

Discriminant validity is part of the CFA process to determine that one dimension does not overlap with another dimension.

Table 3
Comparison of Average Variance Extracted (AVE) values with value correlation square construct value

No	Sub-Dimension	AVE > r2				
		Cooperation (BA)	Respect (BB)	Tolerance (BC)	Self-Discipline (BD)	Democracy (BE)
1.	Cooperation (BA)	-	0.485	0.444	0.258	0.430
2.	Respect (BB)	0.495	-	0.432	0.306	0.619
3.	Tolerance (BC)	0.460	0.512	-	0.240	0.527
4.	Self-Discipline (BD)	0.417	0.469	0.434	-	0.527
5.	Democracy (BE)	0.349	0.401	0.366	0.323	-

Note. Significant correlation at $p < 0.05$. AVE value (bottom diagonal); Value r2 (top diagonal)

Table 3 shows a comparison of the mean values of the AVE and squared correlations (r2) for all sub-dimensions of the value construct.

The comparison between the value of AVE with r2 in Table 3 shows that the value of AVE > value of r2. Thus, it indicates that discriminant validity is achieved for all value constructs studied. These findings also indicate that multicollinearity does not exist between study constructs. The CFA model for the value dimension in Figure 1 also shows that the value construct achieves discriminant validity where no item has cross-loading with other items. In addition, it shows that all the items contained in this construct can measure each dimension unidimensional.

Confirmatory Factor Analysis Model on Feeling and Spirit Dimension

Figure 2 shows the CFA model of feeling and spirit constructs that have achieved acceptable match accuracy. This model combines all the sub-dimensions of feeling and spirit constructs maintained in a one factor congeneric model. The model analysis

in Table 4 shows the model formed has reached an acceptable level of compatibility based on the prescribed indicators (CMIN = 418.652, DF = 51, CMIN / DF = 8.209, $p = 0.000$, SRMR = 0.0526, RMSEA = 0.129, CFI = 0.818, and PNFI = 0.618).

Validity Assessment of the Feeling and Spirit Constructs

Construct validity assessment is implemented by evaluating three main elements, namely factor weighting value (λ), AVE and construct reliability (ρ_c). Table 5 shows the weighting factor value (λ) for each item retained for all value dimensions over the set weighting value, which is above 0.30 (Hair et al., 2010). The sub-dimensions weighting factors for feelings of togetherness are between 0.190 to -0.881, the sub-dimensions of patriotism and nationalism are between 0.679 to 0.830, and the sub-dimensions of Malaysian citizenship are between 0.272 to 0.768. Although there is a weighting value of factors < out of a value of 0.30, the item has to be maintained as it is a key element that forms the national ethos.

Table 4
Indicators of compatibility model on confirmatory factor analysis of feeling and spirit dimensions

Indicator	Accepted Value Indicator	Confirmatory Factor Analysis
Absolute Fit Indices		
CMIN (X2)		418.652
DF		51
CMIN/DF	< 3	8.209
PROB (P-Val)	> .05	0.000
SRMR	< .08	0.0526
RMSEA	< .08	0.129
Incremental Fit Indices		
CFI	> 0.90	0.818
Parsimony Fit Indices		
PNFI	> 0.60	0.618

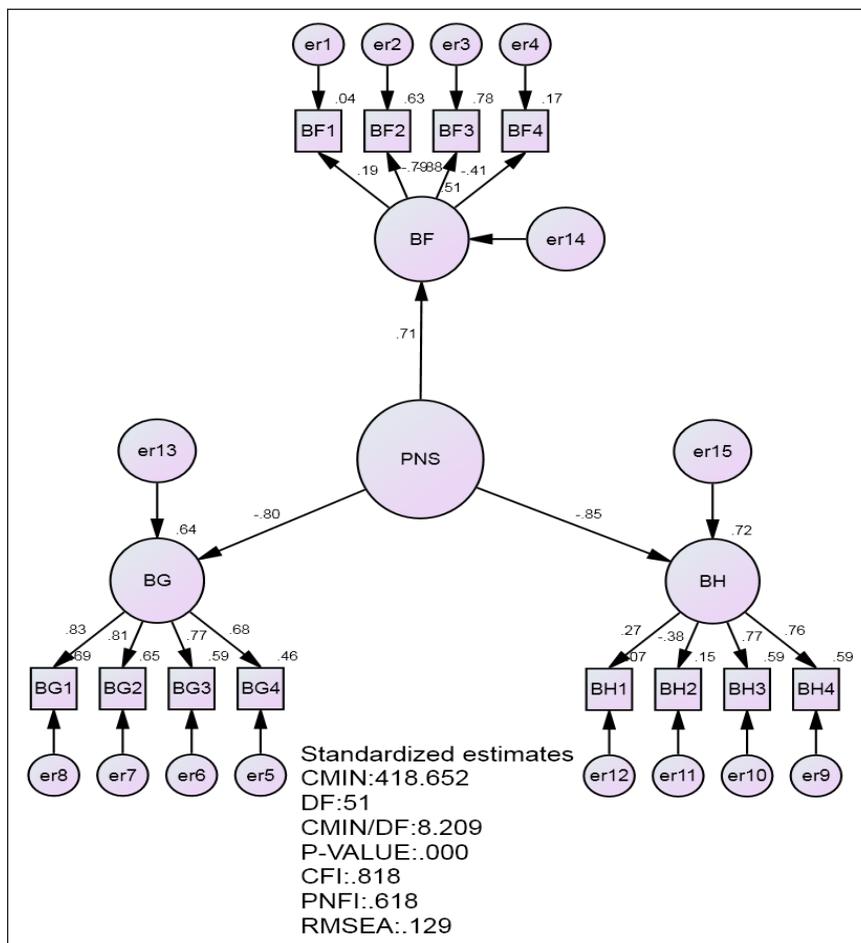


Figure 2. Confirmatory factor analysis model on feeling and spirit dimension

Table 5
Descriptive statistics and construct validity of feelings and spirit dimension

No	Sub-Dimension	Item	Final Analysis					
			Min	S.D	λ	SMC	AVE	ρ_c
1.	Feelings of Togetherness	BF1	4.3573	0.75479	0.190	0.036	0.401	0.676
		BF2	4.2738	0.90180	-0.791	0.625		
		BF3	4.1230	0.92067	-0.881	0.776		
		BF4	4.5336	0.544.2	-0.409	0.167		
2.	Patriotism and Nasionalism	BG1	3.8445	0.81066	0.830	0.688	0.597	0.852
		BG2	3.9443	0.81078	0.807	0.652		
		BG3	4.1717	0.63848	0.765	0.586		
		BG4	4.4130	0.63335	0.679	0.461		
3.	Malaysian Citizenship	BH1	2.6729	1.10060	0.272	0.074	0.349	0.675
		BH2	2.6984	1.15012	-0.383	0.146		
		BH3	4.1369	0.82817	0.768	0.589		
		BH4	4.2506	0.63050	0.765	0.585		

Note. λ = factor weighting, SMC = Squared Multiple Correlations, AVE = Average Variance Extracted; ρ_c = constructive reliability.

The mean value of the AVE set is ≥ 0.5 (Hair et al. 2010) to achieve good matching accuracy. Through the analysis obtained, the AVE value for the sub-dimensions of feelings of togetherness (AVE = 0.401), sub-dimensions of patriotism and nationalism (AVE = 0.597), and sub-dimensions of Malaysian citizenship (AVE = 0.349). Although the AVE values for sub-dimensions of feelings of togetherness and Malaysian citizenship do not reach the value of 0.50 accurately, all these sub-dimensions are maintained due to the importance of these elements in forming the national ethos. Construct reliability analysis (ρ_c) shows that all dimensions have good reliability values > 0.60 (Hair et al., 2010) between 0.675 to 0.852. The three indicators, namely λ , AVE and ρ_c , show that all the items contained in the CFA measurement model have convergent validity.

Discriminant Validity of Feelings and Spirit Construct

Discriminant validity is part of the CFA process to determine that one dimension does not overlap with another dimension. Table 6 shows a comparison of the average variance extracted (AVE) value and squared correlations (r^2) for all sub-dimensions of the feeling and spirit construct.

A comparison between the value of AVE with r^2 in Table 6 shows that the value of AVE $>$ value of r^2 . It indicates that discriminant validity is achieved for all value constructs studied. These findings also indicate that multicollinearity does not exist between study constructs. The CFA model for this dimension in Figure 2 also shows the construct of feeling and spirit achieving discriminant validity where no item has cross-loading with other items. It shows that all the items contained in this construct can measure each dimension unidimensional.

Table 6
 Comparison of Average Variance Extracted (AVE) value with the correlation values of the feelings and spirit construct

No	Sub-Dimension	AVE > r ²		
		Feelings of Togetherness (BF)	Patriotism and Nationalism (BG)	Malaysian Citizenship (BH)
1.	Feelings of Togetherness (BF)	-	- 0.568	- 0.604
2.	Patriotism and Nationalism (BG)	- 0.035	-	0.678
3.	Malaysian Citizenship (BH)	- 0.042	0.140	-

Note. Significant correlation at p < 0.05. AVE value (bottom diagonal); Value r² (top diagonal)

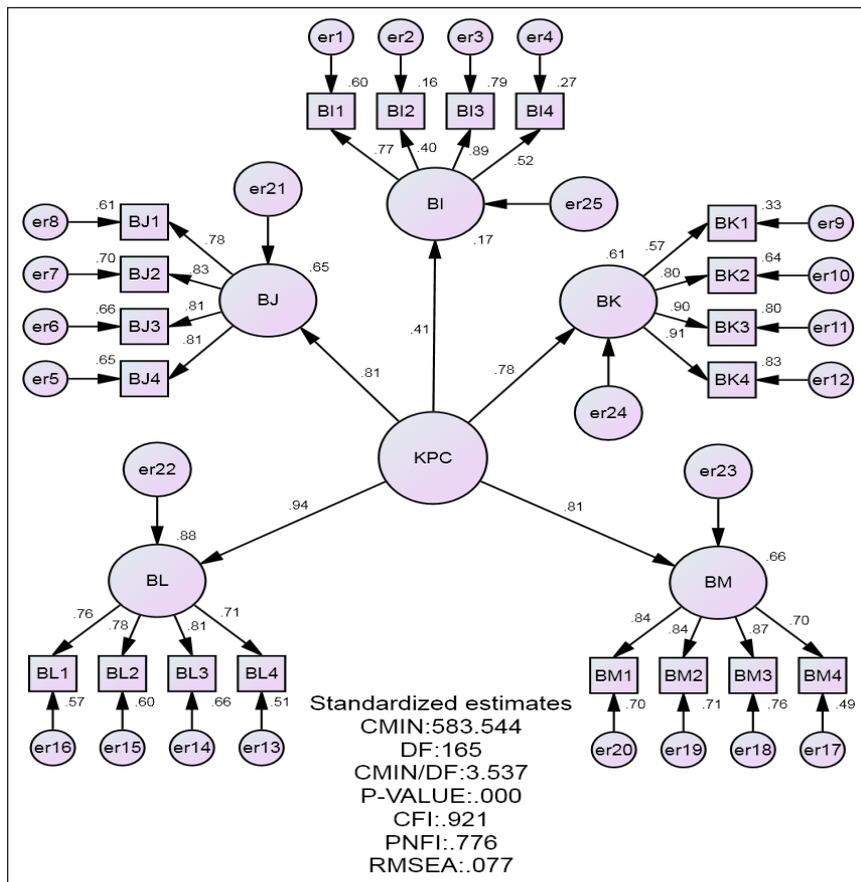


Figure 3. Confirmatory factor analysis model on belief dimension

Confirmatory Factor Analysis Model of Belief Dimension

Figure 3 shows the CFA model for the dimension of the belief that has been achieved good match accuracy. This model

combines all the sub-dimensions of the belief construct that is maintained in the one-factor congeneric model. The model analysis in Table 7 shows the model formed has achieved a good level of compatibility

Table 7
Compatibility indicators model of confirmatory factor analysis on belief dimension

Indicator	Accepted Indicator Value	Confirmatory Factor Analysis
<i>Absolute Fit Indices</i>		
CMIN (X2)		583.544
DF		165
CMIN/DF	< 3	3.537
PROB (P-Val)	> 0.05	0.000
SRMR	< 0.08	0.0695
RMSEA	< 0.08	0.077
<i>Incremental Fit Indices</i>		
CFI	> 0.90	0.921
<i>Parsimony Fit Indices</i>		
PNFI	> 0.60	0.776

based on the set indicators (CMIN = 583.544, DF = 165, CMIN / DF = 3.537, p = 0.000, SRMR = 0.0695, RMSEA = 0.077, CFI = 0.921, and PNFI = 0.776).

Validity Value of Belief Construct

Construct validity assessment is implemented by evaluating three main elements, namely factor weighting value (λ), AVE value and construct reliability (ρ_c). Table 8 shows the λ value for each item retained for all dimensions of belief over the prescribed weighting value, which is above 0.30 (Hair et al., 2010). For example, the weighting factor of sharing the history sub-dimensions is between 0.400 to 0.891, sharing the future sub-dimensions are between 0.782 to 0.835, the constitutional and legal sub-dimensions are between 0.571 to 0.913, national policies sub-dimensions are between 0.715 to 0.815, and government and state leadership dimensions are between 0.697 to 0.871.

The AVE value set is ≥ 0.5 (Hair et al., 2010) to achieve good match accuracy. Through the analysis obtained, the AVE for the sub-dimensions of sharing the history (AVE = 0.456), sharing the future (AVE = 0.656), constitutional and legal (AVE = 0.652), national policies (AVE = 0.587), and government and state leadership (AVE = 0.664). Although the AVE value of the sub-dimension of sharing the history (AVE = 0.456) did not reach the 0.50 value accurately, all of these sub-dimensions were retained because they reached the approximate value of 0.50. Constructed reliability analysis (ρ_c) shows that all dimensions have good reliability values > 0.60 (Hair et al., 2010) between 0.754 to 0.887. The three indicators λ , AVE and ρ_c show that all the items contained in the CFA measurement model have convergent validity. The CFA model for this dimension in Figure 3 also shows the confidence construct achieves discriminant validity where no item has cross-loading with other

Table 8
Descriptive statistics and construct validity of the belief dimension

No	Sub-Dimension	Item	Final Analysis					
			Min	S.D	λ	SMC	AVE	ρ_c
1.	Share History	BI1	4.4524	0.62278	0.774	0.600	0.456	0.754
		BI2	4.5963	0.60185	0.400	0.160		
		BI3	4.4246	0.65998	0.891	0.794		
		BI4	4.1740	0.63603	0.520	0.270		
2.	Share the future	BJ1	4.1021	0.69468	0.782	0.611	0.656	0.884
		BJ2	3.9606	0.74135	0.835	0.697		
		BJ3	4.0719	0.69008	0.813	0.661		
		BJ4	3.9165	0.83665	0.808	0.653		
3.	Constitution and Law	BK1	4.5035	0.65012	0.571	0.326	0.652	0.879
		BK2	4.0000	0.83805	0.802	0.643		
		BK3	4.0626	0.77656	0.897	0.804		
		BK4	4.0696	0.80970	0.913	0.833		
4.	National policies	BL1	4.2227	0.70318	0.755	0.571	0.587	0.850
		BL2	4.1137	0.70781	0.776	0.601		
		BL3	4.0000	0.82123	0.815	0.664		
		BL4	3.9466	0.93731	0.715	0.511		
5.	Government and State Leadership	BM1	3.7193	0.88532	0.837	0.701	0.664	0.887
		BM2	3.8213	0.84804	0.844	0.712		
		BM3	3.6032	0.97307	0.871	0.758		
		BM4	2.7680	1.26196	0.697	0.485		

Note. λ = factor weighting, SMC = Squared Multiple Correlations, AVE = Average Variance Extracted; ρ_c = constructive reliability.

items. It shows that all the items contained in this construct can measure each dimension unidimensional.

Confirmatory Factor Analysis on Identity Dimension

Figure 4 shows the CFA model of the identity construct that has achieved good matching accuracy. This model is a combination of all sub-dimensions of identity constructs retained in a one-factor congeneric model. The model analysis in Table 9 shows that the model formed has achieved a good level

of compatibility based on the set indicators (CMIN = 356.890, DF = 100, CMIN / DF = 3.569, $p = 0.000$, SRMR = 0.0761, RMSEA = 0.077, CFI = 0.923, and PNFI = 0.747).

Validity Value of Identity Construct

Construct validity assessment is implemented by evaluating three main elements, namely factor weighting value (λ), AVE value and construct reliability (ρ_c). Table 10 shows the λ value for each item retained for all dimensions of value above the set weighting value, which is above 0.30

Table 9
Compatibility indicators model of confirmatory factor analysis on identity dimension

Indicator	Accepted Indicator Value	Confirmatory Factor Analysis
Absolute Fit Indices		
CMIN (X2)		356.890
DF		100
CMIN/DF	< 3	3.569
PROB (P-Val)	> 0.05	0.000
SRMR	< 0.08	0.0761
RMSEA	< 0.08	0.077
Incremental Fit Indices		
CFI	> 0.90	0.923
Parsimony Fit Indices		
PNFI	> 0.60	0.747

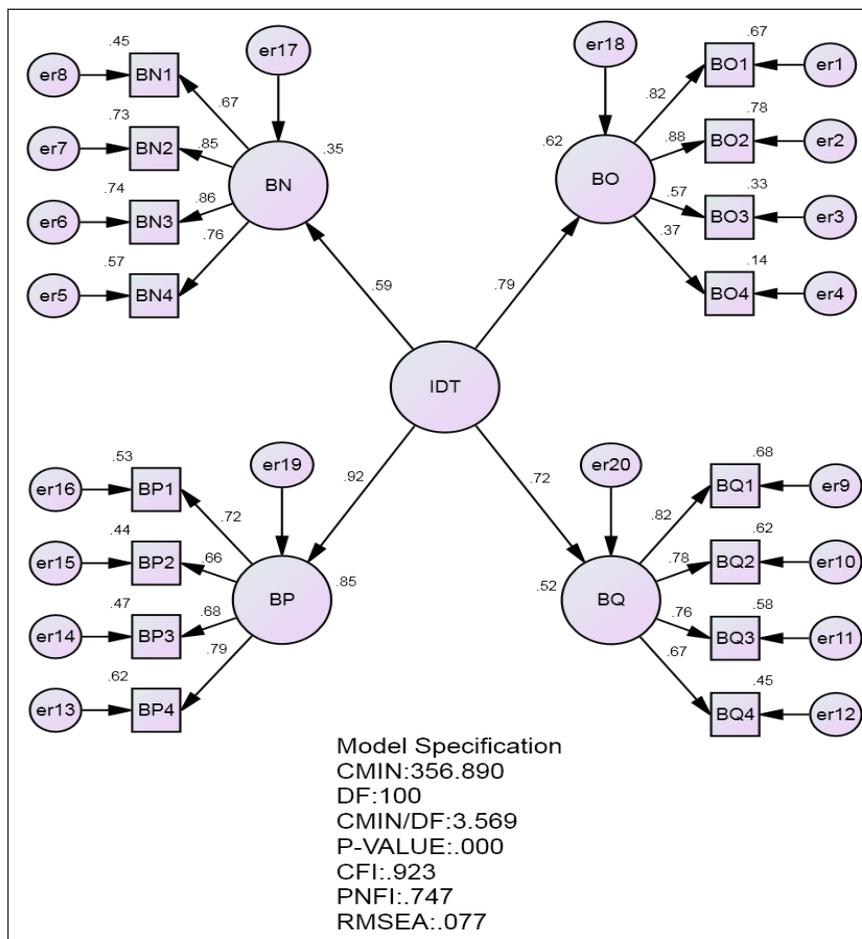


Figure 4. Confirmatory factor analysis model on identity dimension

(Hair et al., 2010). For example, the value of the weighting factor of the sub-dimensions of the Malaysian Nation is between 0.669 to 0.861, *Bahasa Malaysia* is between 0.140 to 0.782, the national symbol is between 0.440 to 0.616, and buy Malaysian products is between 0.455 to 0.680.

The AVE value set is 0.50 (Hair et al., 2010) to achieve good match accuracy. Through the analysis obtained, the AVE value for the sub-dimensions of Malaysian Nation (AVE = 0.662), the *Bahasa Malaysia* (AVE = 0.480), the national symbol (AVE = 0.512), and buy Malaysian products (AVE = 0.583). Although the AVE value of the Bahasa Malaysia sub-dimension (AVE = 0.480) did not reach the 0.50

value accurately, all the sub-dimensions were retained because they reached the approximate value of 0.50. Construct reliability (ρ_c) analysis shows that all dimensions have good reliability values > 0.60 (Hair et al., 2010) between 0.772 to 0.867. The three indicators λ , AVE and ρ_c show that all the items contained in the CFA measurement model have convergent validity.

Discriminant Validity of Identity Construct

Discriminant validity is part of the CFA process to determine that one dimension does not overlap with another dimension. Table 11 shows a comparison of the

Table 10
Descriptive statistics and construct of identity dimension

No	Sub-Dimension	Item	Final Analysis					
			Min	S.D	λ	SMC	AVE	ρ_c
1.	Malaysian Nation	BN1	4.4292	0.57787	0.669	0.447	0.622	0.867
		BN2	4.4385	0.57490	0.852	0.726		
		BN3	4.4339	0.57032	0.861	0.741		
		BN4	4.5151	0.56989	0.758	0.574		
2.	<i>Bahasa Malaysia</i>	BO1	4.2413	0.76082	0.821	0.674	0.480	0.772
		BO2	4.2227	0.79624	0.885	0.782		
		BO3	3.5777	1.21344	0.572	0.327		
		BO4	2.6543	1.26076	0.375	0.140		
3.	National symbols	BP1	4.2413	0.73596	0.725	0.525	0.512	0.807
		BP2	4.4988	0.62830	0.663	0.440		
		BP3	4.2483	0.66549	0.683	0.467		
		BP4	4.2297	0.69259	0.785	0.616		
4.	Buy Malaysian products	BQ1	3.6497	0.80709	0.825	0.680	0.583	0.847
		BQ2	3.4872	0.89661	0.785	0.616		
		BQ3	3.9954	0.70545	0.761	0.579		
		BQ4	3.9698	0.83333	0.674	0.455		

Note. λ = factor weighting, SMC = Squared Multiple Correlations, AVE = Average Variance Extracted; ρ_c = constructive reliability.

Table 11
Comparison of Average Variance Extracted (AVE) value with correlation value of identity construct

No	Sub-Dimension	AVE > r2			
		Malaysian Nation (BN)	Bahasa Malaysia (BO)	National Symbols (BP)	Buy Malaysian Product (BQ)
1.	Malaysian Nation (BN)	-	0.385	0.401	0.258
2.	Bahasa Malaysia (BO)	0.486	-	0.432	0.306
3.	National Symbol (BP)	0.472	0.522	-	0.240
4.	Buy Malaysian Product (BQ)	0.432	0.445	0.469	-

Note. Significant correlation at $p < 0.05$. AVE value (bottom diagonal); Value r2 (top diagonal)

average variance extracted (AVE) values and the square correlation (r^2) for all sub-dimensions of identity constructs.

The comparison between the value of AVE with r^2 in Table 11 shows that the value of AVE > value of r^2 . It indicates that discriminant validity is achieved for all value constructs studied. These findings also indicate that multicollinearity does not exist between study constructs. The CFA model for this dimension in Figure 4 shows that the value construct achieves discriminant validity. No item has cross-loading with other items. In addition, it shows that all the items contained in this construct can measure each dimension unidimensional.

National Ethos Confirmatory Factor Analysis

The confirmatory factor analysis (CFA) on national ethos involves combining all constructs of values, feelings and spirits, beliefs and identities. The four constructs that have passed the second stage confirmatory factor process are combined with being analysed later. The results of this third stage analysis will form a strong and authentic national construct.

National Ethos Confirmatory Factor Analysis Model

Figure 5 shows the CFA model for a national ethos construct that has achieved good match accuracy. This model combines all dimensions of value constructs, feelings and spirits, beliefs and identities maintained in the CFA model of each dimension measured. The model analysis in Table 12 shows that the model formed has achieved a good level of compatibility based on the set indicators (CMIN = 600.947, DF = 115, CMIN / DF = 5.226, $p = 0.000$, SRMR = 0.0937, RMSEA = 0.099, CFI = 0.927, and PNFI = 0.771).

Validity Value of National Ethos Construct

Construct validity assessment is implemented by evaluating three main elements, namely factor weighting value (λ), AVE value and construct reliability (ρ_c). Table 13 shows the λ value for each item maintained for all dimensions of value, feeling and spirit, belief and identity above the set weighting value, which is above 0.30 (Hair et al., 2010). The weighting factor of the value dimension is between 0.767 to 0.998. The weighting factor of the feeling and spirit dimension is

Table 12
Compatibility indicators model of confirmatory factor analysis on national ethos

Indicator	Accepted Indicator Value	Confirmatory Factor Analysis
Absolute Fit Indices		
CMIN (X2)		600.947
DF		115
CMIN/DF	< 3	5.226
PROB (P-Val)	> 0.05	0.000
SRMR	< 0.08	0.0937
RMSEA	< 0.08	0.099
Incremental Fit Indices		
CFI	> 0.90	0.927
Parsimony Fit Indices		
PNFI	> 0.60	0.771

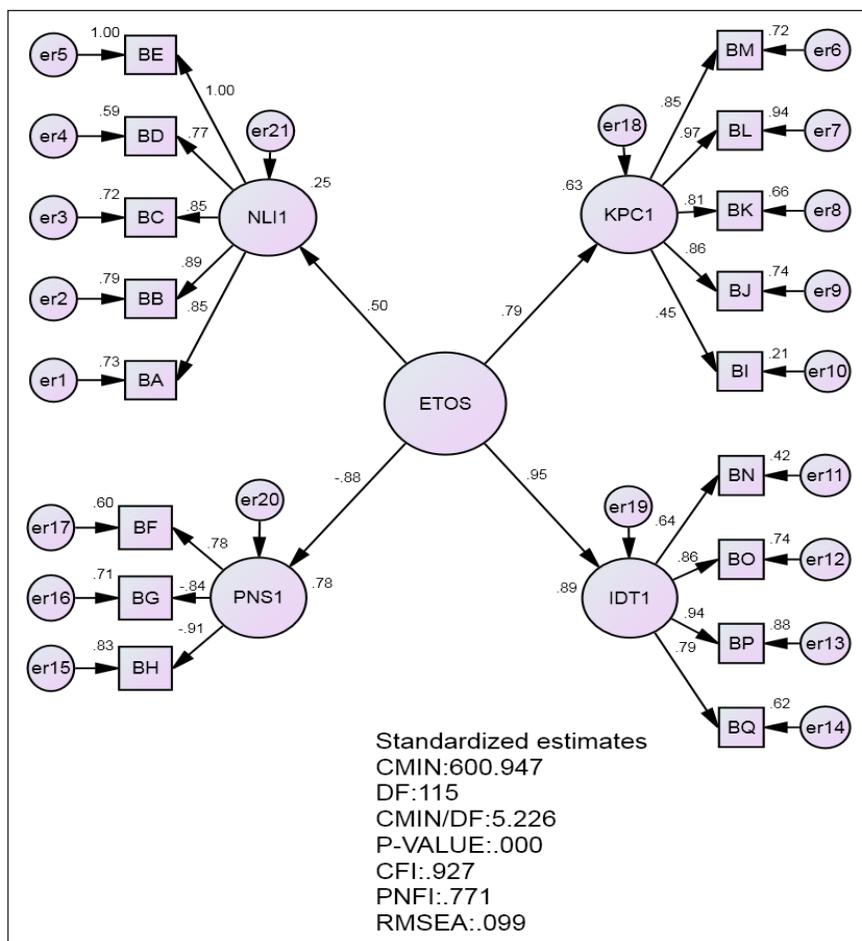


Figure 5. National ethos confirmatory factor analysis model

between 0.776 to 0.914, the weighting factor for the dimension of belief is between 0.453 to 0.971. In contrast, the weighting value factors for identity dimensions range from 0.645 to 0.939. Thus, the factor weighting value for the national ethos has achieved a fairly good match accuracy.

The AVE value set is 0.50 (Hair et al., 2010) to achieve good match accuracy. Through the analysis obtained, the AVE value for dimension of value is AVE = 0.564, feeling and spirit is AVE = 0.716, belief is AVE = 0.653, and identity is AVE = 0.664. These four national ethos dimensions have achieved a fairly good AVE value.

Construct reliability (ρ_c) analysis shows that all four national ethos dimensions

have a relatively high reliability value > 0.60 (Hair et al., 2010) between 0.601 to 0.945. The three indicators λ , AVE and ρ_c show that the four dimensions contained in the CFA measurement model have convergent validity. As shown in Figure 5, the national ethos CFA model also shows that the national ethos construct achieves discriminant validity where no item has cross-loaded with other items. It shows that all the items contained in this construct can measure each dimension unidimensional.

DISCUSSION

Based on the findings, the CFA model of national ethos has proven that national ethos among educated youth in Malaysia

Table 13
Descriptive statistics and construct validity of the national ethos

No	Dimension	Sub-Dimension	Final Analysis					
			Min	S.D	λ	SMC	AVE	ρ_c
1.	Value	BA	3.3236	0.31284	0.852	0.726	0.564	0.601
		BB	2.6112	0.27250	0.889	0.791		
		BC	4.0529	0.42211	0.846	0.716		
		BD	3.3587	0.32709	0.767	0.588		
		BE	3.3772	0.30088	0.998	0.995		
2.	Feeling and Spirit	BF	2.7692	0.43243	0.776	0.602	0.716	0.882
		BG	2.7752	0.40255	0.844	0.712		
		BH	2.9461	0.43153	0.914	0.835		
3.	Belief	BI	3.6875	0.44687	0.453	0.205	0.653	0.794
		BJ	3.4397	0.51505	0.858	0.737		
		BK	2.1617	0.35692	0.813	0.661		
		BL	3.4287	0.50201	0.971	0.942		
		BM	3.5779	0.70728	0.850	0.722		
4.	Identity	BN	3.7669	0.58548	0.645	0.416	0.664	0.945
		BO	3.8576	0.58548	0.860	0.740		
		BP	4.2309	0.50263	0.939	0.882		
		BQ	3.9366	0.62056	0.785	0.617		

Note. λ = factor weighting, SMC = Squared Multiple Correlations, AVE = Average Variance Extracted; ρ_c = constructive reliability.

is based on four main dimensions, namely aspects of values, feelings and spirit, beliefs and identity. The analysis shows the model formed has reached a good level of compatibility and is acceptable based on the prescribed indicators (CMIN = 600.947, DF = 115, CMIN / DF = 5.226, $p = 0.000$, SRMR = 0.0937, RMSEA = 0.099, CFI = 0.927, and PNFI = 0.771). The assessment of the validity of the national ethos constructs was carried out by evaluating three main elements: factor weighting value (λ), AVE value and construct reliability (ρ_c) have also achieved a good match accuracy. It means to build a strong national ethos in every Malaysian youth, the four dimensions of values, feelings and spirit, beliefs and identity need to be given special emphasis. Each dimension carries its impact in influencing fluctuations in the level of national ethos intensity. The balance between these four dimensions also needs to be given attention to ensure that the national ethos can be nurtured effectively. In the meantime, each element of each dimension can be an important backup in building a comprehensive national ethos. Besides, failure to cultivate these four dimensions can affect the formation of national ethos among youth.

Ironically, the national ethos involves forming collective memory and identity, which refers to the formation of national character. National ethos can be an ideal element and form the values, principles and norms that provide normative guidance to a society (Schwaninger, 2006). A strong national ethos bond becomes the main

foundation in a multicultural, multiethnic and multi-religious society, and a strong national ethos can be a unifying factor in society (Tamam et al., 2005). Mahathir Mohamad (1992) sees that the Malaysian nation can be formed through fostering a national ethos. Malaysia's national ethos needs to consider the form of ethnic relations that have been established in the multicultural society over the years. This form of the relationship determines the process of nation-building (Mohd Noor et al., 2006). In the Malaysian context, Mahathir Mohamad (1992) has put forward the national ethos as follows,

Building a nation out of diverse people with differing historical, ethnic, linguistic, religious, cultural and geographical backgrounds is something more than just fostering consensus on the basic character of a state or nation. It involves the fostering of (1) shared historical experiences, (2) shared values, (3) a feeling of common identity, (4) shared destiny that transcends ethnic bounds without undermining ethnic identity, (5) loyalty, (6) commitment, and (7) an emotional attachment to the nation, and the flowering of distinctly national ethos. (p. 1)

The seven elements of national ethos expressed by Mahathir Mohamad have been included in this study's four dimensions. This study confirms that the national ethos was built when society shares the same

values (Burchard, 2005; Donnelly, 2000; Eisner, 1994; Etzioni, 2009; McLaughlin, 2005; Schwaninger, 2006; Oren, 2009). Shared societal values include elements of cooperation (Donnelly, 2000; McLaughlin, 2005), respect for each individual (Schwaninger, 2006), tolerance (McClosky & Brill, 1983; Oren, 2009), self-discipline (ethical; Burchard, 2005; Mohd Noor et al., 2006) and democracy (Jalaluddin et al., 2004; McClosky & Zaller, 1984).

In addition, the national ethos will also be built through the shared feelings and spirits (Adey, 2012; Allder, 1993; Bar-Tal, 2000; McLaughlin, 2005). Feelings and spirit in the context of national ethos can be categorised into feelings of togetherness (Burchard, 2005), the spirit of patriotism and nationalism (Bar-Tal, 2000; Schwaninger, 2006), as well as feelings as a Malaysian citizen (Jalaluddin et al., 2004). Bar-Tal (2000) asserts that patriotism describes the 'basic human motives' shared in life to nurture and maintain a sense of uniformity. This spirit of nationalism is important for a society to exist as a positive collectivity and a clear sense of identity. This spirit of nationalism must be maintained to achieve social cohesion and ensure the survival of a society (Bar-Tal, 2000).

National ethos is also built through elements of beliefs shared by members of society (Bar-Tal, 2000; Mahathir Mohamad, 1992; Oren, 2009). Such elements of belief involve the shared historical experience (Jalaluddin et al., 2004; Mahathir Mohamad, 1992), shared the same future (Etzioni, 2009; Mahathir Mohamad, 1992), believed

in the constitution and the law of the country (Swenson, 2008), as well as national policies, government and national leadership. As a unique combination of a public that shares mutual values and beliefs, the collective identity of a nation lies in its common narratives. The constructed collective memory and the united role led its members to believe that fate had been destined for them in this world (Lewin, 2015, 2016).

National ethos also leads to the formation of identity (Bar-Tal, 2000; Etzioni, 2009; Mahathir Mohamad, 1992). That identity describes a unique element of a stable and uniform society (Bar-Tal, 2000). A superior society will share the same social identity as described by Bar-Tal (2000),

A society consists of a real collective of people who have a clear sense of common identity. These social collectives endure, evolving a tradition, culture, collective memory, belief systems, social structures, and institutions. ...Individuals who have a sense of being society members experience solidarity and a sense of unity. They establish, in essence, a common social identity. (p. xvi)

Society will not have the same identity as another society. It is a set of lasting characteristics that bring elements of similarity to a society. Malaysian multi-ethnic society also carries a distinct identity, as Malays resulting from the convergence of ethnic and Islamic identities (Ikhwan

& Aidulsyah, 2020). The other ethnic groups are also associated with their own identities. Identity binds multiethnic youth elements, which consist of the Malaysian nation (Mahathir Mohamad, 1992), *Bahasa Malaysia* (Jalaluddin et al., 2004; Mahathir Mohamad, 1992), national symbols, and buy Malaysia products (Jalaluddin et al., 2004).

National ethos can be the basis for the stability and resilience of a society or organisation (Schwaninger, 2006). The shared values and traditions formed the national ethos of a people through which the nation views its past, present and future. The shared values and traditions integrate a nation's identity and bond it into a coherent social group (Lewin, 2016). It is a source of focus that can be the most powerful medium for community development and change. If the national ethos is not shared, it will be an obstructive barrier to transformation and innovation (Schwaninger, 2006).

Moreover, a society with no awareness of the national ethos will not live as a collective unit, let alone form an ideal nation-state. The national ethos appeared when the society is holding the foundations of the collective identity through a sense of a certain duty that the nation is bound to fulfil and through a set of common goals that the people have been intended to achieve as a united entity (Lewin, 2015, 2016). National ethos in everyday defined is one of the most imperative key components of people's capacity to unite into one social cohesion in a multiethnic society (Etzioni, 2009), especially among the educated youths.

CONCLUSION

The national ethos needs to be nurtured in every individual in a society, especially a Malaysian society which, is multiethnic. The main focus is definitely towards the educated youth as they are the backbone of the nation-state in the future. Therefore, the national ethos can be said to be central to the agenda of nation-state formation, especially in achieving the goal of national unity and national integration. The study successfully confirms the four main dimensions that shaped the national ethos among educated youths: values, feelings and spirit, beliefs and identity. All these dimensions created the unique characteristics of the local community that bind one individual to another and bind individuals to the country. This study implies a CFA model as a new approach in national ethos formation among educated youths in Malaysia from the dimension evaluated. Furthermore, this study suggests that the evaluation towards a non-educated youth group should also be implemented to assure this model becomes a holistic model.

ACKNOWLEDGMENT

Acknowledgment is given to the "Geran Putra GP/2017/9582600" for the project entitled "Persepsi Belia (Mahasiswa Universiti Awam) Terhadap Malaysia Baharu" (Youth Perceptions [Public University Students] Towards New Malaysia) from the Universiti Putra Malaysia (UPM), which contributed to the publication of this article.

REFERENCES

- Abd Rashid, A. R. (2004). *Patriotisme: Agenda pembinaan bangsa* [Patriotism: A nation building agenda]. Utusan Publications & Distributors Sdn. Bhd.
- Abdullah, S. (2005). Patriotisme alaf baru: Dari semangat kepada khidmat Malaysia [New millennium patriotism: From passion to service]. In H. Mohamad (Ed.), *Belia dan patriotisme Malaysia* (pp. 70-93). Institut Kajian Sejarah dan Patriotisme Malaysia (IKSEP).
- Adey, P. (2012). How to engage? Assemblage as ethos/ethos as assemblage. *Dialogues in Human Geography*, 2(2), 198-201. <https://doi.org/10.1177/2043820612449289>
- Allder, M. (1993). The meaning of 'school ethos'. *Westminster Studies in Education*, 16(1), 59-69. <https://doi.org/10.1080/0140672930160109>
- Bar-Tal, D. (2000). *Shared beliefs in a society: Social psychological analysis*. Sage Publication.
- Bernstein, M. (2005). Identity politics. *Annual Review of Sociology*, 31, 47-74. <https://doi.org/10.1146/annurev.soc.29.010202.100054>
- Burchard, D. J. H. O'S. (2005). Ethos, ethics and endeavours: New horizons in family nursing. *Journal of Family Nursing*, 11(4), 354-370. <https://doi.org/10.1177/1074840705281750>
- Burke, P. J. (2006). Identity change. *Social Psychology Quarterly*, 69(1), 81-96. <https://doi.org/10.1177/019027250606900106>
- Byrne, B. M. (2010). *Multivariate applications series. Structural equation modelling with AMOS: Basic concepts, applications, and programming (2nd ed.)*. Routledge/Taylor & Francis Group.
- Cohen, J. (1969). *Statistical power analysis for the behavioral sciences*. Academic Press.
- Donnelly, C. (2000). Pursuit of school ethos. *British Journal of Educational Studies*, 48(2), 134-154. <https://doi.org/10.1111/1467-8527.t01-1-00138>
- Eisner, E. (1994). *Editorial in school climate and ethos conference report*. Scottish Consultative Council on the Curriculum.
- Embong, A. R. (2006). *Negara-bangsa: Proses dan perbincangan* [Nation-states: Processes and debates] (2nd ed.). Universiti Kebangsaan Malaysia Publisher.
- Etzioni, A. (2009). Minorities and the national ethos. *Politics*, 29(2), 100-110. <https://doi.org/10.1111/j.1467-9256.2009.01345.x>
- European Commission. (2012). *The development of European identity/identities: Unfinished business*. Author.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis (7th ed.)*. Pearson Education.
- Haneef, M. A., Yusof, S. A., Amin, R. M., & Noon, H. M. (2002). Values and their relationship to social problems in Malaysia: An Islamic framework. *The American Journal of Islamic Social Sciences*, 19(3), 58-78. <https://doi.org/10.35632/ajis.v19i3.1921>
- Hoelscher, M., & Anheier, H. K. (2011). Indicator suites for heritage, memory, identity. In H. K. Anheier & Y. R. Isar (Eds.), *Heritage, memory and identity* (pp. 363-407). Sage Publication. <http://doi.org/10.4135/9781446250839.n27>
- Huntington, S. P. (2004). *Who are we?: America's great debate*. Free Press.
- Ikhwan, H., & Aidulsyah, F. (2020). Sultanates and the making of nationhood in Indonesia and Malaysia. *Asian Journal of Social Science*, 48(3-4), 339-352. <https://doi.org/10.1163/15685314-04803008>
- Ishak, M. S. (2011). *Pengaruh kredibiliti terhadap penerima gunaan maklumat berkaitan Islam di internet Malaysia* [The influence of credibility on the adoption of Islamic-related information on the internet; Unpublished doctoral thesis]. Universiti Putra Malaysia.

- Ismail, M. M. (2013). Etos bangsa dan pembinaan negara-bangsa: Analisis pelatih Program Latihan Khidmat Negara Malaysia [National ethos and nation-state building: An analysis on trainees of Malaysian National Service Training Program]. In G. H. Pue (Ed.), *Menyelusuri cabaran kepelbagaian: Pengalaman Malaysia terkini. UKM Ethnic Studies Paper Series No. 30* (pp. 105-142). Institute of Ethnic Studies.
- Ismail, M. M. (2015). *Sosialisasi politik, etos nasional dan negara-bangsa: Kajian pendidikan sivik dan Program Latihan Khidmat Negara (PLKN) dalam kalangan mahasiswa Universiti Putra Malaysia (UPM), Malaysia* [Political socialization, national ethos and nation-state: A study of civic education and National Service Training Program (PLKN) among Universiti Putra Malaysia (UPM) students, Malaysia; Unpublished doctoral thesis]. Universiti Kebangsaan Malaysia.
- Ismail, M. M., Jawan, J., Ahmad, Z., Ab. Halim, A., & Darshan Singh, S. S. (2009). *Penghayatan semangat patriotisme dan nasionalisme: Pelatih Program Latihan Khidmat Negara (PLKN) Malaysia* [Appreciation of the spirit of patriotism and nationalism: Trainees of the Malaysian National Service Training Program (PLKN)]. Sciencefund Report, Kementerian Sains, Teknologi dan Inovasi Malaysia.
- Jalaluddin, N. H., Baharuddin, S. A., Omar, M., & Mohd Noor, M. (2003). *Pengasimilasian identiti nasional dan etos bangsa di kalangan rakyat Malaysia: Satu kajian sosio-budaya Malaysia* [Assimilation of national identity and national ethos among Malaysians: A socio-cultural study]. Research Report Institute of the Malay World and Civilization. Universiti Kebangsaan Malaysia.
- Jalaluddin, N. H., Baharuddin, S. A., Omar, M., & Mohd Noor, M. (2004). Identiti nasional dan etos bangsa Malaysia [Malaysians national identity and national ethos]. *Dewan Budaya*, 26(8), 9-13.
- James, L. R., & Brett, J. M. (1984). Mediators, moderators, and tests for mediation. *Journal of Applied Psychology*, 69(2), 307-321. <https://doi.org/10.1037/0021-9010.69.2.307>
- Kline, R. B. (2005). *Principles and practice of structural equation modeling* (2nd ed.). The Guilford Press.
- Kosterman, R., & Feshbach, S. (1989). Toward a measure of patriotic and nationalistic attitudes. *Political Psychology*, 10(2), 257-274. <https://doi.org/10.2307/3791647>
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30, 607-610. <https://doi.org/10.1177/001316447003000308>
- Lewin, E. (2015). National ethos as a necessary factor in mobilizing for warfare. *Sociology Study*, 5(6), 493-509. <https://doi.org/10.17265/2159-5526/2015.06.006>
- Lewin, E. (2016). The importance of national ethos in military victories. *Social Sciences*, 5(45), 1-16. <https://doi.org/10.3390/socsci5030045>
- Liu, L., & Sai, S. (2017). Chinese culture value identity and patriotism spirit. In *Proceedings of the 3rd Annual International Conference on Social Science and Contemporary Humanity Development* (Vol. 90; pp. 97-102). Atlantis Press. <https://doi.org/10.2991/sschd-17.2017.20>
- McClosky, H., & Brill, A. (1983). *Dimensions of tolerance: What Americans believe about civil liberties*. Russell Sage Foundations.
- McClosky, H., & Zaller, J. (1984). *The American ethos: Public attitudes toward capitalism and democracy*. Harvard University Press.
- McLaughlin, T. (2005). The educative importance of ethos. *British Journal of Educational Studies*, 53(3), 306-325. <https://doi.org/10.1111/j.1467-8527.2005.00297.x>
- Mohamad, M. (1991). *Malaysia melangkah ke hadapan* Malaysia [Malaysia the way forward].

- Institut Kajian Strategik dan Antarabangsa Malaysia.
- Mohamad, T. M. (1992). *Towards a united Malaysian nation*. Jabatan Perkhidmatan Penerangan Malaysia. <http://hdl.handle.net/20.500.12499/3727>
- Mohd Noor, M., Abdul Aziz, A. R., & Lee, M. A. I. (2006). *Hubungan etnik di Malaysia* [Ethnic relations in Malaysia]. Prentice Hall.
- Mulaik, S. A., & Millsap, R. E. (2000). Doing the four-step right. *Structural Equation Modeling*, 7(1), 36-73. https://doi.org/10.1207/S15328007SEM0701_02
- Oren, N. (2009). *The Israeli ethos of conflict 1967-2006*. George Mason University, Institute for Conflict Analysis and Resolution.
- Oren, N., & Bar-Tal, D. 2006. Ethos and identity: Expressions and changes in the Israeli Jewish society. *Studies in Psychology*, 27(3), 1-24. <https://doi.org/10.1174/0211093906778965035>
- Payette, A., & Chien, Y. C. (2020). Culture or context? comparing recent trajectories of elder care development in China and Taiwan. *Asian Journal of Social Science*, 48(3-4), 227-249. <https://doi.org/10.1163/15685314-04803003>
- Rokeach, M. (1973). *The nature of human values*. The Free Press.
- Sarkowi, A. (2012). *Penilaian program praktikum: Model pembentukan dan peningkatan kualiti guru praperkhidmatan di Institut Pendidikan Guru Malaysia* [Evaluation of practicum programs: Formation and quality improvement model of pre-service teachers in Malaysia Institute of Teacher Education; Unpublished doctoral thesis]. Universiti Utara Malaysia.
- Schumacker, R. E., & Lomax, R. G. (2010). *A beginner's guide to structural equation modeling* (3rd ed.). Lawrence Erlbaum Associates.
- Schwaninger, M. (2006). *Intelligent organizations powerful models for systemic management*. Springer.
- Soanes, C., & Stevenson, A. (2004). *The concise Oxford English dictionary*. Oxford University Press.
- Swenson, D. (2008). *Religion and family link*. Springer Science & Business Media.
- Tamam, E., Yee, W. M. T., Idris, F., Hamzah, A., Mohamed, Z. A., Wong, S. L., & Mohd Noor, M. (2005). The relationship of exposure to news media with attachment to the national ethos. *Pertanika Journal of Social Sciences & Humanities*, 13(2), 187-198.
- Tee Abdullah, M. R. (2015). Cabaran integrasi antara kaum di Malaysia: Perspektif media, pertubuhan bukan kerajaan dan parti politik Malaysia [Race integration challenge in Malaysia: Perspective of media, non-governmental organizations and political parties]. *Jurnal Hadhari*, 7(1), 33-60.
- Terblanche, N. S., & Boshoff, C. (2008). Improved scale development in marketing: An empirical illustration. *International Journal of Market Research*, 50(1), 105-119. <https://doi.org/10.1177/147078530805000108>
- Williams, R. M. (1967). Individual and group values. *The Annals of the American Academy of Political and Social Science*, 1(371), 20-37. <https://doi.org/10.1177/000271626737100102>
- Yusoff, A. K. (2005). Globalisasi, internasionalisasi dan nasionalisme dalam mempertahankan identiti Melayu [Globalization, internationalization and nationalism in defending the Malay identity]. *Jurnal Pengajian Melayu*, 16, 174-186.

Case study

Strengthening Marine Ecotourism Management's Institutional Performance in Raja Ampat, Indonesia

Nuraini^{1*}, Arif Satria¹, Ekawati Sri Wahyuni¹ and Dietriech Geoffrey Bengen²

¹*Department of Communication Science and Community Development, Faculty of Human Ecology, Bogor Agricultural University, Bogor 16680, Indonesia*

²*Department of Marine Sciences and Technology, Faculty of Fisheries, Bogor Agricultural University, Bogor 16680, Indonesia*

ABSTRACT

Institutional performance is a critical element that stakeholders must collectively strengthen to better respond to marine tourism development challenges. The institutional strength of a community has the power to influence the behaviour of local people, which drives them to conduct activities effectively and create a foundation for management. This paper uses qualitative approaches specifically through the case study method. The results of this paper show that: (1) beyond the potential of marine ecotourism development, there are several unsolved problems specifically within the ecological, social and economic areas; (2) ten indicators strengthen the institutional performance in developing Raja Ampat Tourism Villages. These indicators consist of: (1) community cooperation with outside institutions; (2) clarity of management area borderlines; (3) correspondence of regulations towards the local conditions; (4) active engagement of the community in the development and management of regulations; (5) the presence of local institutions; (6) effectiveness of supervision; (7) the imposition of sanctions; (8) conflict resolution mechanisms; (9) governmental recognition through the establishment of regulations; (10) equal access for resource users.

ARTICLE INFO

Article history:

Received: 26 March 2021

Accepted: 19 July 2021

Published: 24 September 2021

DOI: <https://doi.org/10.47836/pjssh.29.3.18>

E-mail addresses:

aini.kpmipb@gmail.com (Nuraini)

arifsatria@apps.ipb.ac.id (Arif Satria)

ekawatiwahyuni@gmail.com (Ekawati Sri Wahyuni)

dieter@indo.net.id (Dietriech Geoffrey Bengen)

* Corresponding author

Keywords: Ecotourism development, institutional performance, marine ecotourism, potential and problems, tourism village

INTRODUCTION

Raja Ampat, located in the Coral Triangle, provides an advantage in tropical marine biodiversity (Raja Ampat Regency

Government, 2018). According to the Rapid Assessment Program, Raja Ampat has high biodiversity, including 699 mollusc species, 1,320 fish species belonging to 91 families and 553 coral species out of 800 global coral species (McKenna et al., 2002; Raja Ampat Regency Government, 2018). The rich biodiversity contributes to the popularity of Raja Ampat as a tourist destination, especially for those who seek marine tourism.

In ecotourism, visitors travel to natural destinations while maintaining the responsibility to preserve the environment and improve the local people's welfare (The International Ecotourism Society, 2015). Through careful planning and management, ecotourism can protect the environment, improve the local population's living standards, and promote local economic development (D. Hall, 2004; Su et al., 2014). Marine ecotourism is a type of ecotourism activity that is related to enjoying the view of coral reefs, seagrass, various fish species, or other species in the sea, which is carried out either by swimming, diving, or snorkelling (Ahmed et al., 2007; Garrod & Wilson, 2004).

Marine ecotourism activities in Raja Ampat began to develop due to conservation initiatives in maintaining biodiversity (Atmodjo et al., 2020; Mangubhai et al., 2012; McKenna et al., 2002). Since 2006 the Ministry of Marine Affairs and Fisheries has initiated a conservation program, namely the Coral Reef Rehabilitation and Management Program (Coremap) in Raja Ampat. After the Coremap initiation, the

community formed a community-based marine protected area. The integration of local community knowledge and practices in maintaining the sustainability of resources supports the sustainable development of marine ecotourism (Hanafiah et al., 2021; Prasetyo et al., 2020).

Tourism development is seen as a source of new job opportunities for people who can contribute to economic growth (Cobbinah et al., 2013; Hendijani & Yuliana 2016; Joshi et al. 2017; Rout et al., 2016). Raja Ampat Regency's regional income from environmental maintenance service fees charged to each tourist has increased every year, from total revenue of around 1.5 billion in 2007 to 14.4 billion in 2016 (Raja Ampat Culture and Tourism Office, 2017). However, based on the Presidential Regulation of the Republic of Indonesia Number 131 of 2015, Raja Ampat is still one of the underdeveloped areas in Indonesia. Therefore, it is considered that the benefits of developing marine ecotourism in Raja are not optimal.

Institutional holds an essential role in the sustainable management of ecological, social and economic aspects. The institutional has the power to influence local people's behaviours, which can drive them to conduct activities effectively and become a foundation for management. Institutional is defined as regulations, norms and strategies to direct collective actions used to decide who qualifies in decision-making in specific fields and to decide which actions are allowed and which should be limited (Fidelman et al., 2012; Ostrom, 1990; Satria, 2009).

In facing development challenges, an institutional strategy is needed that is designed in a participatory manner with the community and adapted to local conditions to achieve proper management (Barriga, 2014; Hanafiah et al., 2021). Planning a marine ecotourism development strategy begins with identifying potential and problems as a first step to understanding local conditions. Each country has different challenges and impacts on tourism development (Hanafiah et al., 2021). This paper aims to analyse the potential and problems in Raja Ampat Tourism Village and analyse strengthening institutional performance to develop marine ecotourism in Raja Ampat Tourism Village. As a result, this paper contributes to the institutional aspect study as an essential foundation that should be collectively strengthened to develop marine ecotourism.

METHODS

Location and Time

Through the Regent's Decree No 104, 2008, Raja Ampat Regency Government designated seven of 24 villages in Raja Ampat as tourism villages. The tourism villages are Arborek, Sauwandarek, Yenwaupnor, Sawinggrai, Yenbuba, Friwen and Saporkren. As a result, three villages were chosen to be the locations of the study, namely Arborek, Yenbuba and Sawinggrai, located in the Dampier Strait, Meos Mansar District, Raja Ampat Regency, West Papua Province (Figure 1). The Arborek, Yenbuba and Sawinggrai villages are close and have the most tourism workers compared to the

other tourism villages. It is calculated from the number of homestays where they work. There are 12 homestay units in Arborek, 20 in Yenbuba (Kri Island) and 8 in Sawinggrai. The study was conducted in November 2018 and October 2019.

The Regional Development Planning Board of Raja Ampat (2010) stated that the Dampier Strait has rich coral potential that would continue to be developed as Raja Ampat marine ecotourism. According to the spatial planning direction, the Dampier Strait area has also been designated a semi-intensive zone designed to receive tourists on smaller scales with limited tourism activities.

Paradigm and Approaches

The authors use a constructivist paradigm, qualitative approach and case study method to answer the research objectives. This method includes assessing the potential and problems of developing marine ecotourism and strengthening institutional performance analysis to develop marine ecotourism in Raja Ampat Tourism Village. The case study is a research design used to develop an in-depth case analysis (Creswell, 2014). Through the paradigm above and approach, researchers can develop the subjective meanings of experiences by asking questions to pursue the complexity of views, rather than narrowing down the meanings into categories or ideas (Creswell, 2014; Merriam, 2009). In addition, Creswell (2014) explained that subjective meanings are often negotiated in social and historical contexts.



Figure 1. Locations of the study (Raja Ampat Regency Government, 2006; Google Earth)

Data Collection

The data collection was done in alignment with the code of research ethics, namely conducting research licensing, conducting interviews with informants free from coercion, protecting the confidentiality of research data and presenting research findings honestly. The data collected

consists of primary and secondary data. The primary data sources are informants who report about the situation and the environment of the sites. In this study, there were 53 informants, including the Cultural and Tourism Agency of Raja Ampat, the Regional Public Service Agency Technical Implementing Unit of West Papua Province (UPT BLUD), The Nature Conservancy

(TNC), Conservation International (CI) Indonesia, village chiefs, Raja Ampat Homestay Association committee, tourism workers, non-tourism workers and private parties. The informants were chosen using the snowballing technique to find a key informant who led other informants until the information and data were saturated (data or information are confirmed homogenous). Snowballing technique is a term of purposeful sampling. The researcher asks the participant to recommend other persons to be sampled. The snowballing technique identifies the case questions of that interested people and collects the precious information from the population sampling (Creswell, 2014).

Primary data were acquired from in-depth interviews, focus group discussions (FGD) and participative observation. The interviews and FGD included a summary of the management of marine ecotourism in tourism villages, identification of potential and problems in an attempt to develop marine ecotourism in tourism villages, and identification of institutional performance in managing marine ecotourism in tourism villages. The interview questions were issued in Indonesian and delivered using the question guide to simplify the information exchange between the researchers and informants. The interview was recorded and transcribed into daily reports in the form of detailed descriptions and direct quotations. Secondary data were acquired from various literature, such as scientific papers, books, Central Bureau of Statistics, regional regulations, tourism villages' profiles, reports from the Cultural and Tourism Agency of Raja Ampat, study

results from The Nature Conservancy (TNC) or Conservation International Indonesia and other supporting literature.

Data Analysis

Referring to Creswell (2014) and Marshall and Rossman (1989), the stages of analysis in this study are as follows:

1. Processing and preparing the data for analysis. This stage involves transcribing the interviews, scanning the materials, typing field data, selecting and compiling the data into categories according to the sources.
2. A data coding process to describe the setting, informants, categories and themes will be analysed. The description involves delivering detailed information regarding the people, location or phenomenon in specific settings. Coding the data begins with compiling a statement of the informant's answer. All the answers to the information are read, understood and analysed. Next, the researchers grouped them into the smallest parts until they reached a saturation point. After obtaining the saturation point, the researcher can create a category for a code.
3. Presenting the data by describing the acquired information and data with words that are easy to read in a report. The data are presented through narrations and tables.
4. Data interpretation. Interpretations explain the comparison between

the study results with information acquired from past literature or theories.

5. The reliability and validity test of the qualitative data is done through triangulation. Triangulation is qualitative cross-validation for assessing the sufficiency of the data according to the convergence of multiple data sources or multiple data collection procedures (Wiersma, 1986). In this study, triangulation was carried out by comparing the results of the observation with the interview results, comparing the results of interviews between informants and comparing them with reports and related literature. Then, further verification is carried out by discussing the results of the processed data with the informants.

RESULTS AND DISCUSSION

Potential of Tourism Villages in Developing Marine Ecotourism

Tourism destinations are developed according to the tourist attractions, which are developed synergistically with the tourism and general facilities, accessibility and social empowerment in a complete and sustainable system (The Ministry of Tourism of the Republic of Indonesia, 2016). Nikijuluw et al. (2017) stated that tourism development in Raja Ampat Regency is marked by the increasing number of sea resorts, homestays and liveaboard tourist boats. The Statistic of Raja Ampat Regency (2021) reported that the number of amenities in the Raja Ampat Regency tends to increase from 2016 to 2020. The number of amenities in Raja Ampat Regency is shown in Figure 2.

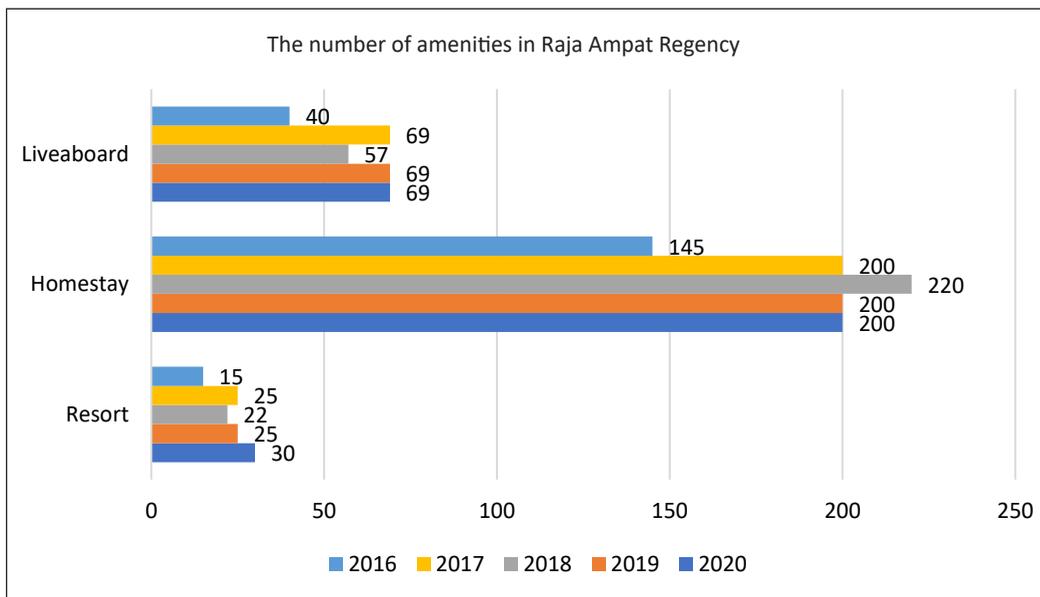


Figure 2. The number of amenities in the Raja Ampat Regency is shown in 2016-2020 (Statistic of Raja Ampat Regency, 2021)

The potential of ecotourism development possessed by Raja Ampat Tourism Villages encompasses ecological, social and economic elements:

Ecological Potential

Natural Potential. The tourism villages have coral reefs in excellent condition with a live coral coverage percentage \geq of 50% (Raja Ampat Regency Government, 2006). Ahmed et al. (2007) stated that coral reefs in an area are the main focus of tourism development because they are a valuable attraction. Based on information from the head of the village of Sawinggrai (P. Sauyai, personal communication, October 21, 2019) who stated that “Raja Ampat has an attraction that can attract tourist visits to the international level. Raja Ampat is most famous for its natural preservation, maritime wealth and karst tourism objects.”

The existence of conservation activities strongly supports the sustainability of natural potential. Conservation is built with the principle to achieve the preservation of natural resources. However, it does not limit people’s access to utilise natural resources. Therefore, the determination of conservation zones (core zones, buffer zones and transition zones) must be clearly and fairly defined.

Carrying Capacity. An increase in visitors can provide economic benefits. However, it will impact environmental damage if you ignore the carrying capacity of the area. The number of tourists in Raja Ampat in 2017 reached a total of 23,141 tourists

(The Regional Public Service Agency Regional Technical Implementing Unit of West Papua Province, 2018). This number does not exceed the carrying capacity. According to the carrying capacity, the number of tourists per year and ten activities in the fifteen Raja Ampat locations is 91,275 (Nikijuluw et al., 2017). West Papua Tourism and Capacity Building Manager, Conservation International (M. Kasmidi, personal communication, November 9, 2018) who stated that:

The Raja Ampat government is committed to developing ecotourism-based tourism by limiting the number of tourist visits as a conservation effort which, of course, will also have a positive impact on the socio-economic community. The behaviour of tourists is also regulated and supervised in tourism activities in Raja Ampat.

Various Selections of Tourism Activities.

Tourists can do various marine tourism activities in the tourism villages such as diving, snorkelling, swimming, fish feeding, sunbathing and beach recreations. Diving is the most popular activity for Raja Ampat visitors (Nikijuluw et al., 2017). The tourism villages also have beautiful scenery and white sand beaches. Tourists commonly enjoy and indulge via swimming, sunbathing and other recreational activities. Many tourist activities are offered to encourage tourists to travel more and stay longer.

Tourism Villages Have a Marine Protection Zone. Tourism villages, such as Arborek, Yenbuba and Sawinggrai, have a marine protection zone extending to 500 meters from the beach. The activities prohibited in this zone include (1) bombing and anaesthetising; (2) coral and sand mining; (3) littering or waste-dumping; (4) building permanent tourism facilities; (5) beach reclamation and anchoring; (6) fishing, netting, trawling and others; (7) catching fish or other marine organisms; (9) use of lamp boats; (10) aquaculture; and (11) walking on coral reefs. In addition, community awareness and compliance are initiated through institutions built at the operational, collective and constitutional levels.

Environmental Awareness and Active Environmental Preservation. The development of ecotourism requires environmental awareness (D. Hall, 2004). Environmental obedience and awareness are based on the knowledge possessed by the community in tourism villages. An example of this local wisdom is that fishing in fish breeding areas will limit the productivity potential of the fish. Another example is that littering the sea waters will negatively impact the fish population. The community in the tourism village become aware that the abundance of fish is one of the attractions for tourists, thus becoming their incentive for preservation.

Social Potential

Cultural Potential Uniqueness. Bhuiyan et al. (2016) described ecotourism as a balance between nature views, biodiversity and culture in the tourism area. There is artistic potential in the forms of traditional dances and handicrafts. Through cultural potential, the locals can obtain additional benefits and opportunities to introduce the local culture. The value of upholding culture in tourism villages is still substantial, such as the enforcement of a modest dress code, prohibition of heavy drinking (except in traditional events), prohibition of non-religious activities on Sunday and upholding values of hospitality and unity. According to Balasingam and Bojei (2019), the development of the homestay product should focus promotional efforts on the sociocultural aspects of friendliness, welcoming and local community participation.

Raja Ampat Homestay Association. Most of the homestay owners and employees are members of the Raja Ampat Homestay Association. Raja Ampat Homestay Association acts as the platform of information exchange and tourism development. The association's agenda is to conduct gatherings for the members to exchange information, meetings and workshops. Raja Ampat Homestay Association enforces rules in homestay management while taking environmental preservation and social-economical aspects into account. The committee also helps the members to market the homestay through

the website www.stayrajaampat.com. Thus, the existence of the Raja Ampat Homestay Association strengthens social capital for the development of marine ecotourism.

Society’s Strong Homogeneity. The cooperation and participation of local people are essential for all industries, especially the tourism industry (Rishi & Upadhyay, 2013). The tourism village inhabitants build a cooperative relationship in managing marine ecotourism. That could happen because of the substantial homogeneity influenced by their homogenous social identities, including familial, ethnic and religious connections, as well as mutual interests, beliefs and culture. The people also highly depend on coastal and marine resources, which drives them to cooperate to preserve the resources.

Cooperation between Stakeholders. During the planning process, the stakeholders agreed to conduct and build conservation strategies. Local people are also involved in determining zones because it is related to the local people’s customary rights. It is different from Luting’s rural tourism development; their discourses were heavily influenced by the upper-level government’s ideas and rules (Wang, 2020). The Raja Ampat government enforces the rule prohibiting private-owned resorts in tourism villages’ areas. The government also does not collect any business permit fees from the local people. The non-government organisation assists people in developing the tourism sector through socialization and scientific data.

Economic Potential

Increasing Tourists. M. Hall (2010) stated that small islands often become popular tourist destinations that attract more tourists than permanent residents. According to the Statistic of Raja Ampat Regency data in 2019, the number of domestic and international tourists in the Raja Ampat Regency kept increasing from 2009 to 2019. The number of tourists in the Raja Ampat Regency is shown in Table 1.

Table 1
The number of tourists in the Raja Ampat Regency

Year	Domestic tourists	International tourists
2009	405	3 446
2010	790	4 628
2011	1 849	6 178
2012	2 060	7 244
2013	4 006	10 157
2014	7 691	10 759
2015	10 251	12 011
2016	12 472	13 616
2017	17 250	18 841
2018	20 811	23 099
2019	22 285	24 090

Source: Statistic of Raja Ampat Regency (2019)

Accessibility. Easy access to tourism villages is supported by easy road access and transportation. For example, tourists outside West Papua would fly to Domine Eduard Osok Airport, Sorong, West Papua, Indonesia. From the airport, land transportation to the Sorong crossing port is easy to find. Tourists can board a boat from Sorong port to Waisai port, then continue by speedboat or longboat to the small islands, where Arborek, Yenbuba and Sawinggrai

villages are located. Speedboat and longboat can be accessed through renting from the local people. It corresponds to Hoang et al. (2018), which stated that local people increase accessibility.

Tourism as an Alternative to Earning a Livelihood. The development of tourism is seen as a new working opportunity, potentially being the most significant contributor to national income (Hendijani & Yuliana, 2016; Joshi et al., 2017; Rout et al., 2016). Before the designation of tourism villages, the majority of the inhabitants work as small-scale fishermen. The driving factors in their transition to tourism workers are their previously small income, low capital and unstable income as a fisherman. The income as a fisherman is uncertain, which is an average of around Rp. 500,000-Rp. 2,000,000/month, then when you become a tourism actor, the average is Rp. 1,500,000-Rp. 7,000,000/month. According

to the informant (E. Mambrasar, personal communication, October 11, 2018), many feel that their income increases when they switch from fishers to tourism actors. It is because Raja Ampat is getting more and more tourists.

Availability of Facilities for Tourists. Each homestay consists of a private facility and a public room. Furthermore, homestay facilities also provide transportation facilities such as speedboats and longboats to facilitate tourist trips. Each homestay determines the price of a travel package that includes the boat, gasoline and driver’s price. Facilities and infrastructure in the tourism villages are also considered sufficient; the following can be shown in Table 2.

Modes of Transportation Owners. Tourism actors, especially the homestay owners and managers, use a speedboat or longboat to facilitate tourist trips. By

Table 2
The total list of facilities and infrastructure facilities at the tourism villages

Facilities and infrastructure facilities	Arborek	Yenbuba	Sawinggrai
Homestay	11	20	8
Semi-permanent dock	1	2	1
Public toilet	3	-	-
Snorkelling equipment rental	2	5	1
Diving equipment rental	1	5	-
Gazebo	7	-	1
Stall	3	2	2
Small garden	2	-	-
Telephone network tower	1	1	-
Midwife’s place	1	1	1
Community health centre	1	1	1
PLN electricity and Genset	1	1	1

using a speedboat or longboat, it creates easy mobility, and the mileage is relatively faster. Most tour operators use speedboats or longboats with two engines, each with 20 Paarden Krachts (P.K.). Homestays that do not have a speedboat or longboat to facilitate the guests will have to borrow a speedboat or longboat from their neighbours or relatives.

Marketing through the Website. The homestay owner or manager cooperates with the Raja Ampat Homestay Association board in marketing the homestay and establishing travel packages to be advertised through the website www.stayrajaampat.com. It is managed by the board of Raja Ampat Homestay Association. The website has clear information about homestay's location, facilities and services, various Raja Ampat destinations, travel packages, booking and trip planning guides. Marketing through the website can reach a broader market. The majority of homestay guests are obtained from bookings through the website.

Challenges in Developing Marine Ecotourism

Kinseng et al. (2018) and Cobbinah et al. (2013) stated that tourism does not only bring benefits but can also bring potential problems and conflicts to the community. According to the study results, the challenges in developing marine ecotourism in Raja Ampat Tourism Villages are as follows:

Ecological Challenge. Fish Feeding. Feeding the fish is one of the tourist activities. However, several rules have been set in the

form of restrictions on feeding and the type of food given. The impacts remain present. The time set for feeding is in the afternoon; whereas, the fish can naturally obtain their food earlier in the day. Furthermore, the types of food that can be fed are only limited to natural or non-packaged foods such as noodles and biscuits. However, tourists still often violate these rules since there is no strict supervision. The violation remains due to lack of socialization to tourists, lack of information boards for fish feeding rules, lack of supervision and no sanctions for such violations. If this case is ignored, the potential of food chain damage and ecological damage will increase and further exist.

Waste Management Problems. As the development of tourism villages continues to develop, the impacts also continue to develop. The activities from village tourism generate an increase in waste produced by tourists. Before many tourists visit the village, most of the community piled up organic waste in the soil. However, with the increasing number of tourists and their waste, the community is burning and polluting the village's air.

Careless Anchor Removal. Raja Ampat conservation areas have implemented the rules on removing anchors at a minimum depth of 50 meters. However, according to residents' reports, many homestays still do not comply with the rules. Some of them are found docking marine protected area zones. Disobedience occurs when homestay

operators lack compliance, unavailability of mooring for anchors' removal and severe penalties and further actions are also absent from punishing those who do not comply with the rules.

Social Issues. *The Ambiguity of Tenurial Owners.* Su et al. (2014) mentioned that structural problems, especially in protected areas, occur due to the structure of tenurial management and land ownership ambiguity. In Raja Ampat Regency, a certificate does not prove land ownership. Land ownership is determined based on customary cultivated land and often results in the ambiguity of land ownership. The ambiguity of land ownership usually occurs between families within a clan.

Conflict of Interest. One private sector in Arborek and Yenbuba villages builds their business with local ownership alibi in each village. The types of business include homestay packages and diving package. First, the tourist stays at a homestay owned by local persons. Later the private sector will pay homestay rent to locals. This situation can potentially shut down local community business owners. It happened in Yenbuba village, where diving packages owned by foreign nations are preferable for the tourists rather than packages owned by locals.

Insufficient Training. The training to enhance skill and knowledge on the conservation efforts has not been implemented regularly and evenly within the tourism villages. The community

especially needs regular training to develop ecotourism in the tourism villages. Several pieces of training needed by the community are homestay standardization training, hospitality training, language training, food and beverage services training, financial management of homestay training and skill training for making various souvenir products.

Economic Issues. Limited Capital. There is limited distribution assistance in several tourism villages in the form of boat assistance, grant funds, loan funds and homestay facilities assistance from the local government. However, the assistance has not been distributed evenly to all communities in tourism villages. According to Raja Ampat Regent Regulation No. 18/2014, there is a fee for maintaining environmental services borne by the tourist. There is an allocation of funds for the community's welfare from that fee, set in the regulations. The allocation of funds must be transparent and evenly distributed.

Limited Events or Tourism Activities. In this tourism village, the development of tourism events has not yet been implemented. Furthermore, tourism activities are limited to snorkelling, diving, swimming, fish feedings and the recreation of bird-beaches (especially in Sawinggrai village), where other events can be developed, such as a glass-bottom boat, parasailing and other environmentally friendly tourism activities. Destination's management must protect the resources and maintain socioeconomic prosperity (Shariffuddin et al., 2020).

The growing exclusion local people in liveaboard business. The liveaboard and travel agent can potentially shut down the local business since they provide complete facilities and services for the tourists without involving the local business actors. The head of the village of Arborek (D. Mambrasar, personal communication, October 12, 2018) stated that:

What is the benefit of having many guests come if the guest is a guest of a travel agent or liveaboard company? We, the people, only watch, the lodging, touring and transport of guests are all from travel agents and liveaboard.

The Marketing System in The Association is Still Not Optimal. There is a fee to market the local business on the website, which is considered unclear and unfair since homestay types (small, medium and large) determine the price. Furthermore, even if there is no tourist in the homestay, the homestay owner must continue to pay the fee to keep the advertisement on the website. Therefore, most homestay owners feel burdened with this policy.

Lack of Proper Cleaning Maintenance and Homestay Comfort. The Raja Ampat Homestay Association has already set the homestay standardization, including full and comfortable facilities and homestay management. However, most homestay owners pay less attention to the homestay cleanliness, especially in the bathroom facilities. Therefore, most homestays

provide a shared bathroom with low maintenance and cleanliness.

Strengthening the Marine Ecotourism Institutions Performance

Identifying the potentials and problems is one way to conduct social mapping as the central core in management planning. After identifying the potentials and problems, proceed with systematical planning to achieve the goals. The expected output from this is institutional or regulations that include targeted, strategic, and needed resources. According to Ostrom (1990) and Satria (2009), nine indicators help strengthen the institutional: (1) clarity of boundaries; (2) compliance of the rules towards local conditions; (3) active involvement of resource users in the composing and management of regulations; (4) the existence of a local institution; (5) community respect towards supervisors; (6) the imposition of sanctions; (7) conflict resolution mechanisms; (8) strong recognition from the government; and (9) the existence of ties or networks with external institutions. However, this study found additional indicators that help strengthen the institutional performance in Raja Ampat Tourism Village. These indicators include:

Identification of Potentials and Problems

Identifying the potentials and problems is one way to conduct social mapping as the central core in management planning. The involvement of community actors who

clearly understand the current condition and issue is needed and can be obtained by conducting a focus group discussion (FGD). After identifying the potentials and problems, proceed with systematical planning to achieve the goals. The expected output from this is regulations that include targeted, strategic, and resources that are needed.

Cooperation within the Local Community and Outside Institutions. The local communities have developed Cooperation with the government, NGOs, academicians and private sectors. At the planning stage, the community conducted a declaration to establish cooperation with the government, NGOs and academicians to determine the borderline of management areas and marine ecotourism strategic regulations. At the implementing stage, the community, the government and NGOs ensured that the management is conducted accordingly to the regulations. To further develop marine tourism management, support from the government in policy, capital and market support, training and development of human resources quality and building partnerships are needed. The community collaborated with the Maya Tribe Adat Council, UPT BLUD, Raja Ampat Culture and Tourism Office and the police at the monitoring stage.

Clarity of Management Areas Borderlines. The marine of the tourism villages are designated as community-based marine protection zone (Daerah Perlindungan Laut Berbasis Masyarakat [DPL-BM]).

The boundaries of the DPL-BM area have been clearly defined, namely 500 meters from the beach. The DPL-BM is an area chosen and determined in a participatory manner by the community to be managed and maintained together as a “fish bank” to supply fish stocks to all communities in the village (Raja Ampat Culture and Tourism Office, 2014). The DPL-BM was used as the fish bank that can provide benefits for food security and tourist attraction. The abundance of fish and coral reefs in the area attracts tourists to snorkelling, diving, fish feeding and other activities.

Regulation Establishment through Local Conditions. Long before the establishment of the DPL-BM, the Raja Ampat community had implemented a marine-*sasi* management institution. *Sasi* is conducted inherently with the *sasi pante* (beach) system, which prohibits catching fish, shellfish, lobsters, sea cucumbers and other sea creatures within the agreed area. *Sasi* is conducted in fish spawning areas and has been implemented since the time of their ancestors. Therefore, the establishment of Raja Ampat as a conservation area by DPL-BM zoning systems is appropriate for local conditions.

To develop marine ecotourism in Raja Ampat Tourism Village, Raja Ampat Homestay Associations apply the rules to manage homestays by local conditions and values. The rules preserve cultural heritage sites, sacred and ancient sites, protecting coral reefs, wild animals, and habitats. Homestay buildings are not permanent. They are built in harmony with nature and

maintain traditional concepts. Guests behave by the cultural context, and women have a voice and power in managing homestays.

Regulations are Developed and Actively Managed by The Community. The community is actively involved in the preparation and management of rules. The rules are as follows: (1) prohibition of fishing; (2) prohibition on the use of explosives, trawlers, potassium, large charters, taking rocks and small-eyed nets with a stretch more than 50 meters from the sea; (3) prohibition of littering; (4) prohibition of stepping on coral; (5) prohibition on damaging seagrass beds; (6) prohibition of jumping from the jetty; (7) prohibition of coral and sand mining; (8) prohibition of building permanent tourism facilities; (9) prohibition of beach reclamation and anchor disposal; (10) prohibition of activities that can damage other environments. During Sunday worship, religious and traditional leaders give sermons to keep the sea in mind and often promote awareness through statements such as *“God will be angered if we destroy nature”*. The words of religious and traditional leaders are considered sacred and must be obeyed.

The Presence of a Local Institution. The existence of local institutions established by the Raja Ampat Homestay Association aims to regulate management mechanisms with sustainability, organize homestay activities and guides, build an information exchange between members and develop sustainable tourism. The Raja Ampat Homestay

Association also plays a role in helping its members market homestays through the website. Homestay owners are charged a monthly fee for website operations, but the charging rules are considered unfair. Thus, applying the collection rules taken from percentages based on income from incoming tourists is necessary. The percentage of fees that goes to the association can be determined according to mutual agreement.

Surveillance Effectivity. Surveillance is carried out through a sea security patrol by representatives of the Maya Tribe Adat Council in each of the customary territories in Raja Ampat. Indigenous people and all parties are entitled and obliged to report violations in their respective customary jurisdictions. Each violation will be tried in a traditional session attended by village community leaders, including the village government. Common violations reported are illegal fishing, fishing gear that is not allowed and the collision of coral reefs by ships.

Applied Sanctions. Sanctions applied in tourist villages in violations, including social sanctions, administrative sanctions and economic sanctions. Economic sanctions are in the form of fines or confiscation of goods and social sanctions in community service to clean the village for one day ranging to more severe social sanctions in the form of eviction. For example, one tourist actor (Marcel, personal communication, October 14, 2019) said, “the people who catch fish here (Arborek) will be admonished three

times. More than that, there are customary sanctions or paying fines. The fine can be used for additional village community service needs.”

In customary regulations, perpetrators of crimes in coastal or marine areas are tried by representatives of customary councils in each village. If indicated criminal, the offender was handed over to the police. Suppose the UPT BLUD knows a violation. In that case, the UPT BLUD will coordinate and report to Raja Ampat Culture and Tourism Office. The office will impose economic sanctions in the form of fines or administrative sanctions to revoke valid business licenses to owners of travel agents, liveaboard and homestays.

Conflict Resolution Mechanism. Land conflicts in tourist villages are caused by clan-based land ownership, which is considered unclear ownership. Therefore, communal ownership conflicts are resolved by customary conflict resolution mechanisms by bringing in customary leaders who have knowledge regarding the land boundaries and possess power based on the communal ownership system. Members of the customary community have institutionalized the mechanism, marked by the knowledge, understanding and compliance of the communal ownership management system.

Recognition from the Government through Policy Establishment. The indigenous communities are given the authority to manage and protect natural

resources in coastal and marine areas. They make a local custom to protect their traditional areas as long there is no contradiction with the existing legislation. Regent Regulation wrote the statement of Raja Ampat Regency No. 8/2017 about the Protection of Fish, Marine Biota and other Potential Natural Resources in Coastal Areas in the Guidance of Maya Raja Ampat Tribe. In local custom, the community agreed to protect and manage natural resources that applied to coastal and marine areas of Raja Ampat, applying a monitoring and sanction system.

Equity Access for All Resource Users.

By definition, equity access covers three things, namely: (1) procedural justice, the involvement of all parties (society) in the truest sense; (2) substantial justice, rights to relish the benefits according to expectation; (3) distribution justice, equal distribution from the gained benefits (Taylor, 2000). Procedural justice and substantial are already achieved by most of the community in tourism villages because they were involved in the planning, implementing and monitoring of marine ecotourism management and gained the benefits according to the existence of management of marine ecotourism. However, distributive justice has not been achieved. Since benefits have not been evenly distributed to all communities, such as the access to technology, capital, market, knowledge and partnership, there should be a transparent and fair mechanism for the community to get the existing benefits.

The development of marine ecotourism can be achieved by maximising existing potential and minimising problems with the right problem-solving solutions. Stakeholders can manage these efforts through institutional. The performance of marine ecotourism management institutional in Raja Ampat has fulfilled several aspects. However, there are several strategies needed to improve institutional performance. The following strategies for strengthening the performance of marine ecotourism management institutions can be shown in Table 3.

Table 3
Strengthening the performance of marine ecotourism management institutions

The performance of Institutional	Fulfilled aspect	Unfulfilled aspect	Strategies needed
Cooperation within the local community and outside institutions	There are cooperation between the government, community, NGOs, academia and the private sector in planning, implementation and monitoring	Lack of cooperation in local community business partnerships.	Necessary stimulus program for local community business development and support to expand business partners between the community and travel agents
Clarity of management areas borderlines	The boundaries of the community-based marine protection zone have been clearly defined	Physical water zoning markings (eg. buoys) are not installed/missing. There is a lack of clarity on communal-based land ownership.	Putting a buoy as a physical zoning barrier. There is formal or informal evidence of communal land ownership.
Regulation establishment through local conditions	The establishment of Raja Ampat as a conservation area by DPL-BM zoning systems is appropriate according to local conditions.	Lack of local economic protection regulations	Involving the community as local guides or workers on liveaboard, strengthening the competitiveness of local businesses.
Regulations are developed and actively managed by the community	Rules are compiled and managed with the community in a regulatory, normative and cultural cognitive manner.	Low enforcement of regulations in waste management, illegal fishing by migrant fishers, anchor removal, and fish feeding	Increase the number of patrol officers, tighten supervision, build moorings and warning boards.
The presence of a local institution	The local institutions established by the Raja Ampat Homestay Association aims to regulate ecotourism management	The effectiveness of capacity building activities for members of the Raja Ampat homestay association has not been optimal	Forming a special team for the Homestay Association management that focuses on administering and developing tourism businesses at the district level.
Surveillance effectivity	Community respect towards supervisors	Lack of guard posts	Establish a monitoring system by building guard posts placed in all tourist spots and tourist villages.

Table 3 (*continue*)

The performance of Institutional	Fulfilled aspect	Unfulfilled aspect	Strategies needed
Applied sanctions	Sanctions applied in tourist villages including social administrative and economic.	There are some violations that escape sanctions.	There is a supervisory person in charge who has the authority to follow up on violations at the village level.
Recognition from the government through policy establishment	Based on the regent's regulations, indigenous peoples can make policies for the protection of their customary territories	There is no enforcement of regulations from the government to protect the local economy	There is support from the government by establishing regional regulations to regulate the entry of private investment in tourist villages.
Equity access for all resource's users	Procedural justice and substantial are already achieved by most of the community in tourism villages.	Distributive justice has not been achieved since the benefits have not been evenly distributed to all communities	There should be a transparent and fair mechanism for the community to get the existing benefits

CONCLUSION

The stakeholders' assessment of the potential and problems of marine ecotourism development affects how the institutional strategy is built. The development of marine ecotourism can be achieved by maximising existing potential and minimising problems with the right problem-solving solutions. Stakeholders can manage these efforts through institutional performance. Behind the potential, there are still problems faced in developing marine ecotourism in Raja Ampat Tourism Village. The institutional aspect is a necessary foundation to be strengthened to answer the challenges of developing marine ecotourism.

This paper has examined ten indicators of strengthening marine ecotourism management's institutional performance in Raja Ampat Tourism Village and the regulatory strategies that need to be improved. These indicators include: (1) community cooperation with outside

institutions; (2) clarity of management area borderlines; (3) rules being developed according to local conditions; (4) rules being developed and actively managed by the community; (5) the presence of local institutions; (6) effectiveness of supervision; (7) the imposition of sanctions; (8) conflict resolution mechanisms; (9) recognition from the government through the establishment of regulations; (10) fair access for resource users.

This study provides several recommendations for the development of marine ecotourism. First, development planning needs to be developed in a participatory manner with the community and adapted to local conditions to achieve proper management. Second, the need to build co-management among stakeholders to increase conservation effectiveness. Third, community capacity building, such as training and mentoring tourism actors. Fourth, the local government guarantees a fair distribution of access to the community.

ACKNOWLEDGMENT

The author would like to express her sincere gratitude to the Ministry of Research, Technology and Higher Education of the Republic of Indonesia, which funded this research through the 2019 budget-year research contract No: 3/E1/KP.PTNBH/2019.

REFERENCE

- Ahmed, M., Umali, G. M., Chong, C. K., Rull, M. F., & Garcia, M. C. (2007). Valuing recreational and conservation benefits of coral reefs: The case of Bolinao, Philippines. *Ocean & Coastal Management*, 50(1-2), 103-118. <https://doi.org/10.1016/j.ocecoaman.2006.08.010>
- Atmodjo, E., Lamers, M., & Mol, A. P. (2020). Governing dynamics in marine conservation tourism in Raja Ampat, Indonesia. *Tourism Planning & Development*, 17(6), 655-673. <https://doi.org/10.1080/21568316.2019.1686652>
- Balasingam, A. S., & Bojei, J. (2019). Homestay owners' perspective of economic sustainability of the registered Malaysian homestay. *Pertanika Journal of Social Sciences and Humanities*, 27(2), 1367-1390.
- Barriga, A. M. (2014). Governance and management of tourism in two biosphere reserves: Galapagos and Sumaco [Doctoral dissertation, Ernst-Moritz-Arndt-Universität]. <https://nbn-resolving.org/urn:nbn:de:gbv:9-001952-8>
- Bhuiyan, M. A. H., Siwar, C., & Ismail, S. M. (2016). Sustainability measurement for ecotourism destination in Malaysia: A study on Lake Kenyir, Terengganu. *Journal of Social Indicators Research*, 128(3), 1029-1045. <https://doi.org/10.1007/s11205-015-1068-5>
- Cobbinah, P. B., Rosemary, B., & Thwaites, R. (2013). Tourism planning in developing countries: Review of concepts and sustainability issues. *International Journal of Social, Human Science and Engineering*, 7(4), 2626-2633.
- Creswell, J. W. (2014). *Research design, qualitative, quantitative and mixed methods approaches, fourth edition*. SAGE Publication.
- Fidelman, P., Evans, L., Fabinyi, M., Foale, S., Cinner, J., & Rosen, F. (2012). Governing large-scale marine commons: Contextual challenge in the coral triangle. *Marine Policy*, 36(1), 42-53. <https://doi.org/10.1016/j.marpol.2011.03.007>
- Garrod, B., & Wilson, J. C. (2004). Nature on the edge? marine ecotourism in peripheral coastal areas. *Journal of Sustainable Tourism*, 12(2), 95-99. <https://doi.org/10.1080/09669580408667227>
- Hall, D. (2004). Rural tourism development in south-eastern Europe: Transition and the search for sustainability. *International Journal Tourism Research*, 6(3), 165-176. <https://doi.org/10.1002/jtr.482>
- Hall, M. (2010). Island destinations: A natural laboratory for tourism: Introduction. *Asia Pacific Journal of Tourism Research*, 15(3), 245-249. <https://doi.org/10.1080/10941665.2010.503613>
- Hanafiah, M. H., Jamaluddin, M. R., & Kunjuraman, V. (2021). Qualitative assessment of stakeholders and visitors perceptions towards coastal tourism development at Teluk Kemang, Port Dickson, Malaysia. *Journal of Outdoor Recreation and Tourism*, 35, Article 100389. <https://doi.org/10.1016/j.jort.2021.100389>
- Hendijani, R. B., & Yuliana. (2016). Local people's perception regarding tourism development: The case of Yogyakarta, Indonesia. *Journal of Environmental Management and Tourism*, 3(15), 512-518.
- Hoang, T. T. H., Rompaey, A. V., Meyfroidt, P., Govers, G., Chi-Vu, K., Nguyen, A. T., Hens, L., & Vanacker. (2018). Impact of tourism development on the local livelihoods and land cover change in the Northern Vietnamese

- highlands. *Environment, Development and Sustainability*, 22(2), 1371-1395. <https://doi.org/10.1007/s10668-018-0253-5>
- Joshi, O., Poudyal, N. C., & Larson, L. R. (2017). The influence of sociopolitical, natural and cultural factors on international tourism growth: A cross-country panel analysis. *Environment, Development and Sustainability*, 19(3), 825-838. <https://doi.org/10.1007/s10668-016-9767-x>
- Kinseng, R. A., Nasdian, F. T., Fatchiya, A., Mahmud, A., & Stanford, R. J. (2018). Marine-tourism development on a small island in Indonesia: Blessing or curse? *Asia Pacific Journal of Tourism Research*, 23(11), 1062-1072. <https://doi.org/10.1080/10941665.2018.1515781>
- Mangubhai, S., Erdmann, M. V., Wilson, J. R., Huffard, C. L., Ballamu, F., Hidayat, N. I., Hitipeuw, C., Lazuardi, M. E., Muhajir, Pada, D., Purba, G., Rotinsulu, C., Rumetna, L., Sumolang, K., & Wen, W. (2012). Papuan Bird's Head Seascape: Emerging threats and challenges in the global center of marine biodiversity. *Marine Pollution Bulletin*, 64(11), 2279-2295. <https://doi.org/10.1016/j.marpolbul.2012.07.024>
- Marshall, C., & Rossman, G. B. (1989). *Designing qualitative research*. SAGE Publication.
- McKenna, S. A., Allen, G. R., & Suryadi, S. (2002). *A marine rapid assessment of the Raja Ampat Islands, Papua Province, Indonesia: RAP bulletin of biological assessment 22*. Conservation International.
- Merriam, S. B. (2009). *Qualitative research: A guide to design and implementation*. John Wiley and Sons.
- Nikijuluw, V. P. H., Papilaya, R. L., & Boli, P. (2017). *Daya dukung pariwisata berkelanjutan Raja Ampat* [Carrying capacity of sustainable tourism in Raja Ampat Regency]. Conservation International Indonesia.
- Ostrom, E. (1990). *Governing the commons*. Cambridge Univ Pr.
- Prasetyo, N., Carr, A., & Filep, S. (2020). Indigenous knowledge in marine ecotourism development: The case of Sasi Laut, Misool, Indonesia. *Tourism Planning & Development*, 17(1), 46-61. <https://doi.org/10.1080/21568316.2019.1604424>
- Raja Ampat Culture and Tourism Office. (2014). *Raja Ampat Regency tourism development master plan*. Raja Ampat Regency Government.
- Raja Ampat Culture and Tourism Office. (2017). *Revenue from The Raja Ampat Environmental Service Fee in 2016*. Raja Ampat Regency Government.
- Raja Ampat Regency Government. (2006). *Raja Ampat atlas of coastal resources*. Conservation International Indonesia.
- Raja Ampat Regency Government. (2018). *Raja Ampat tourism potential*. <https://rajaampatkab.go.id/sejarah>
- Rishi, P., & Upadhyay, B. K. (2013). Meeting the ecotourism challenge through organisational restructuring for a broader mandate: A case of ecotourism development Board. *Journal of Organisation & Human Behaviour*, 2(3), 1-8.
- Rout, H. B., Mishra, P. K., & Pradhan, B. B. (2016). Socio-economic impacts of tourism in India: An empirical analysis. *Journal of Environmental Management and Tourism*, 7(16), 762-768.
- Satria, A. (2009). *Pesisir dan laut untuk rakyat* [Coastal and marine for society]. IPB Press.
- Shariffuddin, N. S. M., Zain, W. M. A. W. M., & Azinuddin, M. (2020). Collaborative challenges among stakeholders on tourism destination competitiveness. *International Journal of Innovation, Creativity and Change*, 13(1), 456-466.

- Statistic of Raja Ampat Regency. (2019). *Number of tourists in Raja Ampat 2014-2019*. <https://rajaampatkab.bps.go.id/subject/16/pariwisata.html#subjekViewTab3>
- Statistic of Raja Ampat Regency. (2021). *Raja Ampat Regency in figures 2021*. <https://rajaampatkab.bps.go.id/publication/2021/02/26/587956882b06fe429464820/kabupaten-raja-ampat-dalam-angka-2021.html>
- Su, M. M., Wall, G., & Ma, Z. (2014). Assessing ecotourism from a multi-stakeholder perspective: Xingkai Lake National Nature Reserve, China. *Environmental Management*, 54(5), 1190-1207. <https://doi.org/10.1007/s00267-014-0360-5>
- Taylor, D. (2000). The rise of the environmental justice paradigm injustice framing and the social construction of environmental discourse. *American Behavioral Scientist*, 43(4), 508-580. <https://doi.org/10.1177/0002764200043004003>
- The International Ecotourism Society. (2015). *Ecotourism principles revision*. <http://www.ecotourism.org/news/ties-announces-ecotourism-principles-revision>
- The Ministry of Tourism of the Republic of Indonesia. (2016). *The Ministry of Tourism Strategic Plan 2015-2019*. <https://kemenparekraf.go.id/post/peraturan-menteri-pariwisata-nomor-29-tahun-2015>
- The Regional Development Planning Board of Raja Ampat. (2010). *Raja Ampat Regency spatial planning book 2010 - 2030*. Raja Ampat Regency Government.
- The Regional Public Service Agency Regional Technical Implementing Unit of West Papua Province. (2018). *Number of tourists in Raja Ampat*. <http://www.kkpr4.net/index.php?page=page&id=34>
- Wang, Y. (2020). Institutional interaction and decision making in China's rural development. *Journal of Rural Studies*, 76(1), 111-119. <https://doi.org/10.1016/j.jrurstud.2020.04.023>
- Wiersma, W. (1986). *Research methods in education: An introduction*. Allyn and Bacon.



Case Study

Ideological Manipulation of Translation through Translator's Comments: A Case Study of Barks' Translation of Rumi's Poetry

Bitu Naghmeh-Abbaspour*, Tengku Sepora Tengku Mahadi and Iqbal Zulkali

School of Languages, Literacies and Translation, Universiti Sains Malaysia, 11800, Penang, Malaysia

ABSTRACT

As purposefully crafted information around a text, paratext is a critical platform for ideological manipulation in translation. Translators' comments as a form of paratext can cause ideological deviations between source and target texts that diminish the ideological context of the source text. On this ground, this study aimed to explore translators' comments and how they can subtly recontextualize the ideology of texts and reframe them in new ideological contexts. Thus, choosing Coleman Barks' translations of Rumi's poetry as a case study. It aimed to probe the congruency of Rumi's ideology with the ideology embedded in the translator's comments on the verses. The study employed critical discourse analysis as its analytical methodology and explored the collected controversial examples of the translator's comments. The findings illustrated a high level of ideological deviation between the source and target texts. Moreover, the findings implied

the translator's dominant approach toward a text from an inferior language comparing the superior English language. It has shown that ideological fidelity in translation is not only confined to texts but includes paratexts as well. The present study can be considered significant as it revealed the de-Islamization trend of a Middle Eastern text in the light of the relationship of the unequal languages. The study suggests that paratexts as an empowering platform for translators effectively direct the readers' perception

ARTICLE INFO

Article history:

Received: 28 March 2021

Accepted: 7 July 2021

Published: 21 September 2021

DOI: <https://doi.org/10.47836/pjssh.29.3.19>

E-mail addresses:

bitana@usm.my (Bitu Naghmeh-Abbaspour)

tsepora@usm.my (Tengku Sepora Tengku Mahadi)

iqbalzulkali03@gmail.com (Iqbal Zulkali)

*Corresponding author

about the source text and its author. This study hopes to make the translator trainees more cautious in their comments on the original authors' voices and ideology.

Keywords: Ideology, New Age, paratexts, Rumi's poetry, translational manipulation

INTRODUCTION

Apart from the traditional perception of translation, which has dealt with linguistic and textual fidelity, more contemporary translation studies have paid special attention to the ideological aspects of the text. The ideological concerns have become more controversial when the source text's ideology does not match the target readers' social context and dominant ideology. On this matter, it has been found that not only the response of readers to a translation would be better, but publication efforts would be more comfortable when the ideology present in a translation is on the same wavelength as the dominant ideology of the society (Shuttleworth & Cowie, 2014). Thus, one of the concerns of the ideological studies of translation is investigating ideological congruency between the source and target texts in terms of any probable ideological deviations. For this reason, the present case study was derived from the attention and significance of a contemporary phenomenon—the extraordinary fascination of North American society towards the translations of Rumi (a Muslim Sufi Sheikh from 800 years ago who used poetry to transmit the Qur'anic teachings).

The beginning of the twenty-first century in North America was accompanied by the rapid dissemination of a wave of fascination towards Rumi's poetry and beliefs. In the last two decades, Coleman Barks' translations of Rumi's poetry "have been the best-selling poetry (of any kind) in North America" (Mojaddedi, 2017, p. 56). According to Tolib (2019), Barks' English renderings of Rumi's poetry have been translated into twenty-three collections, a substantial number that shows the significance of his work. Moreover, Ciabattari (2014) specified that by 2014 over two million copies of his translations have been sold globally. This rapid growth of Rumi's fame and the popularity of Barks' renderings of his poetry in North America is contemplated as an unexpected phenomenal occurrence, especially after the 9/11 attacks and the rise of anti-Islam emotions throughout the nation. The long fascination with Rumi's poetry in North America, even in the Islamophobic context after 9/11, rose many disputes. Researchers in translation studies, literature and even theology have been attracted to the subject which Safavi and Weightman (2009) called "Rumi-Mania". On this topic, we can consider several researchers that have explored this matter, such as Tolib (2019), Mojaddedi (2007), Minnick (2016), Azadibouga and Patton (2015), and Lewis (2014), to name but a few.

As stated above, Coleman Barks has published more than twenty-three translation collections of Rumi's poetry which have received a favourable response from North American society. Some scholars

like Minnick (2016) believed that Barks “through his translation and his poetry is creating a connection between the past and the present moment” (p. 295). Nevertheless, another group of scholars insisted that the translator recontextualise these translations in a New-Age framework. This second group believes Barks separated Rumi from the Islamic context of his poetry and presented him (Rumi) as either a spiritual guru or a love poet (Aviv, 2007; Lewis, 2014; Naghmeh-Abbaspour et al., 2019). The “Rumi phenomenon” (El-Zein, 2000) was inspected from various perspectives; however, to the best of our knowledge, little effort has been made to investigate these translations at the paratextual level. Considering the general peripheral position of translated literature, in particular, translated poetry in the literary system (Bassnett & Lefevere, 1998; Hermans, 2014), and regarding the noted unusual trend of the fascination of North American poetry readers toward collections of Rumi’s poetry translated by Coleman Barks, the very first sparks of this study have been generated. Besides, some earlier studies illustrated that Barks, by removing the Islamic concepts from the text, performed a critical ideological manipulation at the lexical levels (Azadibougar & Patton, 2015; Naghmeh-Abbaspour et al., 2019). On this ground, the current study aimed to examine the ideological shifts of Barks’ translations at the paratextual level, in particularly through the translator’s comments. Translators’ comments as a form of external guidance can be considered as

“an example of text-external manipulation as conscious handling ... [and] can also try to impress a certain ideology on the reader” (Dukate, 2009, p. 95). To be more specific, given the extent of the debate about the ideological manipulations of Barks’ translations of Rumi, there is a significant lack of investigation on the congruency of the translator’s ideology presented in his comments and the original ideology of Rumi’s poetry.

Therefore, to fill this void, the current research explores the translator’s comments on Rumi’s ideology and how the translator introduced him to the new potential audience. Furthermore, the present study focused on the paratextual material (e.g., prefaces, notes, interviews) to illustrate the power of such extra-textual material in redirecting the ideology of the text in line with the target society values.

Depicting the concept of paratext, Batchelor (2018) defined it as “a consciously crafted threshold for a text which has the potential to influence the way(s) in which the text is received” (p. 142). Moreover, it is essential to note that the paratext is the message, not the physical entity (Genette, 1997). Highlighting the importance of exploring paratexts, Batchelor (2020) has further described paratext as a platform that translators employ to position themselves ideologically within a society. In the same vein, Tymoczko (1999) identified paratextual analysis as the central aspect of exploring the implicit ideological intervention of translators, whereby such paratexts like the preface, introduction, notes, and alike

function akin to a commentary on the translation. Therefore by analysing the paratextual materials, the current study aimed to highlight the impact of the translator's ideologically motivated manipulation on the text and the image of the original author in the target social context.

In line with the statements provided, the present descriptive study, which is explored the translator's comments (as a form of paratext) in ideological congruency with the original text. The emphasis here is placed on ideological manipulation, which is exerted from the dominant values and ideology of the target society. Due to the association of critical discourse analysis with ideology and manipulation concepts, the current study has employed critical discourse analysis (CDA) as its analytical methodology. The translator's ideologically controversial comments about Rumi and his poetry were collected from different sources. Ten examples of the collected comments are presented and analysed in the current study.

LITERATURE REVIEW

Rumi's Poetry

Mowlana Khodavandgar Jalal al-Din Muhammad Balkhi, known as Jalal al-Din Rumi, or simply Rumi in the west, was born on September 30/1207 at Balkh, a small area in ancient Iran, which nowadays is part of Afghanistan and died in 1273 at Konya, in Asiatic Turkey (Lewis, 2014). He was born and grew up in a deeply religious family. Although, following his father and ancestors, he was supposed to be a Muslim preacher. All his higher education

was in the Islamic sciences of his day. As Geoffroy (2010) highlighted, Rumi entirely devoted his life to God and, following the example of the prophet Mohammad and by all means, surrendered to God's will. Rumi's life was entirely devoted to God and following the example of the prophet Mohammad and by all means, surrendered to God's will. Although Rumi has written a prose book on mystical discourse, he, like most of the mystics of his time, employed poetry as a pedagogic vehicle to convey the Islamic teachings to general readers. He has composed two major poetry books: *Diwan e Shams e Tabrizi* and *Masnavi e Manavi*.

Diwan e Shams e Tabrizi (The Works of Shams of Tabrizi) is named in honour of Shams, Rumi's great friend and inspiration. It contains more than 3,000 mystical odes in a spirited style, which amounted to around 40,000 lines of verse. *Diwan e Sham* represents Rumi's spiritual feelings while in Sema (Safavi & Weightman, 2009).

Masnavi e Manavi (The spiritual couplets), in short, is known as *Masnavi*, is the other Rumi's poetry book. Few books in the history of literature are read and appreciated as Rumi's *Masnavi*. *Masnavi* significantly transcended its precursors in scope, rank, and conception (Kazerooni, 2011). Everyone who reads Rumi's *Masnavi* can easily perceive the presence of *the Quran* in every tread of it. Rumi specified on the religious nature of *Masnavi*, as in the very first lines of it indicated: "This is the Book of *Masnavi*, which is the roots of the roots of the roots of religion, in respect of its unveiling the mysteries of

attainment (to the Truth) and certainty, which is the greatest science of God” (as cited in Safavi & Weightman, 2009, pp. 3-4). *Masnavi e Manavi* inspired countless commentaries in different languages and has been called ‘the *Qur'an* in the Persian language’ according to the common belief that it conveys the Persian essence of the mystical teachings of Islamic Holy text (Lewis, 2009). *Masnavi* is deeply rooted in Islamic philosophy. In *Masnavi*, Rumi explicitly referred to the 528 verses from *the Quran* and more than 750 traditions (hadith) related to Prophet Mohammad (Safavi & Weightman, 2009). Zamani (2010) believed that the shine and glory of *Masnavi's* general atmosphere are because of the essence of *the Quran*. Reynold A. Nicholson, the eminent orientalist and recognised scholar in Islamic and mysticism Literature, created the first critical edition of *Masnavi*, the first translation, and the first commentary on the entire work in English. Nicholson's (1934) translation highly influenced Rumi studies worldwide. *Masnavi*, in Nicholson's (1934) critical edition, in six books (chapters) of poetry, has over 25,500 verses and a total of 65,000 lines. Safavi and Weightman (2009) believe that *Masnavi* is an astonishing poetic volume by anybody's standards.

However, as Nicholson's translations are too scholarly for the general audience (Lewis, 2014), during the time, different translators tried their chance with Rumi's poetry. It seems Coleman Barks is the most successful among all. Coleman Barks, the American poet and Emeritus literature professor of the University of Georgia,

faceted Rumi's poetry in 1976 for the first time when his friend, Robert Bly, showed him scholarly translations of Rumi's poetry. He told Barks, “these poems need to be released from their cages” (Barks, 1997, p. 82). However, since Barks cannot read or speak Persian, the translation process to him means paraphrasing the previous translations of Rumi, mostly by Nicholson, or the literal translations that John Moyne (a Persian linguist) provided him. Barks has published several translation collections of Rumi's poetry, such as *The Essential Rumi* (1995), *The Illuminated Rumi* (1997), *Rumi: The Book of Love* (2003), which almost all of them were highly successful in the North American context. This favourable response goes to the way that Barks' *The Essential Rumi* (1995) was announced the best seller in America:

By 1998, three years after its publication, *The Essential Rumi* by Barks had sold over 110,000 copies! Any publisher would rejoice to sell this many copies of modern American poetry, but if we take into account the dozen other Rumi volumes by Barks and the dozen-odd versions of Rumi by other authors, the laurel of the best-selling poet in America with which Summer in Publishers Weekly and then Alexandra Marks in *The Christian Science Monitor* crowned Rumi is probably no exaggeration, even if the ultimate authority for the assertion is Coleman Barks himself. (Lewis, 2014, p. 526)

However, as mentioned earlier, this favourable response toward translations of

a pedagogical Islamic text was not usual, especially in the North American context that Islam is not an appreciated ideology. Scholars of different fields studied this unusual fascination toward Rumi's poetry from different perspectives. Almost all of them agreed that Barks recontextualised the text in a different ideological context (Azadibougar & Patton, 2015; El-Zein, 2000; Lewis, 2014; Naghmeh-Abbaspour et al., 2019). Some previous studies focused on Barks' ideological manipulation of Rumi's poetry revealed fascinating findings on Barks' manipulative strategies through lexical choices (Azadibougar & Patton, 2015; Naghmeh-Abbaspour et al., 2019).

As a retired literature professor who perfectly understands manipulative literary tools, Barks employed his academic knowledge to recontextualise Rumi's poetry in a new context. For instance, wherever in Rumi's texts, Barks faced the term God,

or other religious words, he either deleted the concept or replaced it with 'Love'. The following comparisons between Barks' translation and Rumi's text will clarify the point.

However, to facilitate the comparison, apart from original Persian poetry and Barks' English translation of that segment, each of the following examples in Table 1, Table 2 and Table 3 accompanies Nicholson's English translation of Rumi, merely as the literal translation of those specific lines:

Manipulation in Translation

Manipulation in translation is manifested in the form of what has become known as shifts. This term is used in translation studies to denote changes, which can be observed in the target text compared to the source text (Dukate, 2009). In other terms, manipulation, generally, is recognized as a form of distortion that is commonly

Table 1

Ideological manipulation through lexical choices (Example 1)

Barks' translation	Nicholson's translation (Literal translation of Rumi's poetry)
<p>“The way is full of genuine sacrifice. The thickets blocking the path are anything that keeps you from that, any fear that you may be broken to bits like a glass bottle. This road demands courage and stamina, Yet it's full of footprints!” (Barks, 1997, p. 246)</p> <p>آفتی در دفع هر جان شیشه ای که نه راه هر مختت گوهر است</p>	<p>“The road of religion is full of trouble and bale for the reason that it is not the road for any one whose nature is effeminate.” (Nicholson, 1934, p. 61)</p> <p>راه جان باز است و در هر بیشه ای راه دین ز آن رو پر از شور و شر است</p>

Table 2

Ideological manipulation through lexical choices (Example 2)

Barks' translation	Nicholson's translation (Literal translation of Rumi's poetry)
"Puff on this candle , and your face will get burned!" (Barks, 1997, p. 219)	"O old woman, (if) you puff (try to put out) God's candle , you will be burnt, you and your head at the same time, O foulmouthed one." (Nicholson, 1934, p. 237)
شمع کی میرد، بسوزد پوز او	”هر که بر شمع خدا آرد پُفُو

Table 3

Ideological manipulation through lexical choices (Example 3)

Barks' translation	Nicholson's translation (Literal translation of Rumi's poetry)
"Who am I to judge? But the question remained." (Barks, 1997, p. 219)	"Who am I, in view of God's exercising (absolute) control (over everything he does), that my carnal soul should raise difficulties and objections?" (Nicholson, 1934, p. 241)
که بر آرد نفس من إشکال و دق	”من که باشم با تصرفهای حق

presented by altering the meaning or intention of something in a way that does not correlate with the truth or “distorts the truth” (Dukate, 2009, p. 75). However, such manipulation can generally be categorised as conscious or unconscious (Farahzad, 2010) or as a form of obligatory and optional shift (Dukate, 2009). The present research has a mere focus on the conscious/optional choices, which in translation manifests as “changing of the input information in a way that makes it differ from the original and misrepresents it” (Dukate, 2009, p. 75).

Moreover, the concept of ‘ideological’ manipulation in translation needs more clarification. Hatim and Mason (2005),

discussing the definition of ideology in journalism and politics, justified that such concepts have no use for linguists. Therefore, they defined ideology “as the tactic assumptions, beliefs and value systems, which are shared collectively by social groups” (Hatim & Mason, 2005, p. 120), which is in line with the notion of ideology in the current paper. They also indicated that the above definition is closely associated with the idea of discourse, “as institutionalised modes of speaking and writing which give expression to modes of speaking and writing which give expression to particular attitudes towards areas of socio-cultural activity” (p. 120). In the same vein,

Van Dijk (1998) noted that “if we want to know what ideologies look like, how they work, and they are created, changed and reproduced, we need to look closely at their discourse manifestations” (p. 6).

Moreover, he asserted that “ideological communication is often associated with various forms of manipulation” (Van Dijk, 1998, p. 274). Contemporary ideological hegemony is elucidated in terms of functional strategies focusing on the accomplishment of consent. This way, people will not understand its manipulative nature, and power and dominance will look natural and legitimate. According to Van Dijk (2006), manipulation is one of the crucial concepts of critical discourse analysis, which involves power and deals with abuse of power, or in other terms, domination. Manipulation fundamentally in nature includes methods of mind control that the potential recipients are not aware of. This power abuse and manipulation capacity can provide incomplete or biased knowledge to the potential recipient and even affect their general perception of the world.

Relationship between Unequal Languages

One of the critical challenges of translation studies is the relationship between unequal languages. The unequal power exchanges between cultures locate languages into the hierarchy of the power exchange too. This issue mainly corresponds with the post/colonial perspective, as colonialism in nature stands on the unequal exchanges between societies. However, the superiority

of some languages can still be perceived in the modern era. Niranjana (1992) argued that this unequal power exchange between languages gave the ‘West’ a sort of privilege dealing with its ‘Other’. She highlighted that although the whole field of translation studies suffers from this inequality of languages, there is “a strong reluctance to consider the power structure within the discipline” (Niranjana, 1992, p. 79). In the same vein, Benmessaoud and Buzelin (2018) stated, even though in the translational system, all languages are constantly competing for gaining the central position, “English enjoys a ‘hypercentral’ position with the largest shares of the global market for translation, while some languages with large numbers of speakers, like Chinese and Arabic, remain peripheral” (p. 162). Venuti (1995) also emphasised the unequal relationship between languages, especially in the North American context. He noted that

translation practices in the Anglo-American context are particularly violent because they are mired in an ‘ideology of assimilation’ and ‘fluent domestication’ that erases, through processes of selection and assimilationist discursive strategies, the difference of the cultural other and inscribes local cultural and ideological values onto the other’s text. (as cited in Benmessaoud & Buzelin, 2018, p. 162)

In this ground, Niranjana (1992), by emphasizing the significant impact of such unequal trade on the cultural and linguistic production and reproduction, highlighted that the post/colonial perspectives think

of translation as an intermediary device controlled by the Western norms and values. Different containment strategies may be employed in translation to create target texts that conform with the coloniser values. As a post/colonial phenomenon, the relationship between unequal languages can critically affect the translator's overall strategy toward the text. Regularly such strategies convey methods of representing The Other, using the final translation product as a means of illustrating the hegemonic rendering of the colonised to obtain a status that Edward Said (1978, 2003) called "representations without history" (p. 90, p. 87).

Due to the nature of the text, the controlling strategies can be different, either textual or paratextual. In terms of translated texts, Niranjana (1992) argued that the concept of translation conveys the sense of transparent representation of one language into the other without any loss or distortion. In contrast, translation is perceived as a supporting element for comprehensive codification and knowledge production mission in colonial and post-colonial contexts, which Bourdieu (1977) called "symbolic domination" (p. 237). To him, the symbolic domination and its violence work effectively through the creation of the social order by merging the "recognition and misrecognition, ... recognition that the dominant language is legitimate ... and a misrecognition of the point that this language ... is imposed as dominant" (as cited in Niranjana, 1992, p. 32). Furthermore, Bourdieu (1977) emphasised that "the exercise of symbolic violence is so

invisible to social actors precisely because it presupposes the complicity of those who suffer most from its effects" (as cited in Thompson, 1984, p. 46). To clarify the concept, Baer (2014) stated that translation is a device capable of concealing the violence in that the represented literature was made representable. In the same vein, Bassnett and Lefevere (1990), along with Venuti (1998, 2002), have developed a perspective and suggested that post/colonialism is a mission of (mis)translation. In line with the above argument, and considering this fact that Rumi's poetry is a Middle Eastern text (a text from an inferior language), which was translated into the superior English language, the study, along with the other objectives, is going to explore whether the translator feels the same superiority over the text or not.

Paratexts in Translation

The concept of 'paratext' that for the first time coined by Gérard Genette are the items such as "a title, a subtitle, intertitles; prefaces, postfaces; marginal, inframarginal, terminal notes; epigraphs; illustrations; blurbs, book covers, dust jackets, and many other kinds of secondary signals" (as cited in Batchelor, 2018, p. 8). In short, paratexts are the elements that turn the main texts into books that can be presented, advertised, and sold to the public. Paratexts are not random elements, but they are purposefully designed to deliver specific meanings, messages, or guides based on various intentions. As Naghme-Abbaspour (2020) highlighted,

texts as cultural products that their existence is tightly dependent on the readers need to appeal to their potential recipients. In this process, the paratexts can provide the best showcase to persuade the reader to buy it or leave it aside. (p. 481)

Elaborated further by Genette (1997), the paratexts are divided into the peritext (verbal and non-verbal elements that are in proximity of the text such as titles, footnotes, illustrations, prefaces) and the epitext (verbal and non-verbal elements that are perceived as not being in the vicinity of the text as example interviews with authors, letters, diaries). Some scholars like Kung (2013) believed that analysing the paratexts per se can unveil critical information about translation phenomena. The analysis of paratexts can be meaningful when it is observed from the “relation to their source, and to the culture in which they are produced” (Belle & Hosington, 2018, p. 10). In other words, paratextual material is “an important mediator between the source text and the recipient of the translation” (Alvstad, 2003, p. 274). However, manipulation of the paratexts reveals how the cultural perceptions of the target readers can help translators, editors, or publishers deviate from the translation based on the readership, while simultaneously, the employed manipulation limits the information presented to the public (Pellatt, 2014).

Rovira-Esteva (2016) states that aside from the different methods used in transferring paratextual elements

across linguistic and cultural borders, the translation patrons can decide the content and design of the paratexts based on the function of the translation in the target society. The considerations on the stability of the translated material for the target society can cause ideological manipulation and affect the translation of the source text. Also, the significant position of translators cannot be denied through the study of paratexts. Indeed, translators do not use paratexts merely to facilitate the reading experience for the target readers. However, they consider it as a vehicle to inject their perspectives and ideology into the translation. As Haroon (2017) indicated, the prefaces highlight the critical function of paratexts to ease the reception of translations to the target readers. In the same vein, Amirdabbaghian and Shunmugam (2019) discussed that their messages were intended for the readers by focusing on the translators’ ideology in the paratexts. Therefore, exploring the paratexts of translation can provide information on the translators’ ideological framework and social context and their backgrounds.

METHODOLOGY

As Kung (2013) highlighted, “aside from the textual analysis of the translated text, the paratext is thought to contain vital clues for the researcher to infer or understand the translational phenomena absent or implicit in the translated text” (p. 59). Considering the critical characteristics of paratexts which is functionality, and considering the association of paratextual research with

ideological aspects of translation, the current study aimed to investigate the ideological manipulation of Barks' translations of Rumi's poetry at the paratextual level, specifically from the translator's comments. Based on the correspondence of ideology, power, and manipulation with critical discourse analysis (CDA), as well as the nature of CDA as "an analytical research methodology that investigates discursive manifestations of ideological positioning" (Kim, 2020, p. 120), the present descriptive research has chosen CDA as its analytical framework. However, apart from its primary goal, "to expose the ideological forces that underlie communicative exchanges" (Perez, 2003, p. 2), another priority of employing CDA in the current study is the context-bound approach. This approach emphasises interactions of language and power struggles in society, which is particularly crucial for this study due to the exploration of ideological congruency imposed on the text from the dominant ideology of the target society.

The present study collected the translator's ideologically controversial comments about Rumi and his poetry based on these objectives. These comments are collected from the two general classifications of paratextual material, which are either peritextual, "which is physically attached to the text" like the introduction, notes, prefaces or epitextual material, "the distanced elements located outside the book" (Batchelor, 2018, p. 10), such as interviews. After that, the collected data, mainly textual segments, were double-checked

and categorized in separate tables for analysis. As the study indicated earlier, this descriptive translation study used CDA as its analytical tool. Therefore, in the analysis process, the collected textual segments were analysed through CDA at the level of words, expressions, and concepts that would have been considered ideologically controversial. The extracts were analysed under the main headings of 'Imposing New Age Ideology into Rumi's Poetry' and 'The Relationship between Unequal Languages'. As stated earlier, some scholars like El-Zein (2000) claimed that Barks injected New Age ideology in his translations of Rumi; however, no paratextual studies on these translations were conducted to the best of our knowledge. Therefore, this study has focused on how Barks recontextualised an Islamic text into a New Age context at the paratextual level.

In this process, the study has explored the paratexts in terms of common universal New Age beliefs such as 'all religions as one', 'everything is god', 'God is within you' and 'the crucial role of spiritual beings'. Accordingly, the examples of paratextual segments are presented in separate tables in the findings section. In addition, a brief analysis of every single example is presented following each table.

New Age Movement

The term 'New Age' signifies the bringing or flourishing of a remarkably better way of life (Heelas, 1996). The defining features of the New Age movement can be found in its ideological worldview. For a general

understanding, the adherents of this spiritual movement aimed to bring forth change in human beings and society through a mystical unification with the universe. Newport (1998) has elaborated on the central theme of unity in New Age thinking that encompasses various beliefs and theological concepts. Some examples of these beliefs related to the New Age movement include the idea that all religions are one and that God permeates the universe and the human self. This integral belief of the New Age movement is followed by another essential aspect of spirituality. Clark (2006) stated that New Age ideas were focused on different spiritual perceptions of reality that were in line with most “transcendental assumptions of religiosity” (p. 224). The spiritual element of the movement can be further identified through their beliefs regarding destiny and the attempts to find meaning through a reflective interpretation of events that have occurred in one’s personal life (Pike, 2004). These aspects of the New Age movement are based on distinctive approaches that can be in contrast with other worldviews. Followers of the movement had an outlook based on intuition and internal wisdom that were generally against the views of scientists and philosophers (Heelas, 1996). These ideological qualities of the New Age Movement have also been influenced by many world religions, belief systems, and philosophies such as Christianity, Hinduism, Buddhism, and Taoism (Newport, 1998). However, such beliefs do not profoundly explore the diverse understandings found in the Islamic spiritual tradition. El-Zein (2000)

has mentioned that the New Age movement highlights Sufism on occasions. However, it does so without any proper reference to the features of genuine Islamic Sufi beliefs. Although the New Age movement has declined from its zenith after the 1970s, it is still present in American culture today. It could be why Rumi has entered the context of New Age ideology so successfully acting as a symbol that resembled many different perspectives attributed to him (Irwin, 2019). These influential qualities of the New Age movement have turned it into one of the dominant ideologies of American society and culture.

Imposing New Age Ideology into Rumi’s Poetry

The following examples illustrate how the translator, by imposing the New Age concepts in his comments, faded the Islamic ideology away from Rumi’s poetry and recreated it differently in a new context.

Example 4:

I avoid God-words, not altogether, but wherever I can, because they seem to take away the freshness of experience and put it inside a specific system. Rumi’s poetry belongs to everyone, and his impulse was toward experience rather than any language or doctrine about it: our lives as text, rather than any book, be it *Quran*, *Gospel*, *Upanishad*, or *Sutra*. (Barks, 2001b, p. 7)

In the above statement, Barks explicitly declared for Example 4 that he did his best to ‘avoid God-words’ because such concepts

'put the text inside a specific system'. In contrast, as a Muslim Sufi Sheykh, Rumi deliberately located his poetry in an Islamic context to highlight a 'specific system'. However, through this omission strategy, the translator disconnected Rumi's text from its original ideology. To justify his omission strategy, in terms of religious words, the translator implied that "Rumi's poetry belongs to everyone... his impulse was toward experience rather than any... doctrine... our lives as text, rather than any book, be it *Quran*, *Gospel* ..." (Barks, 2001b, p. 7). Thus, he tried to deemphasise the role of Islamic references in Rumi's poetry. In contrast, Rumi's book, *Masnavi*, due to its numerous Quranic references, metaphorically is known as "*Quran* in the Persian language" (Lewis, 2014; William, 2020).

Example 5:

"Rather than be exclusively part of an organised religion or cultural system, he [Rumi] claimed to belong to that companion who transpires through and animates the whole universe." (Barks, 2001b, p. 9)

Although in the previous statement, Barks (the translator) highlighted that to not put the text in a particular context (Islamic context), he avoided God terms, in this statement (Example 5), he denied the fact that Rumi had a specific religion or he was part of a culture. Thus, the translator tried to detach Rumi from Islam as his religion and the Middle Eastern culture he belongs to through this statement.

Example 6:

It's always unsatisfying to try to say, but ***maybe it's to celebrate a friendliness with soul, with spirit's being in a body***, the mysterious Friendship of Rumi and Shams, the extravagant creativeness of life lived inside THAT, and the naturalness of it. (Barks, 1997a, p. 123)

One of the fundamental concepts of the New Age is believing in 'own godhood'. "Indeed, the most pervasive and significant aspect of *lingua franca* of the New Age is that the person is, in essence, spiritual. To experience the 'self' itself is to experience 'God'... 'the inner child', the 'way of the heart', or, most simply, and, I think, most frequently, 'inner spirituality'" (Heelas, 1996, p. 19). According to New Agers, realising the inner godhood can help people arise the slumbering 'higher self'. In Example 6, by merging Rumi and Shams (Rumi's mentor) with New Age ideological concepts, Barks tried to implicitly de-Islamize the text and frame it in the New Age context.

Example 7:

"These poems are love poems, the intimate conversation of self with deep self." (Barks, 2001b, p. 8)

"Based upon their idealistic or spiritual understanding of the nature of the universe, New Age devotees frequently or usually affirm their godhood and/or the self as God. Persons are viewed as individualised manifestations of god-gods and goddesses in exile" (Newport, 1998, p. 5). Accordingly, in

Example 7, we can see that Barks introduced Rumi's poetry (originally Islamic mystical verses) as a love poem, which provides an intimate conversation with the God within self/the higher self. Barks frequently changed the concept of Rumi's Divine love into earthly human love, and through framing strategy, tried to emphasise the New Age ideological perspective.

Example 8:

"Some people *call them Sufis, or mystics. I say they're on the way of the heart.*" (Barks, 1997a, p. 132)

In Example 8, the translator tried to modify a range of potential religious terms (Sufis/mystics) favouring target literary system norms. Almost all dictionaries have an entry for the word Sufi. Practically, all of them emphasised the Islamic nature of Sufism. However, here suddenly, Coleman Barks decided to name the Sufis something else to wash away the trace of Islamic ideology from Rumi's poetry.

Example 9:

"*Organised religions have fanatical possibilities that could become dangerous to the health of the planet, not to mention the dear individuals. It is time for us to feel more comfortable in a place that is not identified with any particular religion (or nation or race or cultural system) but respectful of the truth in all those masks of God,* as Joe Campbell calls them. Surely after Campbell's research, we are all Universalists, as the Sufis have so gently recommended for centuries. *The human*

soul is way more vast than any definition. I am that, a voice says, I am." (Barks, 1997b, p. 87)

According to Heelas (1996), New Agers try to move beyond tradition. To them, "Religion is associated with the traditional; the dead; the misleading, the exclusivistic" (Heelas, 1996, p. 23). Not only the trace of such ideology is evident in Example 9, but also we can see how Barks connect Muslim Sufis to this New Age ideology. In the above statement, Barks highlighted his belief in divine religions. He called them different masks of God and dangerous for the world. Besides, following the New Age ideology, Barks believed in 'the holiness of self,' mentioned above.

Example 10:

"The poem on the next page is Rumi's deathbed poem, a type of poem that is very common, almost a requirement for *Zen masters*, but rare in the Sufi tradition." (Barks, 2001b, p. 11)

One of the characteristics of New Agers is their strong attraction toward Eastern traditions such as Taoism and Buddhism (Pike, 2004). An example would be 'Zen' a distinguished Chinese style of Buddhism that is strongly influenced by Taoism. Therefore, we can understand why Barks identified Rumi more resembling Zen masters than Sufi Sheikhs in Example 10. Barks detached Rumi from the Islamic context and located him closer to New Agers' interest.

The Relationship between Unequal Languages

The previous section's examples focused on how the translator imposed the New Age ideology in Rumi's text. However, the following section illustrated a deeper problem: Westerner translators' innate perception of superiority in dealing with the text from the East or the Middle East. Perhaps such a mindset of superiority can be considered the main backdrop that encouraged the translator to accredited himself in performing such ideological manipulation, either at the expense of creating a different image of the author in the target society. The following three examples illustrate how Barks treated Rumi's poetry from a superior point of view.

Example 11:

“Interviewer: How much of Persian culture is assimilated with the Sufi way and Rumi's poems? And do we need to understand their culture before we start the poems?”

“Coleman Barks: No, I don't think so. I don't think Rumi belongs to any particular nation or religion. He is available to everyone.” (Barks, 2001a, p. 9)

Example 11 is one of the strangest comments that a person who is involved in literature might offer. The literature of each part of the world is the manifestation of its culture. So how could it be possible that in 25,000 verses of poetry, there be no trace of the poet's culture, religion, or lifestyle?

Barks simply asserted that Rumi belongs to no nation or religion. These statements present nothing but a blatant attempt to brutally dominate the text and depart the original poet from his own culture.

Example 12:

I was attending Robert Bly's Great Mother conference, which is about poetry, music and mythology — and just whatever Robert has been reading lately. At that point, he had been reading translations of Rumi, and he had a stack of these that he gave to me, and he said in his Lutheran Minnesota accent, *“These poems need to be released from their cages.”* And so I began doing that, just on my own for seven years. (Barks, 1997b, p. 82)

The above statement of Example 12 recalls Edward FitzGerald's attitude confronting Khayyam's poetry. On March 1857, FitzGerald, in a letter to his friend, highlighted, “It is an amusement for me to take what Liberties I like with these Persians, Who (as I think) are not poets enough to frighten one from such excursions, and who really do want a little art to shape them” (FitzGerald, 2017, p. 261). To Lefevere (1992), based on the colonial perspective of the time, FitzGerald (as a member of superior culture/language) looked at Khayyam's poetry as a text from an inferior culture and treated it accordingly.

The above comment on Barks' translations of Rumi's poetry shows the same superiority over a text can be perceived. However, as Barks literally does not know

the Persian Language (neither speaking nor writing; El-Zein, 2000; Lewis, 2014), this question comes up about how he approached one of the most prestigious Persian classics without having any knowledge about the language. Moreover, what would Westerners' literary scholars' reaction be if an Easterner (so-called) translator, with zero English language knowledge, approached one of Shakespeare's masterpieces, propagating to release the text from the cage?

Barks's hegemonical behaviour toward Rumi's poetry illustrates how Barks, as a member of the Superior language, accredited himself to approach a text from a minority language and publish his name on the cover as a translator with no knowledge about that language.

Example 13:

"In other volumes I have buried some surprises in the Notes. *The four recipes at the end of The Essential Rumi*, for example, the last two meant to serve 60 and 100 people." (Barks, 2010, p. 487)

Example 13 highlighted the way Barks, as a Westerner translator, treated a Middle Eastern classic text. As the above textual segment illustrated, Barks proudly talked about the four Indian recipes he added to the ending notes of *The Essential Rumi* (Barks, 1995, 1997a, 2009), which according to him, "the last two meant to serve 60 and 100 people" (Barks, 2010, p. 487). The question is, why did the translator credit himself the text owner in a way that allows himself to add such material to someone else's

creation? Following translation ethics, the translator has added some recipes to one of the most prestigious Persian classics? What is the association of Rumi's mystical poetry lines with Indian dish recipes?

This degrading attitude toward the value of Rumi's text manifests the unequal relationship of languages that allows a rewriter or translator of the superior languages to look at the texts from minor languages from the higher position and accredited themselves to treat them with absolute liberty.

DISCUSSION

As their rewriters in the modern era, translators of classical literature are responsible for the survival and reception of such texts (Lefevere, 1992). In introducing a translated text to the target readers, translators, by providing additional information around the text such as introduction, preface, note, try to design a reading guide for the potential recipient. These additional elements around the text, which are known as Paratexts, "exert considerable influence over the reader's perception of a text" (Luo & Zhang, 2018, p. 4). Indeed, apart from facilitating the reading experience, the translation paratexts generally represent a specific perspective, value, or intervention in the text or direct toward a particular perception of the translated text (Luo & Zhang, 2018).

In this ground and following the study's objectives the findings reveal that the translator employed the paratexts as a means to recontextualise the text and, in particular, de-Islamize it based on the

dominant ideological currents of the target social context. As illustrated in the findings, to fit Rumi's poetry with the prevailing ideological current of the target social context, the translator washed up the Islamic nature of the text and subtly imposed the central concepts of New Age into the translation through his comments. Considering that most American poetry readers, who have little knowledge about Rumi, rely on the information that the translator provided to them, the effect of these supplementary data on the readers' perception is determining. As highlighted in the findings, the translator employed a subtle systematic approach to manipulate the text ideologically. In this process, the relationship of unequal languages helped the translator act liberally. Therefore, by introducing Rumi as a poet who belongs to no culture and religion, Barks created a new image and identity of this Muslim Sufi Sheikh for the target readers. The majority of them were not acquainted with Rumi before confronting Barks translation.

The above noted controversial level of liberty that the translator accredited himself can be justified in the light of the colonial view of the relationship of unequal languages. This perspective encouraged the translator to work extremely liberal dealing with a prestigious text from an inferior language, comparing to the English language. As discussed in the findings, American Barks, who surprisingly did not know the Persian language, warranted himself to release Rumi's poetry from the cage of earlier scholarly translation

(Example 12). As a superior language and culture member, Barks accredited himself to approach a highly prestigious text from an inferior language without knowing that language. The trace of such a belittlement approach can be easily detected throughout Barks' comments and noted. For instance, as the findings indicate, Barks called Rumi's poetry a text which does not belong to any culture or tradition (Example 11). Also, in another example, he added some Indian recipes at the closing notes of Rumi's poetry collection (Example 13).

The history of translation from non-western text into western languages illustrates that this extremely liberal approach is not new. As discussed earlier, in the mid-nineteenth century, the same level of liberty was detected in Fitzgerald's translation of Omar Khayyam (another Persian poet). Lefevere (1992), in his discussion about Fitzgerald's translation, highlighted that Fitzgerald obviously considered "Persians inferior to their Victorian English counterparts, a Frame of mind that allows him to rewrite them in a way which he would have never dreamed of rewriting Homer or Virgil" (p. 8). It seems the same pattern has been repeated in Barks' translations of Rumi's. Without a doubt, Barks could not even think about adding Indian recipes at the closing notes of classical western literature like Shakespeare or Chaucer. Moreover, for sure, any sort of ideological deviations in western high literature would have been highly unappreciated.

CONCLUSION

The current study explores the translator's comments (as a form of paratexts) in terms of employing ideological manipulation in line with the dominant values of the target social context. Moreover, as the case study of this research is a translation of a Middle Eastern text into the American context, the study focuses on the translator's perspective on the relationship of unequal languages. Investigating the traces of such (colonial) perspective is significant in the current study because it functioned as the backdrop, which encouraged the translator to act extremely liberal tacking with a text from an inferior language, comparing to the English language. Overall, the findings of this research confirm the presence of a high level of ideological deviations, particularly de-Islamization, at the paratextual level (the translator's comments). Moreover, the findings imply the translator's dominant approach toward a text from an inferior language comparing the superior English language.

To sum up, the present study's findings of the can be considered significant as it reveals systematic recontextualisation and de-Islamization of a Middle Eastern text in light of the relationship of the unequal languages. Moreover, it implies that fidelity in translation is not merely limited to the text but extends to the broad context of paratext, i.e., all extra elements around the text.

Limitation and Future Studies

Considering that the current study limited itself to the ideological manipulation

through the translator's comments and notes, it would be interesting to study the paratexts of translations at various levels, either epitext or peritext, in terms of any systematic ideological deviations. Moreover, considering paratexts as elements, purposefully located around the text, the extension of research on different levels of translations' paratexts can significantly contribute to the body of knowledge about paratexts' function in recreation and reception of a translated text in the target context. Also, as the study suggests that paratexts are an empowering platform for translators to effectively direct the readers' perception about the source text and its author, it hopes to make the translator trainees more cautious in their comments respecting authors' voice and ideology.

ACKNOWLEDGEMENT

This study was supported through the Short Term Grant, funded by the Universiti Sains Malaysia (No. 304/PBAHASA/6315348).

REFERENCES

- Alvstad, C. (2003). Publishing strategies of translated children's literature in Argentina: A combined approach. *Meta: Journal Des Traducteurs/Meta: Translators' Journal*, 48(1-2), 266-275. <https://doi.org/10.7202/006973ar>
- Amirdabbaghian, A., & Shunmugam, K. (2019). The translator's ideology: A study of three Persian translations of George Orwell's Nineteen Eighty-Four. *Lebende Sprachen*, 64(1), 1-22. <https://doi.org/10.1515/les-2019-0001>
- Aviv, R. (2007). A Rumi of one's own. *Poetry Foundation*. <http://www.poetryfoundation.org/article/179906>

- Azadibougar, O., & Patton, S. (2015). Coleman Barks' versions of Rumi in the USA. *Translation and Literature*, 24(2), 172-189. <https://doi.org/10.3366/tal.2015.0200>
- Baer, B. C. (2014). What is special about postcolonial translation? In S. Bermann & C. Porter (Eds.), *A companion to translation studies* (pp. 233-145). Wiley Blackwell. <https://doi.org/10.1002/9781118613504.ch17>
- Barks, C. (1995). *The essential Rumi*. Harper Collins.
- Barks, C. (1997a). *The essential Rumi*. Castle Books.
- Barks, C. (1997b). *The illuminated Rumi*. Broadway.
- Barks, C. (2001a). *Chat transcript: Coleman Barks on Rumi*. Beliefnet.com. <http://www.beliefnet.com/Wellness/2001/06/Chat-Transcript-Coleman-Barks-On-Rumi.aspx>
- Barks, C. (2001b). *The soul of Rumi*. Harper San Francisco.
- Barks, C. (2009). *The essential Rumi: New expanded edition*. HarperOne.
- Barks, C. (2010). *Rumi: The big red book*. HarperCollins e-books.
- Bassnett, S., & Lefevere, A. (1990). *Translation, history, culture*. Routledge.
- Bassnett, S., & Lefevere, A. (1998). *Constructing cultures: Essays on literary translation* (Vol. 11). Multilingual Matters.
- Batchelor, K. (2018). *Translation and paratexts*. Routledge.
- Batchelor, K. (2020). Paratext. In M. Baker & G. Saldanha (Eds.), *Routledge Encyclopedia of Translation Studies* (pp. 401-405). Routledge.
- Belle, M.-A., & Hosington, B. M. (2018). *Thresholds of translation: Paratexts, print, and cultural exchange in early modern Britain (1473-1660)*. Springer.
- Benmessaoud, S., & Buzelin, H. (2018). Publishing houses and translation projects. In S.-A. Harding & O. C. Cortés (Eds.), *The Routledge handbook of translation and culture* (pp. 154-176). Routledge. <https://doi.org/10.4324/9781315670898-9>
- Bourdieu, P. (1977). *Outline of a theory of practice* (Vol. 16). Cambridge University Press.
- Ciabattari, J. (2014). Why is Rumi the best-selling poet in the US? *BBC- Culture*. <http://www.bbc.com/culture/story/20140414-americas-best-selling-poet>
- Clarke, P. (2006). *Encyclopedia of new religious movements*. Routledge.
- Dukate, A. (2009). *Translation, manipulation and interpreting*. Peter Lang GmbH.
- El-Zein, A. (2000). Spiritual consumption in the United States: The Rumi phenomenon. *Islamic and Christian-Muslim Relation*, 11(1), 71-85. <https://doi.org/10.1080/095964100111526>
- Farahzad, F. (2010). Manipulation in translation. *Perspectives: Studies in Translatology*, 11(4), 269-281. <https://doi.org/10.1080/0907676X.2003.9961480>
- FitzGerald, E. (2017). *The Letters of Edward Fitzgerald, Volume 1: 1830-1850*. Princeton University Press.
- Genette, G. (1997). *Paratexts: Thresholds of interpretation* (Vol. 20). Cambridge University Press.
- Geoffroy, E. (2010). *Introduction to sufism: The inner path of Islam*. World Wisdom .
- Haroon, H. (2017). The translator's preface as a paratextual device in Malay-English literary translations. *Translation & Interpreting*, 9(2), 100-113. <https://doi.org/10.12807/ti.109202.2017.a07>
- Hatim, B., & Mason, I. (2005). *The translator as communicator*. Routledge.
- Heelas, P. (1996). *The new age movement*. Blackwell Oxford.

- Hermans, T. (2014). *The manipulation of literature (Routledge Revivals): Studies in literary translation*. Routledge. <https://doi.org/10.4324/9781315759029>
- Irwin, R. (2019). Global Rumi. *Global Sufism: Boundaries, Narratives and Practices*, 15.
- Kazerooni, S. A. (2011). Discussion about pedagogic and lyric literature. *Journal of Pedagogic and Lyric in Persian Language and Literature Studies Quarterly*, 3(8), 15-24.
- Kim, K. H. (2020). Critical discourse analysis. In M. Baker & G. Saldanha (Eds.), *Routledge encyclopedia of translation studies* (pp. 119-124). Routledge. <https://doi.org/10.4324/9781315678627-26>
- Kung, S.-W. (2013). Paratext, an alternative in boundary crossing: A complementary approach to translation analysis. In *Text, extratext, metatext and paratext in translation* (pp. 49-68). Cambridge Scholars Publishing.
- Lefevere, A. (1992). *The manipulation of literary fame*. Routledge.
- Lewis, F. D. (2009). Foreword to the new and corrected edition. In E. Yarshater (Ed.), *Mystical Poems of Rumi* (pp. 7-15). The University of Chicago Press.
- Lewis, F. D. (2014). *Rumi-past and present, east and west: The life, teachings, and poetry of Jalâl Al-Din Rumi*. Oneworld Publications.
- Luo, T., & Zhang, M. (2018). Reconstructing cultural identity via paratexts: A case study on Lionel Giles' translation of *The Art of War*. *Perspectives*, 26(4), 593-611. <https://doi.org/10.1080/0907676x.2017.1401650>
- Minnick, N. (2016). The unbroken chain: Some thoughts on Coleman Barks's poetry. *The Georgia Review*, 70(2), 295-298.
- Mojaddedi, J. (2007). Introduction & notes on translation. In *The Masnavi, books 1 and 2* (pp. x-xxx). Oxford University Press.
- Mojaddedi, J. (2017). Following the scent of Rumi's Sufism in a postreligious Age. *World Literature Today*, 91(6), 56-59. <https://doi.org/10.7588/worllitetoda.91.6.0056>
- Naghme-Abbaspour, B. (2020). The impact of dominant ideology on front covers of translation of children's literature in Iran. *Humanities and Social Sciences Reviews*, 8(3), 480-488. <https://doi.org/10.18510/hssr.2020.8352>
- Naghme-Abbaspour, B., Tengku, T. S. M., & Jamal, M. (2019). The impact of dominant ideology of target society on lexical choices of translation: The case study of the essential Rumi. *Humanities and Social Sciences Reviews*, 7(6), 1162-1171. <https://doi.org/10.18510/hssr.2019.76166>
- Newport, J. N. (1998). *The New Age movement and the Biblical Worldview: Conflict and dialogue*. William B. Eerdmans Publishing Company.
- Nicholson, R. A. (1934). *The Mathnawi of Jalalu'ddin Rumi*. Cambridge University Press.
- Niranjana, T. (1992). *Siting translation: History, post-structuralism, and the colonial context*. University of California Press. <https://doi.org/10.1525/9780520911369>
- Pellatt, V. (2014). *Text, extratext, metatext and paratext in translation*. Cambridge Scholars Publishing.
- Perez, M. C. (2003). *Apropos of ideology*. St Jerome Publishing.
- Pike, S. M. (2004). *New Age and Neopagan religions in America*. Columbia University Press.
- Rovira-Esteve, S. (2016). The (mis)use of paratexts to (mis)represent the Other: Chun Sue's Beijing Doll as a case study. *Onomázein*, (34), 187-208. <https://doi.org/10.7764/onomazein.34.11>
- Safavi, S. G., & Weightman, S. (2009). *Rumi's mystical design*. Suny Press.
- Said, E. (1978). *Orientalism*. Routledge and Kegan Paul Ltd.

- Said, E. (2003). *Orientalism*. Penguin Books.
- Shuttleworth, M., & Cowie, M. (2014). *Dictionary of translation studies*. Routledge.
- Thompson, J. B. (1984). *Studies in the theory of ideology*. University of California Press.
- Tolib, K. K. S. (2019). Coleman Barks and the English translation of "Mathnawii Ma'navi." *Scientific Studies of Khujand State University*, 4(61), 91-96.
- Tymoczko, M. (1999). Post-colonial writing and literary translation. In S. Bassnett & H. Trivedi (Eds.), *Postcolonial translation: Theory and practice* (pp. 19-40). Routledge.
- Van Dijk, T. A. (1998). *Ideology: A multidisciplinary approach*. Sage Publications.
- Van Dijk, T. A. (2006). Discourse and manipulation. *Discourse & Society*, 17(3), 359-383. <https://doi.org/10.1177/0957926506060250>
- Venuti, L. (1995). *The translator's invisibility: A history of translation*. Routledge.
- Venuti, L. (1998). *The scandals of translation*. Routledge.
- Venuti, L. (2002). *The scandals of translation: Towards an ethics of difference*. Routledge.
- William, A. (2020). *The Masnavi of Rumi, Book One: A new English translation with explanatory notes*. IB Tauris.
- Zamani, K. (2010). *Content explanation of Masnavi Manavi Balkhi*. Nashre Nei Publication.



Review Article

Socioeconomic Status and Mental Health among Low-income Employees: A Systematic Literature Review

Errna Nadhirah Kamalulil and Siti Aisyah Panatik*

School of Human Resource Development and Psychology, Faculty of Social Sciences and Humanities, Universiti Teknologi Malaysia, 81310 UTM Johor Bahru, Johor, Malaysia

ABSTRACT

Low-income employees are among the focus individuals whose socioeconomic status plays a major role in determining positive or negative mental health status. Mental health among low-income employees is a global issue that requires a comprehensive understanding of its determinant. The objective of this study is to systematically review scientific evidence on the impact of socioeconomic status on mental health among low-income employees. This systematic review was conducted in accordance with the PRISMA guidelines, and data retrieval was done on 7th October 2020 using Scopus, Web of Science and Google Scholar. Based on the inclusion and exclusion criteria of this study, a total of 19 studies were included. Results indicate that the majority of the included studies revealed that socioeconomic status influences mental health, while two studies showed no influence. In conclusion, the findings from the review can provide guidelines to promote better mental health among low-income employees.

ARTICLE INFO

Article history:

Received: 13 April 2021

Accepted: 22 June 2021

Published: 21 September 2021

DOI: <https://doi.org/10.47836/pjssh.29.3.20>

E-mail addresses:

ernnanadhirah@graduate.utm.my (Errna Nadhirah Kamalulil)

saisyah@utm.my (Siti Aisyah Panatik)

*Corresponding author

Keywords: Low-income employees, mental health, PRISMA, socioeconomic status, systematic review

INTRODUCTION

Poverty is a global issue that has influenced the world economic system. Socioeconomic status is one of the contributing factors of economic trends where there are disparities

in income distribution (Hiilamo, 2014; Van Deurzen et al., 2015). Cingano (2014) reported an increase in total income inequality due to the rising of top income earners' shares and the decline of bottom incomes during the booming economics and fell during economic crises. Even for the past decade, Ferreira and Ravallion (2008) also claimed that the world was facing an income inequality crisis, particularly in developing countries; and the association between the average levels of inequality and development levels were was negative. For example, the United States, one developed country, has 38.1 million people living in poverty (11.8%), and approximately 5.3% of individuals had family income below 50% of the poverty threshold (Semega et al., 2020). Perhaps, more surprisingly, the unemployment rate increased 5.6% in 2020 because the world economy is largely affected by the global pandemic, which leads to financial strain (Organisation for Economic Co-operation and Development, 2020).

The disparities of income distribution within a population have affected the mental health of individuals. Positive mental health is associated with high socioeconomic status, low-income inequality and low financial strain. Population-based studies from Australia (Isaacs et al., 2018), United States (Pabayo et al., 2014), Finland, Poland and Spain (Domènech-Abella et al., 2018) demonstrate that higher socioeconomic status reduces the risk of mental health issues among employees in high-income countries. Moreover, a two-year longitudinal

study of 34,653 working adults (Pabayo et al., 2014) showed that rates of depression were significantly higher for bottom income earners. Dijkstra-Kersten et al. (2015) found that the more financial strain encountered among the employees, the higher the odds of being depressed. However, Adjaye-Gbewonyo et al. (2016) and Damaske et al. (2016) argued that the relationship between socioeconomic status and mental health is not linear. If the employees earn a higher income, then their income could cause psychological distress.

Following these considerations, the empirical evidence demonstrates the vital role of employees' mental health status as their socioeconomic status largely determined it. However, a previous study conducting on a small number of employees in a wide area, such as Damaske et al. (2016), leads to less clarification of the findings. Furthermore, due to the under-representation of the sample, the findings cannot be generalised to the target population resulting in weak inferences development. In addition, the relative uncertainty of the socioeconomic status definition and wide range of concepts in the mental health context cause difficulties in concluding. Accordingly, synthesising the included studies is needed to draw the empirical evidence and promote an understanding of the findings obtained regarding the impact of socioeconomic status on mental health among low-income employees across nations.

METHODOLOGY

The Publication Standard – PRISMA

The study selection was conducted according to Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA), as shown in Figure 1. PRISMA or publication standard guides the authors to describe the review process of selected articles and assists both reviewers and readers in the logical stages of searching the relevant research articles (Vu-Ngoc et al., 2018). The authors began the systematic literature review based on the publication standard by formulating a suitable research question. Next, the relevant journal databases to be used are finalised. Lastly, the authors describe the systematic searching strategy comprising three major processes (i.e., identification, screening and eligibility) in selecting of relevant research articles.

Formulation of Research Question

For this systematic review, PICO was used as guideline to formulate the research question. PICO is a method to assist the authors in formulating the suitable research question. The major components of PICO include population, phenomenon of interest and context (Stern et al., 2014). Based on these three components, the authors have followed the guideline for the review namely low-income employees (Population), the influence of socioeconomic status on mental health (Interest) and worldwide (Context) which then direct the authors to develop the main research question – Does socioeconomic status influence mental

health among low-income group across nations?

Resources

Scopus, Web of Science and Google Scholar are the three online databases that have been utilized for literature search and data retrieval. Both Scopus and Web of Science are regarded among the most significant databases for social science field. In terms of journal coverage, Scopus is wider compared to Web of Science (Mongeon & Paul-Hus, 2016) but Web of Science produces greater number of articles with high impact factors (Chadegani et al., 2013). The utilization of Google Scholar apart from these two databases in searching the relevant articles is because of the high accessibility rate of articles.

Systematic Searching Strategies

Identification, screening and eligibility are the three main processes in the systematic searching strategies (refer to Figure 1).

Identification. Identification is a method for searching for any synonym, words associated and variations in the primary keywords of the study namely socioeconomic status, mental health and low-income employees. As proposed by Okoli (2015), the keywords development is on the basis of the concise research question and the keywords are constructed by keywords suggested by Scopus, keywords used by previous studies and expert opinions. Search strings were developed by using Boolean operator, phrase searching, truncation and wildcard.

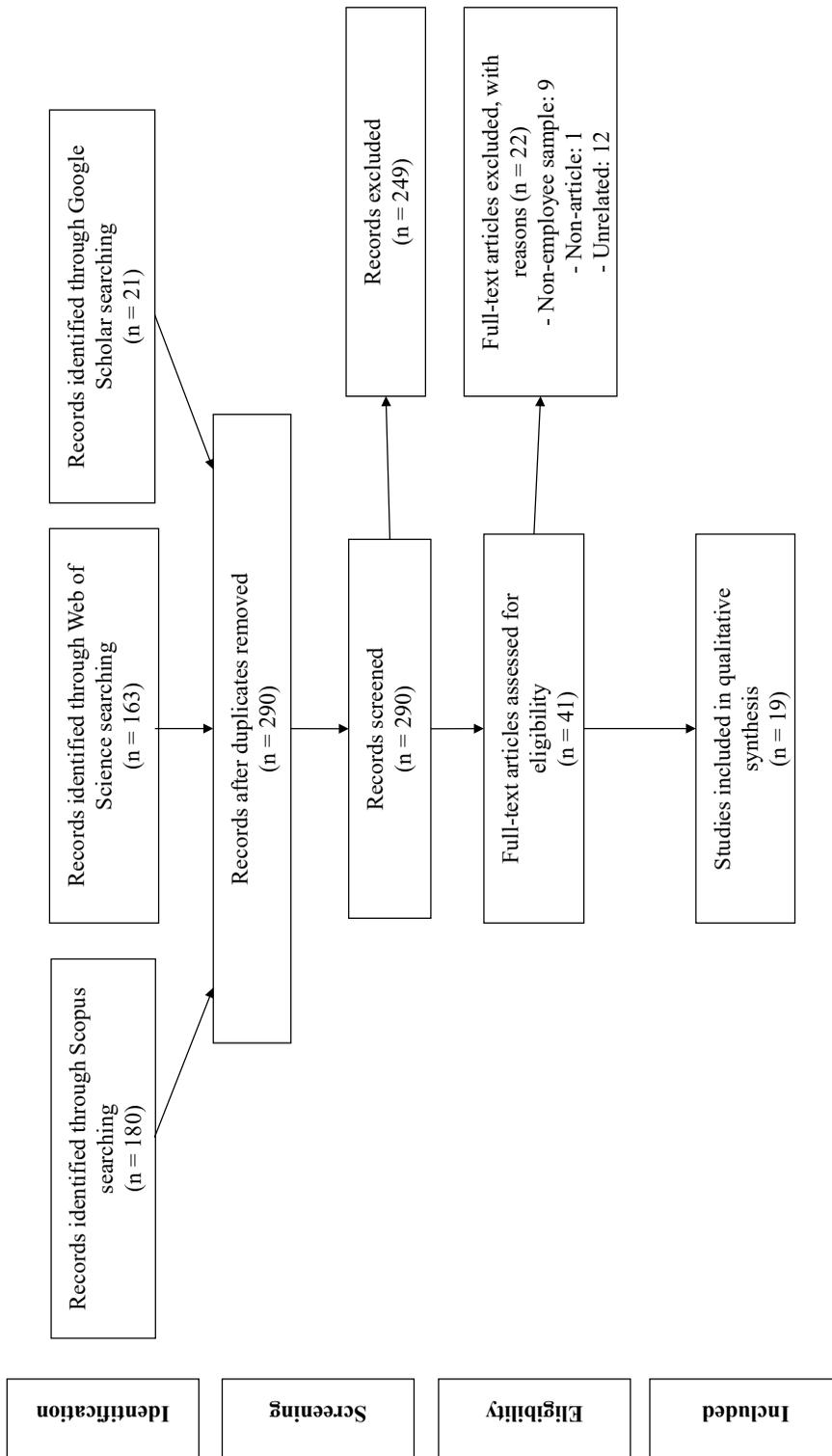


Figure 1. PRISMA flow diagram for selection process. Adapted from Moher et al. (2009)

This process aims to provide the selected database with more options to browse for more relevant articles and the authors are able to widen the related keywords in the full search string on the two main databases used namely Scopus and Web of Science as shown in Table 1. For supplementary articles, Google Scholar was chosen as an

additional online database as in congruence with the suggestion by Haddaway et al. (2015), Google Scholar has the ability to perform as supporting database in systematic review process and also has a high number of scholarly items that can be retrieved. These three online databases yielded a total of 364 articles.

Table 1

Query string used

Database	Query string	Hits
Scopus	TITLE-ABS-KEY (("Socio*economic status" OR "Socio*economic" OR "Income" OR "Low*income" OR "Income inequality" OR "Financial strain" OR "Social status" OR "Social class" OR "Poverty" OR "Economic") AND ("Mental health" OR "Mental illness" OR "Mental disorder*" OR "Depression" OR "Depressive" OR "Health") AND ("Low*income" OR "Poor" OR "B40" OR "Low*earning*" OR "Low*paid" OR "employee*"))	180
Web of Science	TS= (("Socio*economic status" OR "Socio*economic" OR "Income" OR "Low*income" OR "Income inequality" OR "Financial strain" OR "Social status" OR "Social class" OR "Poverty" OR "Economic") AND ("Mental health" OR "Mental illness" OR "Mental disorder*" OR "Depression" OR "Depressive" OR "Health") AND ("Low*income" OR "Poor" OR "B40" OR "Low*earning*" OR "Low*paid" OR "employee*"))	163

Screening. The 364 articles that have been identified from the first process were then being screened. The screening process is started by importing all records into EndNote X9 reference management software package. Next, the authors used the Find Duplicates function to discard the duplicate records (n = 74), thus decreasing the search results to a total of 290 articles. Then, the screening process is continued with inclusion and exclusion criteria

selection which is generated automatically based on the sorting feature available in the database. The search string was generated on 7th October 2020 and in order to retrieve the most recent published articles relevant to socioeconomic status and mental health among low-income employees, the year of publications between 2010 and 2019 was chosen as the inclusion criteria. The search limitation to year 2019 was due to the searching process that started on October

2020 and there is probability of upcoming articles to be indexed or published. Besides, the source type and document type were limited to journal and article only because empirical studies could ensure the review quality. Furthermore, the authors also limited the search to only English language articles to avoid uncertainty in understanding. After selecting the inclusion criteria with the removal of 249 articles, the records left a total of 41 articles. These 41 articles were exported to an Excel sheet (csv) in order for the eligibility process.

Eligibility. Eligibility is the second process of screening which has been carried out manually by the authors to ensure the remaining articles is appropriate and satisfied the inclusion criteria. The authors screened 41 articles by reading the titles and abstracts and identified 19 articles as relevant with the research question. Qualitative synthesis is used in this study to evaluate the data. The exclusion of 22 articles was due to non-employee samples, review article and unrelated studies. Overall, only 19 articles were included in the systematic review and the relevant data for all the included articles were extracted for further analysis.

FINDINGS

Descriptive Analysis

Figure 2 indicates the development of relevant articles published worldwide since 2010 until 2019 with a cumulative number of 19 articles. Based on the selected timeline, Fortin (2010) was the first scholar who published the related article. The peak

of publications among the scholars was in 2014 ($n = 5$) while 2013 and 2019 have zero record. Evidently, the growing of related publications is inconsistent from year 2010 to 2019.

Table 2 displays the socioeconomic status measures from the prior research. Almost third-quarter of the studies (73.68%) measured socioeconomic status by using household income and more than halves of the studies (57.89%) used educational level as one of the important determinants of socioeconomic status. Occupation and financial strain determinants were used thrice (15.79%) and twice (10.53%) of the studies respectively. Economic inactivity, household debt, household size, housing type, income below 100% Federal Poverty and personal income were the least determinants used to assess socioeconomic status with only one study each (5.26%).

Table 3 presents the list of instruments used to measure mental health. The authors found 15 different instruments utilized, of which the self-assessed health status was the most frequent with four times used (21.05%), followed by three times (15.79%) used of Composite International Diagnostic Interview (CIDI 3.0) and General Health Questionnaire (GHQ-12). Kessler Psychological Distress Scale was used twice (10.53%) with 10 items while once (5.26%) with only six items. The other listed instruments were utilized once (5.26%) by scholars in their studies. Overall, the majority of instruments assess mental health on the basis of depression, anxiety and stress.

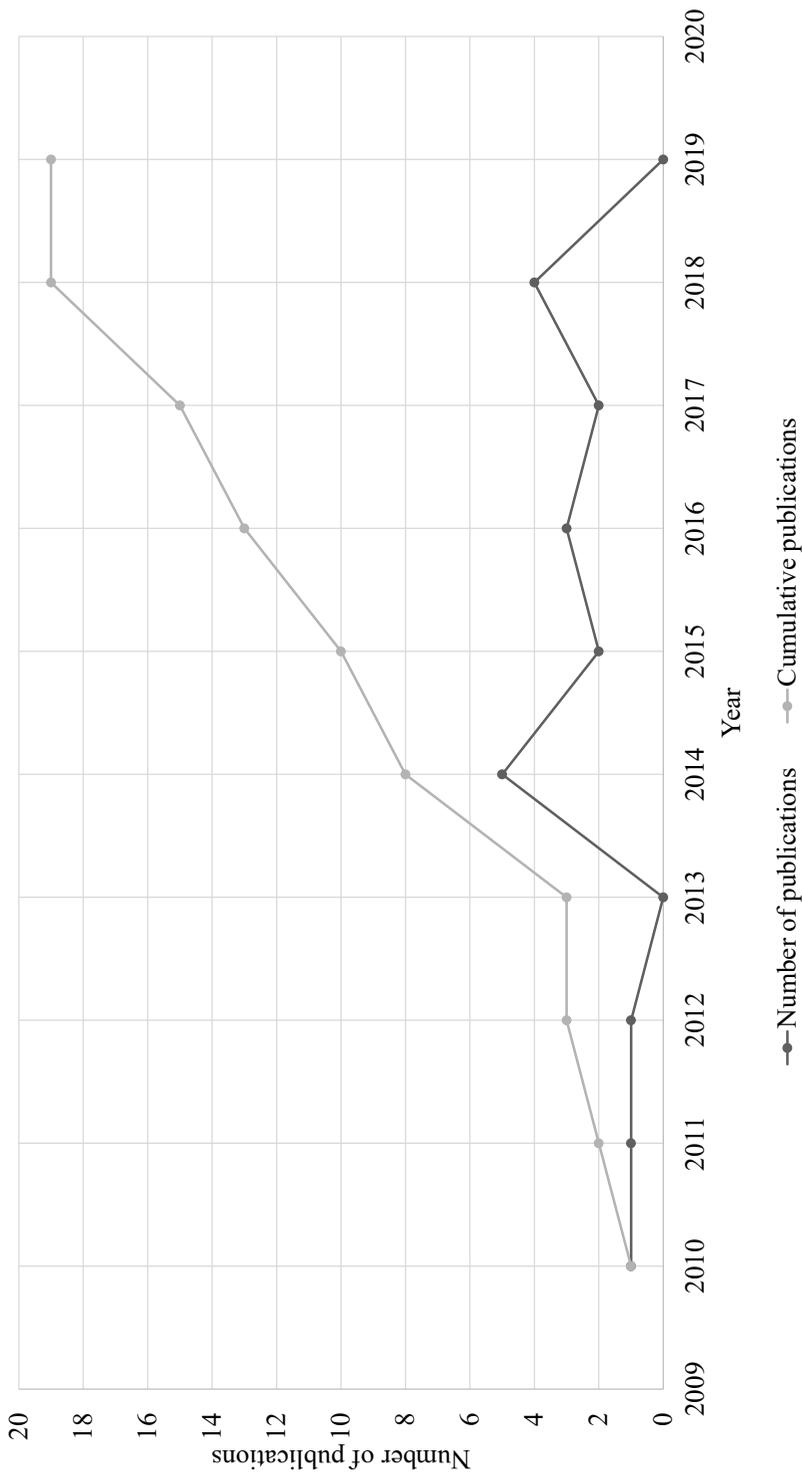


Figure 2. The annual and cumulative number of publications on the effect of socioeconomic status on mental health among low-income employees

Table 2
Socioeconomic status measures (n = 19)

Measures	N of studies	%
Household income	14	73.68
Educational level	11	57.89
Occupation	3	15.79
Financial strain	2	10.53
Economic inactivity	1	5.26
Household debt	1	5.26
Household size	1	5.26
Housing type	1	5.26
Income below 100% Federal Poverty Level	1	5.26
Personal income	1	5.26

Table 3
List of instruments used to assess mental health (n = 19)

Instruments	N of studies	%
Self-assessed health status	4	21.05
Composite International Diagnostic Interview (CIDI 3.0)	3	15.79
General Health Questionnaire (GHQ-12)	3	15.79
Center for Epidemiologic Studies Depression (CESD) scale	2	10.53
Kessler Psychological Distress Scale (K10)	2	10.53
Perceived Stress Scale (PSS)	2	10.53
Alcohol Use Disorder and Associated Disabilities Interview Schedule-5 (AUDADIS-5)	1	5.26
Generalized-anxiety disorder-7 (GAD-7)	1	5.26
Geriatric Depression Scale-15 (GDS- 15)	1	5.26
Health-Related Quality of Life (HRQoL)	1	5.26
Hopkins Symptom Check List (HSCL)	1	5.26
Kessler Psychological Distress Scale (K6)	1	5.26
Patient Health Questionnaire-9 (PHQ-9)	1	5.26
Symptom Checklist-90-Revised (SCL-90-R)	1	5.26
World Health Organization Quality of Life Instrument-Older Adults Module (WHOQOL-OLD)	1	5.26

Socioeconomic Status and Mental Health

The research included 15 cross-sectional studies (78.95%) and four longitudinal studies (21.05%; refer Table 4). The participants of the relevant studies were among employees who are currently working in an organization. The total participation of employees in the 19 studies was 1,755,021 ranging from the minimum of 116 participants (Test et al., 2014) to the maximum of 1,578,189 participants (Kim et al., 2017).

The study on the impact of socioeconomic status toward mental health has been carried out in multiple countries representing first, second and third world countries, namely Canada, Malaysia and Cambodia, but most of the studies were conducted in United States (Asebedo & Wilmarth, 2017; Damaske et al., 2016; Hoffman & Wallace, 2018; Pabayon et al., 2014; Wickrama et al., 2012). Three studies investigated socioeconomic status and other determinants namely trauma, social support and unhealthy behavior with mental health (Jarl et al., 2015; Lazzarino et al., 2014; Ng et al., 2014) while a study by Damaske et al. (2016) assessed the effect of socioeconomic status on mental health and other employees' outcomes namely momentary workplace perceptions. Two of the 19 studies integrated multiple predictor variables including socioeconomic status, caregiver status and weak labor force attachment and outcome variables consisting mental health, unhealthy behavior and prevalence of illness (Fortin, 2010; Hoffman & Wallace, 2018).

The other 13 studies in this systematic review exclusively investigated the effect of socioeconomic status on mental health.

Two out of 19 studies reported that socioeconomic status positively correlated with mental health while 17 studies showed a negative correlation between socioeconomic status and mental health. The demographic variables also showed that age, population group (African), marital status (single) and gender (female) were independently correlated with greater depressive symptoms. Adjaye-Gbewonyo et al. (2016) exclusively analyzed the influence of level of socioeconomic status on mental health status. The data analysis of this longitudinal study recommended that changes in district income inequality will produce significant changes in socioeconomic status and mental health status. However, the findings showed that there was no association between district income inequality and mental health status and thus, the changes in mental health status cannot be predicted by the changes in district income inequality. In line with the findings from Damaske et al. (2016), a higher income was associated with lower odds of happiness at workplace, greater stress and perceived stress representing only one out of six studies carried out in United States that shows positive correlation between these two variables.

For the other five studies conducted in United States, the results showed negative correlation between socioeconomic status and mental health. Two longitudinal studies' findings show that depression was affected by low levels of education and household

Table 4
 Characteristics and main findings of the included studies (n = 19) [Cross-sectional studies (n = 15); Longitudinal studies (n = 4)]

Reference	Country	Research Design	N	Socioeconomic status Indicator	Mental health Indicator	Main findings
Domènech-Abella et al. (2018)	Finland, Poland and Spain	Cross-sectional	7966: Finland (1433), Poland (2910) and Spain (3623)	- Educational level - Occupation - Household income	Depression	- SES indicators that most frequently significantly associated with depression is education and household income. - Spain, followed by Poland and Finland, were the - highest depression level.
Hoffman & Wallace (2018)	United States	Cross-sectional	11,321	Income below 100% Federal Poverty Level	Emotional distress	For those with the greatest economic deprivation, the risk of severe emotional distress grew by >100 percent.
Isaacs et al. (2018)	Australia	Cross-sectional	12,322	Household income	Psychological distress	At a high/very-high stage, 1 out of 4 poorest one-fifth people have psychological distress.
Rezaei et al. (2018)	Iran	Cross-sectional	989	- Household wealth - Education level	Health-related quality of life	Participants with lower SES are more likely to exhibit poor health-related quality of life.

Table 4 (Continued)

Reference	Country	Research Design	N	Socioeconomic status Indicator	Mental health Indicator	Main findings
Asebedo & Wilmarth (2017)	United States	Cross-sectional	8,366	Household income	Depression	As the stress response to financial pressure increased, depression scores increased.
Kim et al. (2017)	South Korea	Cross-sectional	1,578,189	Household income	Self-rated poor health	There was a strong income gap in self-assessed poor health in 245 districts of Korea.
Damaske et al. (2016)	United States	Cross-sectional	122	- Personal income - Education level	Stress and perceived stress	Higher satisfaction at work, less self-reported stress and less perceived stress were reported by lower socioeconomic status.
Freeman et al. (2016)	Finland, Poland and Spain	Cross-sectional	10,800: Finland (1,976), Poland (4,071) and Spain (4,753)	- Household income - Education level	Depression	In Finland and Poland, but not in Spain, a higher income was correlated with lower chances of depression.

Table 4 (Continued)

Reference	Country	Research Design	N	Socioeconomic status Indicator	Mental health Indicator	Main findings
Dijkstra-Kersten et al. (2015)	Netherland	Cross-sectional	1595	- Household income - Financial strain	Depression	There were greater chances of being depressed for participants with moderate to serious financial pressure.
Jarl et al. (2015)	Cambodia	Cross-sectional	3,200	- Household debt - Household wealth - Economic inactivity	Mental health	Mental health status was strongly negatively correlated with all economic status indicators.
Kader Maideen et al. (2014)	Malaysia	Cross-sectional	1,556	- Household income - Education level	Depression	Depression was strongly correlated with the low-income category.
Ng et al. (2014)	Singapore	Cross-sectional	2,447	- Education level - Housing type	Depression	The probability of depressive symptoms was greatly increased by low socioeconomic status.
Lazzarino et al. (2014)	Thailand and Singapore	Cross-sectional	56,615: Thailand (40,679) and Singapore (15,936)	- Occupational status	Psychological distress	Low socioeconomic status in both countries is consistently correlated with psychological distress.

Table 4 (Continued)

Reference	Country	Research Design	N	Socioeconomic status Indicator	Mental health Indicator	Main findings
Test et al. (2014)	Turkey	Cross-sectional	116	- Household income - Education level - Household size	Health condition and quality of life	The health condition and quality of life among the poorest people was lower.
Economou & Theodossiou (2011)	Denmark, Finland, France, Greece, Netherland and United Kingdom	Cross-sectional	3,137: Denmark (702), Finland (383), France (533), Greece (646), Netherland (415) and United Kingdom (458)	- Household income - Education level	Health	The influence of individual household incomes on health is important.
Adjaye-Gbewonyo et al. (2016)	South Africa	Longitudinal	9,664	- Household income - Education level - Employment status	Depression	-No depressive symptoms were associated with the level of income. - Depressive symptoms decreased substantially over time.
Pabayo et al. (2014)	United States	Longitudinal	34,653	- Household income - Education level	Depression	The likelihood of depression is increased by low income.

Table 4 (Continued)

Reference	Country	Research Design	N	Socioeconomic status Indicator	Mental health Indicator	Main findings
Wickrama et al. (2012)	United States	Longitudinal	370	Family economic hardship (Dohrenwend et al., 1978)	Depression	Family economic hardship leads to increase in depressive symptoms.
Fortin (2010)	Canada	Longitudinal	11,593	- Household income - Education level	Health	Low-income earners are in much poorer health and persistently increase the risk of health deterioration.

income (Pabayo et al., 2014) and high level of family economic hardship (Wickrama et al., 2012). These results also supported by a cross-sectional study from Asebedo and Wilmarth (2017) that higher score of depression was associated with greater response rate on financial strain. Moreover, another study investigated whether the effects of socioeconomic status were moderated by caregiver status. The data analysis revealed that this interaction was not significant (Hoffman & Wallace, 2018).

A study by Freeman et al. (2016) in three different countries namely Finland, Poland and Spain, found a significant impact of socioeconomic status measures including household income and educational level on depression in Finland and Poland, but not in Spain. However, the latest study conducted in the same European countries demonstrated that lower income was associated with higher probabilities of having depression in Finland, Poland and Spain (Domènech-Abella et al., 2018). This study included additional variables of mediators namely behavioral, psychosocial and material factors which psychosocial factors and especially loneliness had the strongest correlations with depression while material factors and financial strain, in particular revealed as the highest mediating function in the relationship between socioeconomic status and depression.

In addition, five studies conducted in Asian countries revealed a significant effect of socioeconomic status on mental health. Studies discovered that among the low-income group, mental health status in

Cambodia was strongly positively correlated with all economic status determinants including household debt and economic inactivity (Jarl et al., 2015) and depression in Malaysia had a strong correlation with economic status namely household income and education level (Kader Maideen et al., 2014). Singapore has carried out two relevant studies (Lazzarino et al., 2014; Ng et al., 2014) but one of it was collaborated with Thailand by Lazzarino et al. (2014) with larger study samples. Both of these studies established that socioeconomic status was strongly and negatively correlated with psychological distress with additional findings revealed inconsistent moderation of social support across socioeconomic status groups (Ng et al., 2014) and unhealthy behavior was inconsistently associated to psychological distress (Lazzarino et al., 2014). Among all of the included studies, the largest number of samples included in the study was 1,578,189 in South Korea which also reported socioeconomic status was negatively associated with mental health status (Kim et al., 2017).

Furthermore, improving economic stability was linked to reduction of emotional distress among low-income employees (Isaacs et al., 2018). This result is similar from those reported in previous longitudinal included studies where lower economic determinants and weak labour force attachment led to mental health issue and an increase of illness prevalence (Fortin, 2010). Socioeconomic status also had a direct negative effect on depression and anxiety Dijkstra-Kersten et al. (2015),

emotional health in general (Economou & Theodossiou, 2011) and health-related quality of life (Rezaei et al., 2018; Test et al., 2014).

In summary, the different findings obtained from the 19 included studies were contributed from different demographic features, sample sizes and national cultures. Besides, various determinants of socioeconomic status and mental health scales utilized in the studies could also contribute to various research outcomes. Therefore, in-depth studies in the future by various scholars are required to acquire heterogenous research findings.

DISCUSSION

The main aim of this study is to carry out a systematic review of the empirical studies on the impact of socioeconomic status on mental health among low-income employees. Most of the prior research indicated that socioeconomic status affects mental health among the low-income employees. The longitudinal study also proved that the socioeconomic status influence mental health over time. Primarily, it is vital to emphasize that socioeconomic status has been assessed through various measures. Several studies only used household income as the determinant (Asebedo & Wilmarth, 2017; Isaacs et al., 2018; Kim et al., 2017) while other studies integrated other related measures such as employment status, education level, housing type, household debt and household size (Adjaye-Gbewonyo et al., 2016; Freeman et al., 2016; Jarl et al., 2015; Test et al., 2014). A study from

Lazzarino et al. (2014) exclusively utilized occupational status as socioeconomic status measures. The inconsistencies of conceptual and operational definitions of the concept used in the empirical studies lead to difficulties in appropriately defining the variable. Huang et al. (2017) and Präg et al. (2016) highly recommend the integration of both objective and subjective measures of socioeconomic status to ensure the clarity in the concept of socioeconomic status in the aspects of individual and social or economic. Objective socioeconomic status is regarded as the position of one's economic and social standing in comparison to others, as determined by three measures including household income, education level and occupational status which have widely used by various scholars (Adjaye-Gbewonyo et al., 2016; Domènech-Abella et al., 2018) while subjective socioeconomic status is an individual's perception of his or her own status in relation to others (Goodman et al., 2001). The subjective socioeconomic status was found to be significantly related to the three measures of objective socioeconomic status (Ostrove et al., 2000) which implies that both subjective and objective socioeconomic status may complement each other in influencing its psychological effects. Thus, clarifications on the variables according to specific research discipline particularly in developing phase is important by understanding the concepts and outcomes of recent studies.

Improving the low-income employees' socioeconomic status can be an important source of positive mental health. As

established by the reviewed studies, employees who have higher socioeconomic status are tend to portray greater positive affect, feel less depressed and have better levels of emotional status compared to lower-income employees. The significant measure of mental health was depression (Domènech-Abella et al., 2018; Kader Maideen et al., 2014; Wickrama et al., 2012) and as acknowledged by other studies (Damaske et al., 2016; Dikshit & Acharya, 2017; Economou & Theodossiou, 2011; Lazzarino et al., 2014), emotional health, stress, anxiety and psychological distress have also been indicated as strong measures of mental health. Nevertheless, the better outcome of employees' mental health is affected by the multidimensional concept of socioeconomic status that is based on objective and subjective socioeconomic status. Evidently, Bøe et al. (2019) and Honjo et al. (2014) presented both objective and subjective socioeconomic status to be among the prime contributors of mental health among low-income employees in order to ensure the comprehensiveness of the employees' socioeconomic status through their privilege, resources, power and control.

For the association between socioeconomic status and mental health among low-income employees based on developed, developing and underdeveloped countries as used by United Nations Development Programme (UNDP), there are different outcomes in several studies. This review comprised of studies from 11 developed countries, seven developing

countries and only one underdeveloped country. All studies found that socioeconomic status among low-income employees in developed and developing countries was negatively associated with mental health. By contrast, Adjaye-Gbewonyo et al. (2016) found that in South Africa as developing nation, there was no association between socioeconomic status and mental health over time and Damaske et al. (2016) reported positive association between socioeconomic status and mental health among low-income employees in United States as the developed country. In underdeveloped country, studies examining the association between socioeconomic status and mental health are scarce (Jarl et al., 2015) even though underdeveloped country is among the nations with the lowest Gross National Income (GNI) per capita (World Bank, 2021). Therefore, these evidences linking socioeconomic status to mental health outcomes inconsistently address a number of key issues that could improve in causal inference, including the overall economic indicators. For that reason, the examination on this potential nature of this association based on GNI per capita from lowest to highest-income countries is required.

Strengths and Limitations of Review

This systematic review is the first to synthesize included studies on the impact of socioeconomic status on mental health among low-income employees because the other relevant reviews were conducted among children, adolescents and general population in low, middle and high-income

countries (Lund et al., 2010; Patel et al., 2018; Reiss et al., 2019). Besides, multiple databases were utilized including Scopus and Web of Science as among the highest impact factors journal for psychology research discipline while Google Scholar as an additional academic source. Furthermore, the literature shows that income stability affects different states of mental health namely depression, anxiety and stress and mental health outcomes in this review is mostly researched in specific constructs. Hence, this review demonstrates the significance of recent research calls for both individual and organizational approaches for income equalities and an increased emphasis on low-income employees' positive mental health.

Out of 19 studies, majority of the studies were cross-sectional leading to inability of identifying the trends in the characteristics of low-income employees. For this reason, longitudinal study is a powerful research design that are recommended in the future studies to determine to what extent socioeconomic status influences mental health of employees over a period of time. Next, several studies were carried out in unknown organizational settings that could be the factors of the inconsistencies of research findings. Therefore, the authors suggest for future studies to conduct research that focuses on specific organizational settings.

Implications for Practice

This review offers constructive resources for efforts to establish a stable and equal

income distribution that promote low-paid employees' positive mental health. Examining the influence of socioeconomic status on mental health and other individual outcomes will assist health care professionals and psychologists to understand how income stability improves low-income employees' emotional health. As supported by Golberstein (2016), the increasing number of studies on the mental health outcomes that due to the stability and security of income will help the patients' diagnosis and treatment. Apart from assisting the health care professionals, understanding the impact of socioeconomic status on mental health status could help government not just for policy amendment or making through the critical issues identification, but also to encourage the comprehensiveness towards equitable society. In addition, these findings could be the fundamental idea for future research on discovering this issue by integrating both objective and subjective economic measures and defining mental health in more extensive.

CONCLUSION

Based on this review, the findings provide evidence of the significance of employees' socioeconomic status to achieve positive mental health status. Examining the impact of socioeconomic status and understanding the association between socioeconomic status and mental health are beneficial for mental health state improvement which eventually promote a positive overall health among low-income employees. This review will assist the government in formulating

effective strategies for an equal income distribution and this is one of the ways for the poverty reduction. Besides, this review also acts as direction for health professionals and psychologists to treat the patients' emotional effects with suitable approaches while further studies that examine the influence of economic status on employees' emotional health through longitudinal and qualitative studies are highly required among scholars. Hence, the integration of government, clinical and research efforts will lead to positive thoughts, behaviors and emotions which eventually promoting productive and effective employees at the workplace.

ACKNOWLEDGMENT

Funder by the Ministry of Higher Education under FRGS, Registration Proposal No: R.J130000.7853.5F172

REFERENCES

- Adjaye-Gbewonyo, K., Avendano, M., Subramanian, S. V., & Kawachi, I. (2016). Income inequality and depressive symptoms in South Africa: A longitudinal analysis of the National Income Dynamics Study. *Health Place, 42*, 37-46. <https://doi.org/10.1016/j.healthplace.2016.08.013>
- Asebedo, S. D., & Wilmarth, M. J. (2017). Does how we feel about financial strain matter for mental health? *Journal of Financial Therapy, 8*(1), 62-80. <https://doi.org/10.4148/1944-9771.1130>
- Bøe, T., Petrie, K. J., Sivertsen, B., & Hysing, M. (2019). Interplay of subjective and objective economic well-being on the mental health of Norwegian adolescents. *SSM - Population Health, 9*, 1-8. <https://doi.org/10.1016/j.ssmph.2019.100471>
- Chadegani, A., Salehi, H., Md Yunus, M. M., Farhadi, H., Fooladi, M., Farhadi, M., & Ale Ebrahim, N. (2013). A comparison between two main academic literature collections: Web of science and scopus databases. *Asian Social Science, 9*(5), 18-26. <https://doi.org/10.5539/ass.v9n5p18>
- Cingano, F. (2014). Trends in income inequality and its impact on economic growth. In *OECD Social, Employment, and Migration Working Papers* (No. 163). <https://doi.org/10.1787/5jxrjncwxv6j-en>
- Damaske, S., Zawadzki, M. J., & Smyth, J. M. (2016). Stress at work: Differential experiences of high versus low SES workers. *Social Science & Medicine, 156*, 125-133. <https://doi.org/10.1016/j.socscimed.2016.03.010>
- Dijkstra-Kersten, S. M. A., Biesheuvel-Leliefeld, K. E. M., van der Wouden, J. C., Penninx, B. W. J. H., & van Marwijk, H. W. J. (2015). Associations of financial strain and income with depressive and anxiety disorders. *Journal of Epidemiology and Community Health, 69*(7), 660-665. <https://doi.org/10.1136/jech-2014-205088>
- Dikshit, S., & Acharya, S. K. (2017). Impact of occupational stress on the work life balance of teaching professionals in higher education with special reference to Bhubaneswar City, Odisha. *Advances in Economics and Business Management, 4*(6), 357-361.
- Dohrenwend, B. S., Krasnoff, L., Askenasy, A. R., & Dohrenwend, B. P. (1978). Exemplification of a method for scaling life events: The PERI Life Events Scale. *Journal of Health and Social Behavior, 19*(2), 205-229. <https://doi.org/10.2307/2136536>
- Domènech-Abella, J., Mundó, J., Leonardi, M., Chatterji, S., Tobiasz-Adamczyk, B., Koskinen, S., Ayuso-Mateos, J. L., & Haro, J. M. (2018). The association between socioeconomic status and depression among older adults in Finland,

- Poland and Spain: A comparative cross-sectional study of distinct measures and pathways. *Journal of Affective Disorders*, 241, 311-318. <https://doi.org/10.1016/j.jad.2018.08.077>
- Economou, A., & Theodossiou, I. (2011). Poor and sick: Estimating the relationship between household income and health. *Review of Income and Wealth*, 57(3), 395-411. <https://doi.org/10.1111/j.1475-4991.2010.00416.x>
- Ferreira, F. H. G., & Ravallion, M. (2008). *Global poverty and onequality: A review of the evidence*. The World Bank. <https://doi.org/10.1016/j.contraception.2014.01.015>
- Fortin, M. (2010). The connection between low income, weak labour force attachment and poor health. *Canadian Studies in Population*, 37, 25-52. <https://doi.org/10.25336/p62s5f>
- Freeman, A., Tyrovolas, S., Koyanagi, A., Chatterji, S., Leonardi, M., Ayuso-Mateos, J. L., Tobiasz-Adamczyk, B., Koskinen, S., Rummel-Kluge, C., & Haro, J. M. (2016). The role of socioeconomic status in depression: Results from the COURAGE (aging survey in Europe). *BMC Public Health*, 16(1), 1-8. <https://doi.org/10.1186/s12889-016-3638-0>
- Golberstein, E. (2016). The effects of income on mental health: Evidence from the Social Security Notch. *Physiology & Behavior*, 176(1), 139-148.
- Goodman, E., Adler, N. E., Kawachi, I., Frazier, A. L., Huang, B., & Colditz, G. A. (2001). Adolescents' perceptions of social status: Development and evaluation of a new indicator. *Pediatrics*, 108(2), 1-8. <https://doi.org/10.1542/peds.108.2.e31>
- Haddaway, N. R., Collins, A. M., Coughlin, D., & Kirk, S. (2015). The role of Google scholar in evidence reviews and its applicability to grey literature searching. *PLoS ONE*, 10(9), Article e0138237. <https://doi.org/10.1371/journal.pone.0138237>
- Hiilamo, H. (2014). Is income inequality "toxic for mental health"? An ecological study on municipal level risk factors for depression. *PLoS ONE*, 9(3), Article e92775. <https://doi.org/10.1371/journal.pone.0092775>
- Hoffman, G. J., & Wallace, S. P. (2018). The cost of caring: Economic vulnerability, serious emotional distress, and poor health behaviors among paid and unpaid family and friend caregivers. *Research on Aging*, 40(8), 791-809. <https://doi.org/10.1177/0164027517742430>
- Honjo, K., Kawakami, N., Tsuchiya, M., Sakurai, K., & WMH-J 2002-2006 Survey Group. (2014). Association of subjective and objective socioeconomic status with subjective mental health and mental disorders among Japanese men and women. *International Journal of Behavioral Medicine*, 21(3), 421-429. <https://doi.org/10.1007/s12529-013-9309-y>
- Huang, S., Hou, J., Sun, L., Dou, D., Liu, X., & Zhang, H. (2017). The effects of objective and subjective socioeconomic status on subjective well-being among rural-to-urban migrants in China: The moderating role of subjective social mobility. *Frontiers in Psychology*, 8, 819. <https://doi.org/10.3389/fpsyg.2017.00819>
- Isaacs, A. N., Enticott, J., Meadows, G., & Inder, B. (2018). Lower income levels in Australia are strongly associated with elevated psychological distress: Implications for healthcare and other policy areas. *Frontiers in Psychiatry*, 9, 1-9. <https://doi.org/10.3389/fpsyg.2018.00536>
- Jarl, J., Cantor-Graae, E., Chak, T., Sunbaunat, K., & Larsson, C. A. (2015). Trauma and poor mental health in relation to economic status: The case of Cambodia 35 years later. *PLoS ONE*, 10(8), Article e0136410. <https://doi.org/10.1371/journal.pone.0136410>
- Kader Maideen, S. F., Mohd Sidik, S., Rampal, L., & Mukhtar, F. (2014). Prevalence, associated factors and predictors of depression among

- adults in the community of Selangor, Malaysia. *PLoS ONE*, 9(4), Article e95395. <https://doi.org/10.1371/journal.pone.0095395>
- Kim, I., Bahk, J., Yun, S. C., & Khang, Y. H. (2017). Income gaps in self-rated poor health and its association with life expectancy in 245 districts of Korea. *Epidemiology and Health*, 39, Article e2017011. <https://doi.org/10.4178/epih.e2017011>
- Lazzarino, A. I., Yiengprugsawan, V., Scubsman, S., ang, Steptoe, A., & Sleigh, A. C. (2014). The associations between unhealthy behaviours, mental stress, and low socio-economic status in an international comparison of representative samples from Thailand and England. *Globalization and Health*, 10(10), 1-8. <https://doi.org/10.1186/1744-8603-10-10>
- Lund, C., Breen, A., Flisher, A. J., Kakuma, R., Corrigall, J., Joska, J. A., Swartz, L., & Patel, V. (2010). Poverty and common mental disorders in low and middle income countries: A systematic review. *Social Science and Medicine*, 71(3), 517-528. <https://doi.org/10.1016/j.socscimed.2010.04.027>
- Moher, D., Liberati, A., Tetzlaff, J., Altman, D. G., & Group, T. P. (2009). Preferred reporting items for systematic reviews and meta-analyses: The PRISMA statement. *PLoS Medicine*, 6(7), Article e1000097. <https://doi.org/10.1371/journal.pmed.1000097>
- Mongeon, P., & Paul-Hus, A. (2016). The journal coverage of Web of Science and Scopus: A comparative analysis. *Scientometrics*, 106(1), 213-228. <https://doi.org/10.1007/s11192-015-1765-5>
- Ng, C. W. L., Tan, W. S. hi., Gunapal, P. P. G., Wong, L. Y. i., & Heng, B. H. oo. (2014). Association of socioeconomic status (SES) and social support with depressive symptoms among the elderly in Singapore. *Annals of the Academy of Medicine, Singapore*, 43(12), 576-587.
- Okoli, C. (2015). A guide to conducting a standalone systematic literature review. *Communications of the Association for Information Systems*, 37(1), 879-910. <https://doi.org/10.17705/1CAIS.03743>
- Organisation for Economic Co-operation and Development. (2020). *OECD Unemployment Rates* (Issue May). <https://www.oecd.org/sdd/labour-stats/unemployment-rates-oecd-05-2020.pdf>
- Ostrove, J. M., Adler, N. E., Kuppermann, M., & Washington, A. E. (2000). Objective and subjective assessments of socioeconomic status and their relationship to self-rated health in an ethnically diverse sample of pregnant women. *Health Psychology*, 19(6), 613-618. <https://doi.org/10.1037/0278-6133.19.6.613>
- Pabayo, R., Kawachi, I., & Gilman, S. E. (2014). Income inequality among American states and the incidence of major depression. *Journal of Epidemiology and Community Health*, 68, 110-115. <https://doi.org/10.1136/jech-2013-203093>
- Patel, V., Burns, J. K., Dhingra, M., Tarver, L., Kohrt, B. A., & Lund, C. (2018). Income inequality and depression: A systematic review and meta-analysis of the association and a scoping review of mechanisms. *World Psychiatry*, 17(1), 76-89. <https://doi.org/10.1002/wps.20492>
- Präg, P., Mills, M. C., & Wittek, R. (2016). Subjective socioeconomic status and health in cross-national comparison. *Social Science and Medicine*, 149, 84-92. <https://doi.org/10.1016/j.socscimed.2015.11.044>
- Reiss, F., Meyrose, A.-K., Otto, C., Lampert, T., Klasen, F., & Ravens-Sieberer, U. (2019). Socioeconomic status , stressful life situations and mental health problems in children and adolescents: Results of the German BELLA cohort-study. *PLoS ONE*, 14(3), Article e0213700. <https://doi.org/10.1371/journal.pone.0213700>

- Rezaei, S., Hajizadeh, M., Khosravipour, M., Khosravi, F., & Rezaeian, S. (2018). Socioeconomic inequalities in poor health-related quality of life in Kermanshah, Western Iran: A decomposition analysis. *Journal of Research in Health Sciences*, *18*(1), 1-6. <https://doi.org/10.26719/emhj.20.001>
- Semega, J., Kollar, M., Creamer, J., & Mohanty, A. (2020). Income and poverty in the United States: 2018. In *Current Population Reports*. U.S. Government Printing Office. <https://www.census.gov/content/dam/Census/library/publications/2019/demo/p60-266.pdf>
- Stern, C., Jordan, Z., & McArthur, A. (2014). Developing the review question and inclusion criteria. *AJN, American Journal of Nursing*, *114*(4), 53-56. <https://doi.org/10.1097/01.NAJ.0000445689.67800.86>
- Test, I. S. T., Test, M. U., Status, H., & Analizi, V. (2014). Investigating the effects of poverty on health and quality of life in poor people aged 65 and over in Etimesgut district, Ankara. *Turkish Journal of Geriatrics*, *17*(4), 397-403.
- Van Deurzen, I., Van Ingen, E., & Van Oorschot, W. J. H. (2015). Income inequality and depression: The role of social comparisons and coping resources. *European Sociological Review*, *31*(4), 477-489. <https://doi.org/10.1093/esr/jcv007>
- Vu-Ngoc, H., Elawady, S. S., Mehyar, G. M., Abdelhamid, A. H., Mattar, O. M., Halhouli, O., Vuong, N. L., Mohd Ali, C. D., Hassan, U. H., Kien, N. D., Hirayama, K., & Huy, N. T. (2018). Quality of flow diagram in systematic review and/or meta-analysis. *PLoS ONE*, *13*(6), Article e0195955. <https://doi.org/10.1371/journal.pone.0195955>
- Wickrama, K. A. S., Surjadi, F. F., Lorenz, F. O., Conger, R. D., & O'Neal, C. W. (2012). Family economic hardship and progression of poor mental health in middle-aged husbands and wives. *Family Relations: Interdisciplinary Journal of Applied Family Studies*, *61*(2), 297-312. <https://doi.org/10.1111/j.1741-3729.2011.00697.x>
- World Bank. (2021). *World Bank Country and Lending Groups*. <https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups#:~:text=For the current 2021 fiscal,those with a GNI per>

“Assessment for Learning” Practices Amongst the Primary School English Language Teachers: A Mixed Methods Approach

Mazidah Mohamed*, Mohd Sallehuddin Abd Aziz and Kemboja Ismail

Center for Research in Language and Linguistics, Faculty of Social Sciences and Humanities, Universiti Kebangsaan Malaysia, Bangi, 43000, Malaysia

ABSTRACT

This study aimed to investigate the practices of the AfL strategies and the stages of assessment in pedagogy by English language teachers in primary schools. In Phase I: the Quantitative Strand, the Assessment for Learning Audit Instrument (AfLAI) was distributed to a total of 89 primary schools in the Hulu Langat district. The AfLAI results determined the cut-off points and the divergent categories to be further investigated in Phase II: Qualitative Strand. The 244 respondents were clustered into two subset participants of four higher and four lower scorers in the AfLAI who were investigated via a semi-structured interview and/or observation. The results from the AfLAI cum the cut-off points were Mean=3.7 on QCD (SD=0.74), sharing LOSC (SD=0.79) and FB (SD=0.77), and mean=3.3 on PSA (SD=0.87). From Phase I, 15 divergent categories were selected. Phase II findings on the 115 recurring categories were divided into three profiles: the higher scorers (29 categories), the lower scorers (26 categories) and the consensus (60 categories).

Consequently, the 15 divergent categories were explained in a joint display to observe the similarities and the differences of practised amongst the higher and the lower scorers in the AfLAI. The joint display affirmed that 11 categories were practiced similarly. The four differences were on the “Availability of LOs”, “Questioning strategies”, “Compliment with FB”, and “Pupils’ progress report/self-assess”. It indicated that regardless of their scores, the participants had contributed some practical

ARTICLE INFO

Article history:

Received: 29 April 2021

Accepted: 6 July 2021

Published: 21 September 2021

DOI: <https://doi.org/10.47836/pjssh.29.3.21>

E-mail addresses:

mazidah78@gmail.com (Mazidah Mohamed)

salleh@ukm.edu.my (Mohd Sallehuddin Abd Aziz)

kemboja.ismail@gmail.com (Kemboja Ismail)

*Corresponding author

approaches to the study framework, which were beneficial beyond disciplines and classroom situations.

Keywords: Assessment for learning, assessment in pedagogy, audit instrument, English language teachers, formative assessment, mixed methods, primary school

INTRODUCTION

Formative assessment (FA) practises by the English language teachers in primary schools comprised a plethora of strategies, including assessment for learning (AfL) and assessment in pedagogy. Despite being a developing theory, the concept of FA, AfL and Feedback (FB) had been ranked as one of the most effective pedagogical strategies to influence student achievement (Hattie, 2008, 2012; Hattie & Zierer, 2018, 2019).

The holistic education system in Malaysia required implementing the School-Based Assessment (SBA) policy since 2011 (Alla Baksh, 2019). The SBA policy comprised Central Assessment, School Assessment, Physical, Sports and Co-curricular Activities assessment, and Psychometric assessment (Alla Baksh et al., 2016; Ministry of Education Malaysia, 2016). The School Assessment component in SBA is the focus in this study, which combined the progress chart of individual pupils based on the FA and the Summative Assessment (SA), among the other assessments. In addition, in the primary school English language education (ELE), the revised CEFR-aligned Dokumen Standard Kurikulum dan Pentaksiran contained several suggestions

on the implementation of FA (Azman, 2016; Ministry of Education Malaysia, 2012; Mohamad Uri & Abd Aziz, 2018; Mohd Don et al., 2015).

In one of the CEFR cascades, the nine building blocks for FA were introduced, namely: sharing Learning Objectives and Success Criteria (LOSC), exemplars, starters and plenaries, deliberate practice, Questioning, Discussions (QCD), quick scans, self-assessment and peer-assessment (PSA), and Feedback (FB; Wiliam, 2018). In this study, the framework was built on the four key strategies of AfL in the Assessment for Learning Audit instrument (AfLAI; Lysaght & O'Leary, 2017) and the five stages of assessment in pedagogy (Black, 2015).

The four key strategies of AfL in the original AfLAI in this study were sharing Learning Intentions and Success Criteria, Questions and Classroom Discussions (QCD), Feedback (FB) and Peer- and Self-assessment (PSA; Lysaght & O'Leary, 2017). The original AfLAI was adapted and validated in the Hulu Langat district with modifications based on a pilot study.

The pilot study procedure was an adaptation Phase 8 in the Instrument Development and Construct Validation (Onwuegbuzie et al., 2010) procedure whereby the modified AfLAI instrument was discussed with three subject-matter experts and nine English language teachers as the validators. Then, the semi-structured AfLAI was distributed to a stratified sample among 53 English language teachers. The analysis from the 53 responses was again discussed

with the nine validators. The pilot study aimed to validate the modified AfLAI.

Among the preliminary findings, the term Sharing Learning Intentions and Success Criteria was changed to sharing Learning Objectives and Success Criteria (LOSC), and the others were maintained (Mohamed et al., 2019). In addition, the six scales in the instrument (Lysaght & O'Leary, 2013) were reduced to 5 scales (Lysaght & O'Leary, 2017) as displayed in Table 1 because none of the respondents stated that they did not know the AfL strategies. The first key strategy in the validated AfLAI for this study was how the teachers share the Learning Objectives and the Success Criteria with the pupils during the lesson, e.g., verbally or in pictures. The second key strategy was Questions and Classroom Discussions which focused on how the teachers facilitated learning using different types of questions and brainstorming. The third key strategy, feedback, allowed the teachers to assess the pupils based on their responses, whether verbally, in writing, or through gestures. Furthermore, the fourth key strategy, Peer- and Self-Assessment by the pupils, for the other pupils and themselves was dedicated to training the trait of appreciation on self-paced progress through socialisation. These four key strategies were later merged into the Implementation stage in the five stages of assessment in pedagogy (Black, 2015).

Black (2013) proposed the model of the five stages of assessment in pedagogy based on (Hallam et al., 2004), among others, in the following: (1) Clear aims, (2)

Planning activities, (3) Implementation, (4) Review and (5) Summing up. The first stage of assessment in pedagogy began with having clear aims prior to planning the activities. In the second stage, teachers were expected to plan the activities that had the potential to achieve the aims. The key strategies of AfL were mainly expected during the Implementation stage, but not limited to this stage only. The fourth stage, review of the learning, suggested using informal assessment to check the pupils' achievement. Finally, the fifth stage, Summing up, required pupils assessment to guide the teachers in planning the next lesson. Black (2015) emphasised the perpetual interactions among the teacher and the pupils between the stages, from which the teacher could observe the assessments in the long term. The key strategies in AfL and the stages of assessment in pedagogy were to be practiced in continuous cycles in the triangle of the curriculum, pedagogy and assessment.

The definitions of FA and AfL had been debated as to whether they belong to assessment or pedagogy. Brown (2019) argued that AfL was more inclined towards pedagogy even though it contained the word 'assessment'. The fluidity of the definition of 'assessment' in AfL had led to questionings on the validity of the evidence from which the pupils' progress reports were made. This issue was previously discussed by Black (2015), whereby SA and FA were supposed to be 'married'. In the Malaysian education system, the integration of FA, SA and other school assessments and central assessments

were prominent in the SBA assessment policy.

Current Developments in Assessment for Learning

The teachers' knowledge and understanding of FA and AfL have affected their practices to some extent (Talib et al., 2014). Many teachers preferred pencil and paper tests and high stakes examinations to FA and AfL strategies. Despite the high ranking of FA and AfL as one of the catalysts in student achievement (Hattie & Clarke, 2019), the results from high-stakes examinations were always sought after by most stakeholders. Most parents, pupils, teachers and schools preferred norm-referenced statistical results compared to the individual progress or criterion-referencing. Moreover, previous washback studies on SBA often showed that some students "were equally pessimistic about external examinations and SBA" (Alla Baksh et al., 2016, p. 1087), and some pre-service teachers indicated some barriers to the implementation of SBA (Alla Baksh et al., 2019). In other words, the examination-oriented culture could somehow affect the inclination of the stakeholders on the practices of FA or AfL in the classrooms compared to the practice of teaching to the test or other complex situations (Alderson & Wall, 1993; Tayeb et al., 2014).

In terms of implementation, workload issues were dominant in the practices of FA and AfL in SBA. The stigma of the increased workload caused by the implementation of SBA and FA was found in the UK, Brunei, Singapore, and Malaysia, among others. In the UK, some teachers named the reporting

of FA as the 'checkbox' syndrome due to the detailed requirement in keying in the pupils' progress (Marshall & Drummond, 2006). Nasri et al. (2010) found that the added paperwork in the alternative assessment was overwhelming in Brunei. In Singapore, the primary school teachers had to give lengthy and detailed written feedback to Primary 1 and Primary 2 pupils because there were no examinations for these pupils (Ratnam-Lim & Tan, 2015). Meanwhile, in Malaysia, some teachers had experienced the increased workload due to SBA while acknowledging its benefits (Mansor et al., 2013). Compared to the assessment practices in Singapore, the Malaysian teachers were more empowered to choose the assessment strategies despite having similar challenges on the increased workload (Mohamed & Abd Aziz, 2018).

The study aimed to examine the use and understanding of AfL amongst the English language teachers in primary schools using the AfLAI. It then investigated their practices in implementing AfL and assessment in pedagogy to explain any recurring similarities or differences in practices between the higher and the lower scorers in the AfLAI. The following are the research questions of this study.

Research Questions

1. What is the understanding and practices of AfL amongst the English language teachers in primary schools, based on the AfLAI?
2. What are the practices in the implementation of AfL by the higher and the lower scorers in the AfLAI?

amongst the English language teachers in primary schools?

3. What are the similarities and the differences of practices between the higher and the lower scores in the AfLAI amongst the English language teachers in primary schools?

METHODS

Phase I: Quantitative Strand

Instrument. This sequential explanatory mixed-methods study was carried out in two significant phases. In Phase I: Quantitative Strand, the AfLAI instrument was adapted

from an Irish study (Lysaght et al., 2013; Lysaght & O’Leary, 2017) with written consent via email. The modified and validated AfLAI audited four key strategies of AfL: sharing Learning Objectives and Success Criteria (LOSC=16 items), Questions and Classroom Discussions (QCD=16 items), Feedback (FB=12 items) and Peer- and Self-Assessment (PSA=14 items) using five numerical scales ascending from the labels 1=never, 2=sporadic, 3=emerging, 4=established and 5=embedded via 58 items. The following Table 1 shows the key strategies and the rating scales in the AfLAI.

Table 1
Key strategies and rating scales in the AfLAI

4 key strategies of AfL	5 rating scales	Explanation
LOSC (16 items)	5=embedded	Happens 90% of the time
QCD (16 items)	4=established	Happens 70% of the time
FB (12 items)	3=emerging	Happens 50% of the time
PSA (14 items)	2=sporadic	Happens 25% of the time
	1=never	Never happens

Procedures. The AfLAI instrument was adapted, piloted, modified and distributed to a target population of 772 English language teachers in the district of Hulu Langat. The sampling design was adapted according to the multistage cluster sampling (Babbie, 2007). The AfLAI was distributed online and in hardcopies to encourage more participation. The psychometric properties of the four scales in the AfLAI were examined via the Kaiser-Meyer-Olkin test (none statistically significant) and Bartlett’s Test of Sphericity (all statistically

significant). The cut-off points were based on descriptive statistics. Based on the results from Phase I, the cut-off point was used to identify the subset participants and the divergent categories to be investigated in Phase II.

Phase II: Qualitative Strand

Sampling. The eight subset participants among primary school English language teachers were purposively selected based on their AfLAI scores, gender, age, teaching experience and academic background. There

was only 1 participant who scored below the average mean rating in all four scales of the AfLAI. Therefore the three other lower scorers were purposively selected based on at least one lower scores in the four scales in the AfLAI.

Procedures. The nine items (four key strategies of AfL and five stages of assessment in pedagogy) in the semi-structured interview questions and the observation checklist were modified to include the 15 divergent categories from the AfLAI results. Only field notes were taken from the observations due to MoE Malaysia's audio/video recording prohibition. The participants were asked to complete a biodata and consent form prior to the interview and the observation. The investigation was halted after six interviews and 12 observations upon reaching the saturation of data. Data triangulation was made via member checking whereby the transcribed data were discussed with the participants and were only used in this study with their permission. The within-case and cross-case analyses were profiled according to the higher, lower, and general consensus.

Ethical considerations were taken by obtaining written permission from the Ministry of Education Malaysia, the Selangor State Education Department, the Hulu Langat District Education Office, the headteachers of the respective schools and the English language teachers involved in this study.

Phase I and Phase II were designed to answer RQ1 and RQ2, respectively.

RQ3 was discussed based on a tabulated joint data display from both Phases to find the similarities and the differences in the divergent categories. This research was based on the explanatory sequential mixed method procedure suggested by (Creswell, 2014a, 2014b; Creswell & Creswell, 2017; Creswell & Plano Clark, 2011; Tashakkori & Creswell, 2007). Hence RQ3 was the mixed method research question that integrated the quantitative and the qualitative phases in this study.

RESULTS AND FINDINGS

Phase I

The 244 respondents in Phase I: Quantitative Strand constituted 31.6% of the population in this study who responded to the AfLAI. Therefore, the target sample size between $n=196$ to $n=278$ out of $n=772$ could reach a 90% confidence level, 10% sampling error and .10 significance level (Cohen et al., 2007). They were predominantly women (96.3%) and bachelor degree holders (89%). Twenty-one respondents were Master's degree holders. In the preliminary study, some EL teachers complained that the AfLAI was difficult to understand. Hence it underwent back-to-back translation into Bahasa Melayu. Since the AfLAI was translated into Bahasa Melayu, language preferences were also denoted whereby 146 respondents preferred the dual-language version, 68 preferred the English language version, and 30 chose the Bahasa Melayu version. The following Table 2 displays the respondents' information.

Table 2
Respondents

Total respondents	Gender	Academic background	Language preference
244	Male (9) Female (235)	SPM (2) STPM (1) Diploma (2) Bachelor degree (218) Master's degree (21)	English language (68) Bahasa Melayu (30) Dual language (146)

Separate principal components factor analyses were run on the data to examine some of the psychometric properties of the four scales in the AfLAI. Results from the Kaiser-Meyer-Olkin (KMO) test (none statistically significant) and Bartlett's Test of Sphericity (all statistically significant) supported the application of factor analysis to all four scales. More specific, the KMO Measure of Sampling Adequacy values of LOSC=.93, QCD=.93, FB=.91, and PSA=.94 indicated that the sampling was adequate and factor analysis was useful. Bartlett's Test of Sphericity showed .00 of the significance levels, indicating that the factor analysis was useful. The factor analysis of each scale and inspection revealed one large factor with Eigenvalues ranging in size from 5.8 to 8.1. It was clear that the point at which the curve began to straighten (scree test criterion) occurred at the point of the second factor. It indicated an ideal curve in the scree plots. The analysis also revealed that the proportion of variance explained by the first factor in each scale was large and acceptable in the principal components factor analysis. The Cronbach's alpha reliabilities on LOSC=.91, QCD=.93, FB=.90 and PSA=.94 showed that the AfLAI instrument in this study was

acceptable and satisfactory. There was no instance of any case where removing an item from any scale would improve the overall reliability measure of that scale. The following Table 3 shows the analysis.

In this study, the respondents gave the highest rating on QCD (mean=3.7, SD=0.74) followed by FB (mean=3.7, SD=0.77), sharing LOSC (mean=3.7, SD=0.79), and PSA (mean=3.3, SD=0.87). All the average mean ratings in each scale indicated that the practices in implementing the four key strategies of AfL were 'emerging', moving towards 'established'. Based on this descriptive analysis, the cut-off points from each item were taken from the average mean ratings, which separated the higher and the lower scoring respondents in the AfLAI.

The results showed that the count of responses above the mean rating was: LOSC(n=126), QCD (n=131), FB (n=115) and PSA (n=131). On the other hand, the number of responses below the average mean rating were LOSC (n=118), QCD (n=129), FB (n=129) and PSA (n=113). It was observed that the cut-off point separated the higher and the lower scorers in almost equal respondents. The following Table 4 displays the summary of the descriptive analysis of the AfLAI in this study.

Table 3
AfLAI analysis

Key strategies of AfL in the AfLAI	LOSC	QCD	FB	PSA
Number of items	16	16	12	14
Cronbach's alpha reliability	.91	.93	.90	.94
Factor 1				
Eigenvalue	7.2	8.1	5.8	8.0
Percent of variance explained	45.2	50.7	48.8	57.8
Range of factor loadings	0.41-0.74	0.5-0.73	0.4-0.61	0.45-0.75
Average factor loadings	0.58	0.58	0.48	0.65

Table 4
Descriptive analysis and cut-off points

4 scales	Mean/cut-off point	SD	Value label	Higher scorers (n)	Lower scorers (n)
QCD	3.7	0.74	Emerging	131	113
FB	3.7	0.77	Emerging	116	129
LOSC	3.7	0.79	Emerging	126	118
PSA	3.3	0.87	Emerging	131	113

Based on the cut-off points, four subset respondents (ID=219, 237, 239 and 241) consistently reported higher than average mean ratings in all the four scales of the AfLAI, between 'emerging' and 'embedded'. On the other hand, only one subset respondent (ID=242) scored below the average mean rating between 'sporadic' and 'emerging'. The other three lower scorer subset respondents (ID=205,220,232) had higher scores in at least 1 to 3 scales of the AfLAI, despite having at least one or lower scores. However, they were still categorised as the lower scorers because

of the unavailability and unwillingness of the other lower scorers to consent in participating. The subset average mean rating scores are presented in the following Table 5.

The divergent items with the highest scores and the lowest scores among the higher and the lower scorers were selected as the divergent categories to be explained in this study. These 15 categories were selected because they were divergent from the identified patterns in the results. The following subsections discuss the 15 divergent items according to the

framework of this study: the four scales in the AfLAI (LOSC, QCD, FB, PSA) with the incorporation of the five stages of assessment

in pedagogy (Clear aim, Planning activities, Implementation, Review, Summing up).

Table 5

The subset average rating scores

ID	Overall score moving from...	LOSC	QCD	FB	PSA
219	Established to Embedded	4.9	4.7	4.2	4.4
237	Emerging to Established	4.2	4.1	3.7	3.9
239	Emerging to Established	3.9	4.1	3.7	3.9
241	Emerging to Established	3.7	4.1	3.8	3.5
220	Emerging to Established	3.9	3.9	4.5	3.1
205	Emerging to Established	3.4	3.5	3.6	3.5
232	Sporadic to Established	4.4	4.3	3.8	2.2
242	Sporadic to Emerging	2.9	3.1	2.8	2.0

LOSC. The overall score saw Item 5: ‘Child-friendly language is used to share LO with pupils’ and the subset score on Item 3: ‘Pupils are reminded about the links between what they are learning and the big learning picture’ were rated as Established. The least rated were Item 16: ‘Pupils are given responsibility for checking their own LOSC of lessons’ and Item 13: ‘LOs are available throughout lessons in a manner that is accessible and meaningful for all pupils’, ranked between Never to Sporadic. The divergent categories were labelled as follows: Item 3: Assessment and real-life (also relevant to the themes: Clear aim and Planning activities); Item 5: Simplified language; Item 13: Availability of LOs; and Item 16: Pupils’ responsibility (also relevant to the theme: Implementation and of course LOSC).

QCD. Item 19: ‘Questions are used to elicit pupils’ prior knowledge on a topic’ was reported as Established moving towards Embedded. On the contrary, Item 31: ‘Pupils can explain to others what they are learning’ was rated as Emerging and Item 24: ‘Assessment techniques are used to encourage teacher questioning by pupils’ was moving from Emerging to Established. The divergent categories were labelled as Item 19: Questioning strategies; Item 24: Assessment techniques; and Item 31: Pupils’ abilities (also relevant to the theme: Implementation).

FB. The highest-rated were Item 37: ‘Teacher-made tests are used diagnostically to identify strengths and needs in teaching and learning’ (between Emerging and Established) and Item 36: ‘Teachers’

praise of pupils work...is deliberately and consistently supplemented with FB that specifies the nature of the progress made' (Established). On the other hand, the lowest-rated were Item 40: 'FB focuses on one or two specified areas for improvement at any time' (between Never and Established) and Item 44: 'Pupils are provided with information on their learning on a minute-by-minute, day-by-day basis rather than the end of week/month/term' (between Emerging and Established). The divergent categories relevant to the FB, Implementation and Review themes, were: Item 36: Compliment with FB; Item 37: Teacher-made tests; Item 40: Specific FB; and Item 44: Timely FB.

PSA. Item 47: 'Lessons on new topics begin with pupils being invited to reflect on their prior learning' (between Embedded to Established), and Item 55: 'Pupils use each other as resources for learning' (between Sporadic to Embedded) were the highest-rated. Meanwhile, Item 46: 'Pupils are encouraged to record their progress using... e.g., learning logs' (Emerging) and Item 58: 'Pupils have ready access to exemplar materials showing work at different levels of achievement across a range of subject areas (between Never and Embedded) were the lowest rankings. These items were labelled in the divergent categories as Item 46: Pupils' progress report; Item 47: Pupils' reflections; Item 55: Pupils' resources; and Item 58: Differentiated exemplars, which were associated with the themes on PSA, Implementation, Review and Summing up.

The ranking of the items provided

the most divergent categories due to the large gap in different opinions among the respondents. These 15 divergent categories based on the 15 items were sometimes probed if the respondents did not mention them in the semi-structured interviews. More importantly, the 15 divergent categories represented the practices on the nine themes in the framework of this study: the four key strategies of AfL (LOSC, QCD, FB, PSA) and the five stages of assessment in pedagogy (Clear aim, Planning activities, Implementation, Review, Summing up) as displayed in column 1, Table 10. The results from Phase I were further investigated in the quest on RQ2 as follows.

Phase II

Eight English language teachers from Phase I participated in Phase II- Qualitative Strand. The purposeful sampling of the four higher scorers (ID=A1-A4) and four lower scorers (ID=B1-B4) in the AfLAI was based on their results, gender, age-range, teaching experience, academic background and mutual consent. They were located at three primary schools in the Hulu Langat district. Five were females, and the other three were males. The three teachers taught the upper primary pupils aged 10 to 11, and the rest taught lower primary pupils aged 7 to 9. The age range of the participants was between 24 to 45, with the range of teaching experience between 0 to 20 years. Five of the participants were bachelor degree holders, and the other three were two Master's graduates and a Master's candidate. The investigation was wrapped

after six interviews and 12 observations upon the saturation of data. The following Table 6 shows the backgrounds of the participants in Phase II: Qualitative Strand.

Table 6
Background of the participants

ID	Gender	Age range	Teaching experience	Academic background	Contribution
A1-A4	M (1), F (3)	25-45	2-16	Bachelor (2), Master's (2)	4 interviews, 5 observations
B1-B4	M (2), F (2)	24-45	0-20	Bachelor (3), Master's candidate (1)	2 interviews, 7 observations

After analysing the data via within-case and cross-case analyses, the 115 recurring findings from Phase II were divided into three profiles: higher scorers, lower scorers and general consensus. The general consensus comprised 60 categories practiced by both the higher and the lower scorers in the AfLAI. In addition, there were 29 categories unique to the higher scorers and 26 categories to the lower scorers. The following subtopic discusses the three profiles. The findings were framed using the four key strategies of AfL within the five stages of assessment in pedagogy, labelled as nine stages: Clear aims, Planning activities, Implementation, sharing LOSC, QCD, FB, PSA, Review and Summing up.

Profile of the Higher Scorers. The 29 practises in the i higher scorers, whether individually or collectively. For instance, one higher scorer mentioned using SMART strategies in determining the LOs, by saying: ‘need to have this... SMART (*Specific,*

Measurable, Attainable, Realistic...Time)’ as one of the strategies.

The activities suggested in the CEFR-aligned curriculum and the Scheme of Work such as ‘...quizzes, question papers, prompts, language games...’ were also included in the Planning Activities and Implementation stages.

It was believed that every pupil must be ‘...in the same line...’ in achieving the shared LO. On the other hand, one of the higher scorers prepared a sum chart to record the group achievements in a lesson.

QCD was practiced to encourage the pupils to socialize among themselves. ‘Two-way communication between the pupils and the teachers...’ was necessary. According to a higher scorer, ‘...you can ask questions from minimal level to maximum level like asking *Wh* questions...’, in other words, begin with the more straightforward questions, then move to the more difficult questions.

In primary school ELE, ‘...some lower proficient pupils need extra guidance in the

practice of giving FB'. The higher scorers provided guided thinking, a scenario, language structures and simplified sign language or gestures to encourage the pupils in giving FB. In addition, one of the higher scorers used mini-surveys so that the pupils could practice exchanging FBs among themselves.

One of the PSA strategies practised by the higher scorers was '*...Parking Lots for the pupils to see their own understanding.*' Self-assessment was indicated as an important skill. One of the suggestions on the SA strategy was checking one's work

with exemplars from the fast finishers. In peer-assessment, the whole class was instructed to check their peer's writing on the whiteboard.

The lesson Review stage was sometimes conducted via QCD or language games.

During the Summing up stage, sometimes the higher scorers recapped the new words learnt on that day or reminded the pupils of their homework or ongoing projects. In addition, the exemplars from the early finishers were sometimes displayed during the Summing up stage. The following Table 7 shows the higher scorers' profiles.

Table 7

Profile of the higher scorers

Stages/themes/categories	Frequency by the higher scorers
Clear aims	
SMART objectives	1
Implementation	
Quiz	1
Question papers	1
Prompts	1
Language games	1
Sharing LOSC	
All the pupils in the same line	1
Sum chart for SC	1
QCD	
Use questions from easy to difficult	1
Use classroom discussions to socialise	1
Ask to clarify any confusions	1
Encourage pupils to ask the teacher	1

Table 7 (Continued)

Stages/themes/categories	Frequency by the higher scorers
FB	
Teacher provides guided thinking or giving scenarios as FB	2
Focus on constructing learning culture via FB	1
FBs from pupils are used to review the lesson	1
Types of FB depending on the lesson–sign or verbal	1
Tangible FB (e.g., stickers, stamps)	2
The culture of pupils being afraid to give FB	1
Pupils are trained to give FB using language structures	1
Use survey activities to train pupils in exchanging FB	1
PSA	
An example of SA–Parking Lots to see own understanding	1
SA is important as a reflection in a pupil	1
Fast finisher asked to read the answers aloud	2
Pupils listen to the fast finisher and check their own work	2
Checking peers writing on the whiteboard	2
Review	
Review via QCD	1
Review with a game	1
Summing up	
Identify new words	2
Homework and/or on-going project instructions	2
The teacher displays an exemplar on the on-going project	1

Profile of the Lower Scorers. The 26 practises unique to the lower scorers were also beneficial to the classroom, as shown in the following Table 8.

Table 8

Profile of the lower scorers

Stages/themes/categories	Frequency by the lower scorers
Implementation	
Colour codes	1
Assessment of learning	1
AfL	1
Sharing LOSC	
Sometimes forget to share LOSC	1
Use LOSC targets for the standardised assessment	1
QCD	
Pupils need clear instructions for discussions	1
Teacher asks questions to do a perception tag on the pupils	1
Frequent questionings so pupils are engaged in the lesson	1
Questions during the teaching point in 15 minutes	1
Lesson time is affected with QCD	1
Pupils are more confident during whole class QCD	1
FB	
FB is given if pupils complete the task	1
FB is given once a week	1
FB is given based on exam papers	1
Sometimes FB is too much for weak pupils	1
PSA	
Hard for lower proficient pupils to do SA	1
Some pupils are confused with PSA	1
Time consuming to make sure each pupil practice PSA	1
Gallery Walk: a PSA strategy	2
Teacher displays a written exemplar from a fast finisher	1
Review	
Check pupils' progress in the lesson using a list	1
Review lessons near examinations	1

Table 8 (Continued)

Stages/themes/categories	Frequency by the lower scorers
Summing up	
Rewards to the pupils	1
Sharing session on the answers of the activities	2
Immediate corrections	1
Taking pictures of pupils and their art work	1

Some differences were found in the Implementation stage. For example, in a lower primary class, a lower scorer used colour codes on the whiteboard to differentiate between the notes that the pupils should read and the notes that the pupils should copy. On the other hand, another lower scorer admitted to the practices of AfL and assessment of learning as being equally important.

In the sharing LOSC stage, sometimes a lower scorer seemed to forget to practice the strategy, but he operationalised the LOSC targets for the standardised assessment.

At least six practices were unique to the lower scorers in the QCD stage. According to a lower scorer, the pupils can be more confident in whole class QCD, and they need clear instructions: *'...in a weaker class, I will use classroom discussions because by doing that, students will be more confident to answer the questions, instead of asking them one by one. When they answer in discussions or giving opinions, they would likely express themselves more freely than if they're asked one by one...'* Sometimes the teacher asked questions to do a perception tag on the pupils. During the first 15 minutes of the lesson, there should be frequent

questioning to engage the pupils. However, it was sometimes perceived that lesson time is affected when the QCD strategy was practised.

On the FB stage, the lower scorers gave FB if pupils have completed the task once a week or based on exam papers. Sometimes, FB was regarded as too much for the weak pupils.

It was considered hard for lower proficient pupils to do SA because some became confused with the PSA strategy. Moreover, it would be time-consuming to make sure each pupil practice PSA. Nevertheless, a lower scorer displayed a written exemplar from a fast finisher in the PSA strategy practice.

The Review stage was an opportunity to check the pupils' progress in the lesson using a list. Sometimes, the teacher also reviewed the lessons when the examination was around the corner.

During the Summing up stage, the lower scorers rewarded the pupils after sharing sessions on the answers to the activities. There were also immediate corrections. One of the lower scorers took pictures of the pupils and their artwork as a gesture of appreciation.

The differences between the higher and lower scorers were limited in the stages: Clear aims, Implementation, sharing LOSC, QCD, FB, PSA, Review and Summing up. Therefore, the following General consensus profile covered all nine stages, including the stage on Planning activities.

General Consensus Profile. There were 60 practises in the nine stages, which were applied by both the higher scorers and the lower scorers, as presented in the following Table 9.

Table 9

General consensus

Stages/themes/categories	Frequency by consensus
Clear aims	
One clear aim	8
Specific language skills	6
Refer to the SOW	5
Specific topic	8
Planning activities	
Consider the pupils' levels in real life	5
Link with the previous lessons	3
Lesson plan	4
Learning aids	7
Refer to the SOW	8
Implementation	
Observation	2
Explanation on the activities in the lesson	4
Homework	2
Sharing LOSC	
Tell pupils what they are going to learn	8
SC based on the levels of the pupils	3
At the end of the lesson, check LOSC achievement	3
Keywords in the lesson	3
LOSC in words for proficient pupils	4
LOSC in pictures for less proficient pupils	3
Write LO on the whiteboard	3
Use child-friendly language in LOSC for the young learners	2

Table 9 (Continued)

Stages/themes/categories	Frequency by consensus
QCD	
Use questions to check pupils' understanding	5
Use different kinds of questions	6
Have discussions because pupils like to talk	2
Can't force the pupils to use the target language 100%	2
Need to plan and prepare items for classroom discussions	2
Pupils can critic, can agree and disagree in discussions	2
Pupils need guidance in classroom discussions	3
Need to use Malay language to make sure pupils understand	2
Waiting time for the pupils to answer the questions	6
FB	
Teacher asks questions/probes to get FB from the class	4
Teacher gives specific and simple FB to individual pupils	4
Teacher gives FB in English even when pupils speak Malay	3
Differentiated FB—words, then pictures	5
Scaffolding FB using pictures, then questions, then answers	3
Peers are allowed to give FB	6
PSA	
SA—know your level and what to be done	2
PA—get multiple FB from peers	2
PSA among children need to be guided and trained	4
Pair work—pupils check on their partners	3
PSA mostly on written work (e.g., spelling)	3
Pupils do corrections based on PSA	3
SA based on worksheets or checklists	2
PSA is applicable during reading and speaking lesson	2
Review	
FB from the teacher and pupils near the end of the lesson	4
Repeat the lesson to achieve the intended objectives	4
Check individual pupils near the end of the lesson	2
Enrich, give more examples and explanations as a review	3
Complete the tasks within the review time	2
Summing up	
Discuss the moral values	2
Pupils listen, sing and chant again	3
The teacher compliments the achieved tasks	3
Repeat the language structures in the lesson	3
Reminder on the submission of tasks	2

In short, there was mutual consensus in the practices of having one Clear aim, a specific topic, refer to the SOW and tell the pupils what they will learn. In the other stages, the shared practises are as follows.

All the participants had clear aims and followed the specific topics in the textbooks and the curriculum. They also prepared daily lesson plans based on the SOW. Each aim in the lesson was targeted according to specific language skills.

In the Planning activities stage, the teachers considered the pupils' levels and used suitable learning aids according to the levels. The activities in a lesson were usually linked to the previous lessons.

During the Implementation stage, observations on the pupils were practised. The teachers also provided explanations on the upcoming activities in the lesson, including homework tasks.

To share LOSC, the teachers told the pupils about what they were going to learn verbally, in writing, or using pictures, according to their level of understanding. The Success criteria were also determined based on the pupils' levels. Near the end of the lesson, the LOSC was checked against the pupils' achievements to scan their progress and understanding.

In the QCD stage, the participants used different types of questions to check the pupils' understanding. Moreover, during the QCD stage, the pupils can socialise, criticise, agree and disagree. Since the pupils usually like to talk to each other, QCD was the preferred AfL strategy. The only issue was the use of Bahasa Melayu

instead of the target English language during QCD. Prior to a QCD activity, extra preparations were needed, such as items to start conversations and suitable learning aids. Some of the pupils needed continuous guidance throughout QCD sessions. Some of the participants resorted to Bahasa Melayu, while some maintained using simplified English to accommodate the pupils who were reluctant to communicate in the target language. Using Bahasa Melayu was argued as acceptable systematically in certain situations (Romli & Abd Aziz, 2015; Romli et al., 2021), in this case, for the young learners to learn the target language. Nevertheless, all the participants always gave optimum waiting time in getting responses and interactions with the pupils during QCD.

Regarding the FB stage, the participants mostly agreed that the pupils had to be trained not to be afraid to exchange FBs. Most of the time, the teachers would ask questions and probe the pupils to get their FB. Nevertheless, the participants gave simple and specific FB throughout the lessons to individual pupils when necessary. Written FBs were given when the participants marked their pupils' books or on the whiteboard during a lesson. One time, when the pupils could not read the words on the whiteboard and copied the wrong spelling, the teacher would use bigger fonts for the pupils to do the corrections and recall the keywords. Verbal compliments and gestures as FB from peers were also encouraged when necessary, such as whole class applause. Some of the younger pupils

appreciated tangible FBs such as stickers or stamps. Similar to the Questioning strategy, the FB strategy was also differentiated and scaffolded to consider the pupils' reactions and comprehension. There was a need to translate the FB into Bahasa Melayu for the lower proficient pupils from time to time. In cases when the pupils could not give FB even after some waiting time, their peers were allowed to chip in.

The PSA stage was defined as the pupils knowing their level and what to be done to improve their learning. Peer-assessment served a purpose to get multiple FBs from the peers in the classroom. PSA among the children needed much guidance from the teachers. One of the most frequent strategies was checking a partner's spelling as PSA, followed by self-corrections. SA was also done by giving the pupils a worksheet or a checklist of tasks with the teacher's guidance.

In the Review stage, some participants repeated the gist of the lesson, some checked the individual pupils finishing their tasks, and some exchanged FBs with the pupils. Sometimes, the teacher included enrichments with extra examples and explanations. However, most importantly, the pupils were usually required to complete the class tasks during the Review stage.

Lastly, during the Summing up stage, some participants held mini QCDs on moral values. Others instructed the pupils to repeat the language structure, the song or the chant taught earlier. The pupils were also reminded to complete their ongoing projects during the Summing up stage.

The general consensus provided some evidence that regardless of whether the teachers were higher or lower scorers in the AfLAI, they had practised the four key strategies of AfL and the five stages of assessment in pedagogy in their respective classrooms. It should also be noted that this data was based on self-reports and observations. Therefore, the data may not be perfectly accurate (Black, 2015; Lysaght, 2009), but at least some of the interactions recorded during the observations proved that as humans, we tend to be positive and choose to show our best foot forward (Mohamed et al., 2019; Ryan et al., 2012). Further discussions on the quantitative and qualitative data follow.

The Interpretation of How the Phase II Findings Explain the Phase I Results

Phase I had answered RQ1, and Phase II resonated with RQ2. Consequently, RQ3 was the mixed method research question in this study. As discussed earlier, 15 divergent categories from the AfLAI results in Phase I would be explained with qualitative data from Phase II quotes. The following joint display: Table 10 serves a purpose to answer RQ3.

From the joint display, there were 11 similarities and four differences between the quotes from the lower scorers and the higher scorers of the AfLAI. The discussion on the similarities and the differences follows.

DISCUSSION

Based on the joint display (Table 10), there were more similarities than differences

Table 10

Quotes related to the divergent categories among the lower and the higher scorers in the AfLAI

Divergent categories	Quotes
1: Assessment and real life (Similar)	
Lower AfLAI score	“...I only sometimes have one aim in my lesson, for example: ‘to be able to write a paragraph’... if they could write a paragraph by the end of the lesson, with my guidance, I’ll be happy enough.”
Higher AfLAI score	“...need to have this SMART (Specific, Measureable, Attainable, Realistic, Time) [in the objectives].”
2: Simplified language (Similar)	
Lower AfLAI score	“...it must be comprehensible by the pupils. If they do not understand it, there is no point for you to tell them.”
Higher AfLAI score	“...among lower proficient pupils, I usually don’t share the LOSC in words, but pictures...”
3: Availability of LOs (Different)	
Lower AfLAI score	“...sometimes I will share [LOSC] but sometimes I will forget that.”
Higher AfLAI score	“I will write [the LO] on the board.”
4: Pupils’ responsibilities (Similar)	
Lower AfLAI score	“I think it’s quite good to share the LO with them because they will know what they are learning and they will not feel clueless about what they will learn in the classroom. SC, I’m not sure. I will not make the students feel expected to do the SC, which means they will learn on their own and will not be pressured by the SC: what they need to do...the end of the lesson.”
Higher AfLAI score	“...before I start my lesson, I will tell my students...the objectives, then the success criteria...at the end, I will repeat, I’ll ask the pupils: they achieved the objectives? ... introduce a sum chart [for group achievements] for SC.”
5: Questioning strategies (Different)	
Lower AfLAI score	“I need to ask questions very frequently so that pupils are engaged in the lesson, and I can do a perception tag each and every time I’m giving them a new information in the classroom.”
Higher AfLAI score	“I use different kinds of questions to check back whether they could understand, depending on the pupils at that time.”

Table 10 (Continued)

Divergent categories	Quotes
6: Assessment techniques (Similar)	
Lower AfLAI score	"...assessment, it depends, if it is assessment of learning it will be examinations, tests, and if it is AfL, for a lesson to take place, it will be based on the homework that I gave them, what I've taught them."
Higher AfLAI score	"...you can do many things, for example from your own observation or mini quiz, question papers, and homework. I give them certain things that may show whether they could understand or not. Playing games can be used as assessment like matching, puzzles..."
7: Pupils' abilities (Similar)	
Lower AfLAI score	"...in a weaker class, I will use classroom discussions because by doing that, students will be more confident to answer the questions, instead of asking them one by one. When they answer in discussions, or giving opinions, they would likely to express themselves more freely than if they're asked one by one."
Higher AfLAI score	"...from the discussion, we could see how the pupils could understand or not, the lesson, the level, whether they have that kind of thing to know their level."
8: Compliment with FB (Different)	
Lower AfLAI score	"I will give FB by giving them the compliments and telling their friends are doing the correct job and you need to follow their example."
Higher AfLAI score	"I think, it's good in terms of motivating them, but I think for constructing thinking, I think that's way better... I think if we are focusing on constructing learning culture in them, I think, giving them a constructive FB is very important."
9: Specific FB (Similar)	
Lower AfLAI score	The teacher then gave a clear instruction on the importance of listening carefully the second time, and gave specific warning to those who did not follow the instruction.
Higher AfLAI score	The teacher asked the pupils to refer to a specific page.
10: Timely FB (Similar)	
Lower AfLAI score	"I will give FB only if they finish the work given... because, the lack of time, I focus on them to finish the work first, so, FB is likely to be done once a week."
Higher AfLAI score	"...we have to look and see what are the FB on certain things so that we know whether we could proceed further with the lesson or we could review back at whatever we need to review. Depends on the lesson or the activity."

Table 10 (Continued)

Divergent categories	Quotes
11: Teacher-made test (Similar)	
Lower AfLAi score	“...assessment, it depends, if it is assessment of learning it will be examinations, tests, if it is AfL, for a lesson to take place, it will be based on the homework that I gave them, what I’ve taught them...”
Higher AfLAi score	“...some aspects we can assess using exams, some can’t be assessed via exams...”
12: Pupils’ progress report/self-assess (Different)	
Lower AfLAi score	“I will check through a checklist, give the pupils a checklist and ask them to tick the things that they have achieved.”
Higher AfLAi score	“...you know you, you know your level and what to be done... self-assessment among students, for example the Parking lot system, from where they will see how much the lessons have helped them in understanding certain area. I think SA among students should be guided... I think SA is very important as a reflection for themselves.”
13: Pupils’ reflections (Similar)	
Lower AfLAi score	“...if it is AfL, for a lesson to take place, it will be based on the homework that I gave them.”
Higher AfLAi score	The teacher made sure the pupils were able to recall the previous lesson before beginning a new lesson.
14: Pupils’ resources (Similar)	
Lower AfLAi score	During the QCD, the pupils corrected each other when necessary.
Higher AfLAi score	“...let them talk peer-to-peer”. The pupils corrected their peer who wrote on the whiteboard, when necessary.
15: Differentiated exemplars (Similar)	
Lower AfLAi score	During the writing session, the teacher showed an exemplar from the pupil who did the written task neatly.
Higher AfLAi score	In a speaking lesson, the teacher wrote language structures on the whiteboard. Some pupils used the language structures to present what they have learnt and their peers listened. Some referred to the structure, some say their own sentences.

among the practices of the higher scorers and the lower scorers in the AfLAI. This finding suggested that the inclination of self-bias in giving self-reports were possible (Ryan et al., 2012).

The eleven similarities were on: Assessment and real-life; Simplified language; Pupils' responsibilities; Assessment techniques; Pupils' abilities; Specific FB; Timely FB; Teacher-made test; Pupils' reflections; Pupils' resources; and Differentiated exemplars.

The first difference was in the Availability of LOs, whereby the lower scorer claimed that he '*...sometimes will share [the LOSC] but sometimes... forget that*'. On the contrary, the higher scorer made sure the LO was shared.

The second difference was on the Questioning strategies that involved more frequent questionings by the lower scorer. Meanwhile, the higher scorer alleged that she '*...use[s] different kinds of questions...*' to assess the pupils' understanding. This finding challenged Sardareh and Mohd Rashid (2013) data, whereby the lower primary teachers were claimed to have used questions '*...below the pupils' Zone of Proximal Development (ZPD) and did not help their thinking skills.*'

Next, the difference was on Compliment with FB. It was interesting to note that the lower scorer complimented his pupil and made the work an exemplar. On the other hand, the higher scorer decided that '*...giving them a constructive FB is very important...*' compared to complimenting them, although '*...it's good in terms of motivating them...*'.

The last difference was about the Pupils' progress report/self-assess, on which the lower scorer provided a clear-cut example of using checklists for the pupils to '*...ask them to tick the things that they have achieved....*' The higher scorer suggested more guidance for the pupils to produce their progress reports. The different strategies could be suggested for future studies.

CONCLUSION

This sequential explanatory research had framed a part of the English language teachers' practises and voices regarding their practices on the four key strategies of AfL and the five stages of assessment in pedagogy (the nine stages/themes/categories). In Phase I: Quantitative Strand, AfLAI respondents self-reported that their practises on the key strategies of AfL were *Emerging: Happens 50% of the time* in their lessons. Furthermore, 15 divergent categories were also derived from the highest and the lowest mean average rating on the 58 items. Next, the participants in Phase II: Qualitative Strand had provided in-depth data via interviews and lesson observations on the nine stages/themes/categories by providing a total of 115 recurring practises in the assessment strategies. In sequence, the 15 divergent categories from Phase I were explained with the in-depth data from Phase II to observe the similarities and the differences between the AfL and assessment in pedagogy practises among the selected different scorers in the AfLAI. These similarities determined that the higher or lower scores in the AfLAI did not affect

the participants' understanding and practises on the 11 divergent categories. On the other hand, the differences in the divergent categories became evidence for the multiple realities in the practices of the concept.

Regardless in the education or assessment system changes, these practices could always be improvised, especially when the teachers participate in Professional Learning Communities at their site as researched (Lysaght, 2009). Moreover, these practises are not limited to the English language subject per se but are applicable across disciplines and in online lessons. Nevertheless, it could be observed that all the assessment practises in SBA are not limited to examination-orientations because the higher target would be able to inculcate self-regulated learners on a lifelong basis.

ACKNOWLEDGEMENT

This article was written with the support of the supervisors, the feedback from the reviewers and the editors, and two semesters of scholarship from MyBrain15. The data were collected with the approval from the Ministry of Education Malaysia, the Selangor State Education Department, the Hulu Langat District Education Department, the headteachers and the participants. Much appreciation and thanks to all.

REFERENCES

Alderson, J. C., & Wall, D. (1993). Does washback exist? *Applied Linguistics*, 14(2), 115-129. <https://doi.org/10.1093/applin/14.2.115>

Alla Baksh, M. A., Mohd Sallehudin, A. A., Tayeb, Y. A., & Norhaslinda, H. (2016). Washback effect

of school-based English language assessment: A case-study on students' perceptions. *Pertanika Journal of Social Sciences & Humanities*, 24(3), 1069-1086.

- Azman, H. (2016). Implementation and challenges of English language education reform in Malaysian primary schools. *3L: The Southeast Asian Journal of English Language Studies*, 22(3), 65-78. <http://doi.org/10.17576/3L-2016-2203-05>
- Babbie, E. (2007). *The practice of social research* (11th ed.). Wadsworth/Thomson.
- Black, P. (2013). Formative and summative aspects of assessment: Theoretical and research foundations in the context of pedagogy. In J. H. McMillan (Ed.), *Sage handbook of research on classroom assessment* (pp. 167-178). SAGE Publications. <http://doi.org/10.4135/9781452218649.n10>
- Black, P. (2015). Formative assessment - an optimistic but incomplete vision. *Assessment in Education: Principles, Policy & Practice*, 22(1), 161-177. <https://doi.org/10.1080/0969594X.2014.999643>
- Brown, G. T. L. (2019). Is assessment for learning really assessment? *Frontiers in Education*, 4(64), 1-7. <https://doi.org/10.3389/educ.2019.00064>
- Cohen, L., Manion, L., & Morrison, K. (2007). *Research methods in education* (6th ed.). Routledge/Taylor & Francis Group. <https://psycnet.apa.org/record/2007-05446-000>
- Creswell, J. W. (2014a). *A concise introduction to mixed methods research*. SAGE Publications.
- Creswell, J. W. (2014b). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). Sage Publications, Inc.
- Creswell, J. W., & Creswell, J. D. (2017). *Research Design: qualitative, quantitative and mixed methods approaches* (5th ed.). SAGE Publications.
- Creswell, J. W., & Plano Clark, V. L. (2011). *Designing and conducting mixed methods research* (3rd ed.). SAGE Publications.

- Hallam, S., Kirton, A., Peffers, J., Robertson, P., & Stobart, G. (2004). *Evaluation of Project 1 of the Assessment is for Learning Development Programme: Support for Professional Practice in Formative Assessment – Final Report*. The Scottish Government. <https://discovery.ucl.ac.uk/id/eprint/1507418/>
- Hattie, J. (2008). *Visible learning: A synthesis of over 800 meta-analyses relating to achievement*. Taylor & Francis.
- Hattie, J. (2012). *Visible learning for teachers: Maximizing impact on learning*. Routledge/Taylor & Francis Group.
- Hattie, J., & Clarke, S. (2019). *Visible learning: Feedback*. Routledge.
- Hattie, J., & Zierer, K. (2018). *10 Mindframes for visible learning: Teaching for success*. Routledge. <https://doi.org/10.4324/9781315206387>
- Hattie, J., & Zierer, K. (2019). *Visible learning insights*. Routledge.
- Khan, A. B. M. A., Abd Aziz, M. S., & Stapa, S. H. (2019). Examining the factors mediating the intended washback of the English language school-based assessment: Pre-service ESL teachers' accounts. *Pertanika Journal of Social Sciences & Humanities*, 27(1), 51-68.
- Lysaght, Z. (2009). *From Balkanisation to boundary crossing: Using a Teacher Learning Community to explore the impact of assessment on teaching and learning in a disadvantaged school* [Master's thesis, Dublin City University]. <http://doras.dcu.ie/22527/>
- Lysaght, Z., & O'Leary, M. (2013). An instrument to audit teachers' use of assessment for learning. *Irish Educational Studies*, 32(2), 217-232. <https://doi.org/10.1080/03323315.2013.784636>
- Lysaght, Z., & O'Leary, M. (2017). Scaling up, writ small: Using an assessment for learning audit instrument to stimulate site-based professional development, one school at a time. *Assessment in Education: Principles, Policy & Practice*, 24(2), 271-289. <https://doi.org/10.1080/0969594X.2017.1296813>
- Lysaght, Z., O'Leary, M., & Ludlow, L. (2013). Measuring teachers' Assessment for Learning (AfL) classroom practices in elementary schools. *International Journal of Educational Methodology*, 3(2), 103-115. <https://doi.org/10.12973/ijem.3.2.103>
- Mansor, A. N., Leng, O. H., Rasul, M. S., Raof, R. A., & Yusoff, N. (2013). The benefits of school-based assessment. *Asian Social Science*, 9(8), 101-106. <https://doi.org/10.5539/ass.v9n8p101>
- Marshall, B., & Drummond, M. J. (2006). How teachers engage with Assessment for Learning: lessons from the classroom. *Research Papers in Education*, 21(2), 133-149. <https://doi.org/10.1080/02671520600615638>
- Ministry of Education Malaysia. (2012). *Malaysia Education Blueprint 2013-2025 (Preschool to Post-Secondary Education)*. http://www.moe.gov.my/cms/upload_files/articlefile/2013/articlefile_file_003108.pdf
- Ministry of Education Malaysia. (2016). *Quick facts 2016 Malaysia Educational Statistics*. Education Data Sector, Educational Planning and Research Division. <https://www.moe.gov.my/muat-turun/penerbitan-dan-jurnal/terbitan/buku-informasi/1586-quick-facts-2016/file>
- Mohamad Uri, N. F., & Abd Aziz, M. S. (2018). Implementation of CEFR in Malaysia: Teachers' awareness and the Challenges. *3L: The Southeast Asian Journal of English Language Studies*, 24(3), 168-183. <http://doi.org/10.17576/3L-2018-2403-13>
- Mohamed, M., & Abd Aziz, M. S. (2018). Juxtaposing the primary school assessment concepts and practices in Singapore and Malaysia. *International Journal of Engineering & Technology*, 7(3.21), 552-556. <http://doi.org/10.14419/ijet.v7i3.21.17232>

- Mohamed, M., Abd Aziz, M. S., & Ismail, K. (2019). The validation of assessment for learning audit instrument: A mixed methods approach. *3L: The Southeast Asian Journal of English Language Studies*, 25(4), 209-226. <http://doi.org/10.17576/3L-2019-2504-13>
- Mohd Don, Z., Abdullah, A. C., Abd Samad, A., Abdullah, M. H., Singh, K. K. K., Lee, B. H., Pillai, J. P. @ L., Abu Bakar, M., Salim, S., & A. Alias, M. K. (2015). *English Language Education Reform in Malaysia: The Roadmap 2015-2025*. Ministry of Education Malaysia.
- Nasri, N., Roslan, S. N., Sekuan, M. I., Abu Bakar, K., & Nor Puteh, S. (2010). Teachers' perception on alternative assessment. *Procedia-Social and Behavioral Sciences*, 7, 37-42. <https://doi.org/10.1016/j.sbspro.2010.10.006>
- Onwuegbuzie, A. J., Bustamante, R. M., & Nelson, J. A. (2010). Mixed research as a tool for developing quantitative instruments. *Journal of Mixed Methods Research*, 4(1), 56-78. <https://doi.org/10.1177/1558689809355805>
- Ratnam-Lim, C. T. L., & Tan, K. H. K. (2015). Large-scale implementation of formative assessment practices in an examination-oriented culture. *Assessment in Education: Principles, Policy & Practice*, 22(1), 61-78. <https://doi.org/10.1080/0969594X.2014.1001319>
- Romli, N. H., & Abd Aziz, M. S. (2015). The use of Bahasa Melayu in the English language classroom by 'non-optionist' English teachers. *Procedia - Social and Behavioral Sciences*, 172(2015), 770-777. <https://doi.org/10.1016/j.sbspro.2015.01.431>
- Romli, N. H., & Abd Aziz, M. S., & Krish, P. (2021). Investigating the utilisation of the micro-functions of Bahasa Melayu by english teachers. *3L: Language, Linguistics, Literature*, 27(1), 34-46. <https://doi.org/10.17576/3L-2021-2701-03>
- Ryan, K., Gannon-Slater, N., & Culbertson, M. J. (2012). Improving survey methods with cognitive interviews in small- and medium-scale evaluations. *American Journal of Evaluation*, 33(3), 414-430. <https://doi.org/10.1177/1098214012441499>
- Sardareh, S. A., & Mohd Rashid, M. S. (2013). Malaysian primary school ESL teachers' questions during assessment for learning. *English Language Teaching*, 6(8), 9. <https://doi.org/10.5539/elt.v6n8p1>
- Talib, R., Kamsah, M. Z., Abu Naim, H., & Abdul Latif, A. (2014). From principle to practice: Assessment for Learning in Malaysian school-based assessment classroom. *International Journal of Social Sciences and Education*, 4(4), 8. <http://ijsse.com/sites/default/files/issues/2014/v4-i4-2014-1/Paper-11.pdf>
- Tashakkori, A., & Creswell, J. W. (2007). Editorial: The new era of mixed methods. *Journal of Mixed Methods Research*, 1(1), 3-7. <https://doi.org/10.1177/2345678906293042>
- Tayeb, Y. A., Abd Aziz, M. S., Ismail, K., & Khan, A. B. M. A. (2014). The washback effect of the General Secondary English Examination (GSEE) on teaching and learning. *GEMA Online Journal of Language Studies*, 14(3), 83-103. <https://doi.org/http://dx.doi.org/10.17576/GEMA-2014-1403-06>
- Wiliam, D. (2018). *Embedded Formative Assessment* (2nd ed.). Solution Tree Press.

Leadership Attitude and Clan-Structure: Lessons for Leadership Practices in Contemporary Post-Conflict Nation Building in Somalia

Abdisamad Hassan

College of Law Government and International Studies, Universiti Utara Malaysia, Sintok, Kedah 06010, Malaysia

ABSTRACT

The study analyses the implication of the relationship between leader attitude and Somali Clan-Structure in post-conflict nation-building. The research questions were drawn from a review of relevant literature. Ten subjects were interviewed as a sample to achieve the study objective. Data were thematically analysed using a combination of social identity and reification theories. The results show that clan structure significantly influences Somali leadership attitude in nation-building. The paper argues that since it is clear that the reified clan system exerts a strong unfavourable influence on the future attitudes of Somali leaders towards nation building, the clan structure must be repositioned. Notably, the study discovered that the rise and fall of Siad Barre's efforts in nation-building relate to the adverse influence of Clan-Structure on the leader's attitude. As glaringly made clear by this study, attitudes that adversely affected nation-building in Somalia, as depicted by Siad Barre, were dictatorial, nepotistic, egoistic and survivalist. The consequence has been the fragmentation of the Somali political system into clan particularism resulting in a survivalist race and determination of leadership attitude. The study concludes that despite the centrality of Clan-Structure in shaping Somali leaders' attitudes, there is the necessity for a radical departure towards more constitutional-democratic practice for success in post-conflict nation-building. The study presented some recommendations on reforms in relation to clan structure and leadership attitude towards a more constitutionally relevant PCR.

Keywords: Clan structure, leadership attitude, nation-building, post-conflict reconstruction, Somalia

ARTICLE INFO

Article history:

Received: 17 January 2021

Accepted: 28 July 2021

Published: 24 September 2021

DOI: <https://doi.org/10.47836/pjssh.29.3.22>

E-mail address:

cabdisamad0001@gmail.com

ISSN: 0128-7702

e-ISSN 2231-8534

INTRODUCTION

After more than a decade of civil war, Somalia, like several societies ravaged by conflicts, is now transitioning into

post-conflict stages of nation-building (Farah & Handa, 2015). While studies have established that nation-building in a post-war society is a mammoth task, one of the key challenges in the case of Somalia appears to be the retrogressively historical influence of clan structure instituted by Siad Barre's regime (Ingiriis, 2016a, 2016b, 2016c). Although the clan phenomenon has existed in Somalia for centuries, it has, become a topical issue of discourse in relation to being the most critical factor to reckon with as far as the ideological basis for the acquisition of power and legitimacy in Somali politics is concerned. The central argument of this research is that the leadership attitude of President Barre remains an important pointer to the need for a departure from the heavy traditional patronage of the clan structure as a major determinant of leadership attitude in nation-building towards a more constitutional democratic leadership attitude. Finally, the paper offered suggestions for a constitutional alternative post-conflict leadership attitude model adaptation for Somalia.

Conceptual Departure and Theoretical Orientation

Ancient Egyptians was once described Somalia as "the land of Punt, a fabled source of wealth and luxury" (Adibe, 1995, as cited in A. A. Ismail, 2010, p. 9). However, today's description of it is far from that of luxury. It is well documented that clan structure forms the basis for local politics among Somalis (Hassan et al., 2019; I. Ismail, 2010). However, the

transformation and emergence of clan structure as the sole determinant of what, when and how Somali leadership attitude exists became well pronounced during the colonial era and culminated with the regime of Siad Barre. After only nine years of democracy in 1969, President Abdirashid Ali Shermarke was assassinated when the military staged the 1969 coup d'état on October 21 and Siad Barre, a major general gendarmerie, became President of Somalia. Immediately after ascending power, Siad Barre destroyed democratic institutions and imposed a dictatorship that divided the society along with clan affiliations. Barre rewarded his supporters during his military rule, and jailed and even executed his opponents (Ingiriis, 2016c). Shortly after seizing power and the subsequent implementation of "scientific socialism" through the eradication and complete transformation of the clan structure in line with socialism, the so-called unification and eradication of ancient clan divisions led to the clan system being officially banned and made a serious crime punishable by law. Barre employed revolutionary rhetoric in which he presented himself as the "Father" of the Somali nation whose "Mother" was his revolution (Ingiriis, 2016a, 2016d).

Further, intensive media propaganda and orientation at various levels were instituted to consolidate power and control over Somalia. To this effect, Barre introduced Socialist Ideologies to serve as the basis for public orientation towards accepting socialism as the ideal society Somalis should appreciate (Muhammad

et al., 2017). On the symbolic level, Barre replaced the concept of “Whom do you know” to “What do you know”. He also introduced greetings, such as the singular *jaalle* (comrade) or the plural *jaalleyaal* (comrades; Cali & Cawad, 2001). The main objective of the *new form of greeting* was to re-orient the public away from clan loyalty towards modern socialist nationalism, while *comradeship* was to ensure a singular line of thought among Somalis. Other aspects of the socialist ideology and control included, among others, setting up several cooperative farms and factories of mass production and new collective settlements of small villages known as the Danwadaagaha. As part of Barre’s socialist policies, major industries and farms were nationalised, including banks, insurance companies and oil distribution farms.

An important landmark in transforming of the clan structure into a political one was the Clan Klatura policy, which refers to substituting of government officials with loyal clansmen, specifically from three clans, code-named MOD (Iazzolino, 2020; Ingiriis, 2016b). Barre adopted Clan-Klatura as a policy based on “clannism” after the Ogaden War to serve as the new ideology. It became apparent that socialism could not serve to perpetuate him in power. For the Clan-Klatura policy implementation, a 120,000 strong army was built for internal repression and control to ensure the dominance of the MOD. When the Clan-Klatura policy was put in action by Barre, the Isaaq Clan was singled out for a “neo-fascist” type of punishment (Adam, 1994),

resulting in internal resistance movements, such as the Somali National Movement (SNM) established by the Isaaq Clan and the Democratic Front for the Salvation of Somalia (DFSS) by the Majeerteen-Darod clans in 1978 (Adam & Ford, 1997).

Despite Barre’s obsession with Soviet guidance, it turned out that not everyone in Somalia condoned the socialist path taken by his regime (Muhammad et al., 2017). Ironically, while Barre overtly sought measures to eliminate clan and lineage divisions, the only option open to him was to overtly rely on older, time-honoured ties of loyalty that became handy at that moment. Further, the value of clan loyalties became more prominent when Barre’s regime survived an unsuccessful coup by the Majeerteen Clan in 1978 (Ingiriis, 2016c, 2016d). Thus, the need to resort to clan structure as a necessity culminated to the peak.

Leadership and Attitude

The appropriateness of leadership in society correlates with nation-building. It manifests in how a leader’s attitude influences on the levels of economic success, higher growth (Fukuyama, 2008; Putnam, 2016; Russell, 2017; Siisiainen, 2003) and civic engagement (Putnam, 2001). Thus, literature abounds to indicate how the attitudes of any leadership can facilitate nation-building through holistic social and economic approaches (Cortez & Johnston, 2020; Croson, 1999; Sheer, 2015; Walker & Kavedžija, 2015), yet little is emphasised on why nation-building is hard to be

attained when there is an attitudinal flaw in leadership. Therefore, as the writer argued, a good quality leadership attitude is critical via attitudinal and behavioural components that can promote good governance, reduce social disintegration, increase social participation, enhance social welfare and ultimately culminate into successful nation-building. The fact that different countries have different historical antecedents, which determine the quality of leadership, suggests that institutions play an important role in shaping the attitudinal components of leadership. While the existing literature discusses the determinants of leadership quality from different perspectives (Hassan et al., 2019), the possible impact of clan institutions on the general evolution of leadership attitudinal components on nation-building is not well researched (Winston & Fields, 2015). Some observations in Somalia's current situation may suggest that the leadership crisis confronting the country at the national level is rooted in the historical influence of clan institutions on the attitudinal components of leadership in national development. As noted by Lewis (2002), "If all Somalis are to go to hell, tribalism will be their vehicle to get there" (p. 22).

An attitude is the learned and global evaluation of a person, object, place or issue that influence thought and action (North & Fiske, 2015; Omer et al., 2015). While an attitude as a construct hypothetically represents an individual's extent of like or dislike for something, attitudes are generally positive or negative views. Within the

Jungian perception of attitude, the emphasis is on a readiness of the psyche to act or react in a certain way towards an attitude object (Sermabeikian, 1994). An attitude as a social value refers to a general pattern in a group, resulting from communication and acting as an important determinant of the behaviour of a person as a group member (Lloyd-Sherlock, 2018). Thus, attitudes provide a mechanism of social control and a tendency towards influencing individual and group activity. In Somalia's history of nation-building, a variety of attitudes played critical roles. It seemed to have played an important role in the current state of affairs with regard to nation-building, ranging from a warlordism attitude, parochial attitudes, nationalist attitude and a strong seminary attitude (Abdi, 2011; Bryden, 2003; Ingiriis, 2016b; Omar & Omar, 2015).

The theoretical orientation of the paper is the social identity theory developed by Tajfel (1979; as cited in Insko et al., 1992; Tajfel & Robinson, 2002). Recent theoretical and methodological discussions (Mathende & Nhapi, 2018; Rabiee, 2017; Wallen & Fraenkel, 2013) have provided new inspirations to apply this theory for empirical studies in leadership attitude (Hassan et al., 2019; Wu & Parker, 2017). Thus, the social identity theory was used to conceptualize the relationship between Clan-structure and Barre's leadership attitude in nation-building. Further, the transformation of clan structure from its original formation into a political machine in the era of Barre's regime was analysed using Reification (Arato, 1972; Barton & Hamilton, 2005; Gartman, 1991).

Literature Review

Ancient Egyptians Somalia was once described as “the land of Punt, a fabled source of wealth and luxury” (Gerhart & Ginifer, 1996, as cited in A. A. Ismail, 2010, p. 9). But today’s description is far from any description of luxury due to the long-standing and equally devastating conflict rooted in the relationship between clan structure and leadership attitude. Within the current decade, several studies have noted that Somalia, like several societies ravaged by conflicts, is now moving towards various phases of Post-conflict nation-building (Gure et al., 2016; Omer et al., 2015). Related studies on Post-conflict nation-building have proposed various issues to be addressed in Somalia, including constitutional transformation and the restoration of the collapsed central government (Berardi, 2002; Farah & Handa, 2015; Giustozzi, 2016; Mutahi & Ruteere, 2017). However, a major challenge neglected by these studies, which must be faced by any current or potential Somali leadership, appears to be the menace of clan structure on the attitude of leadership.

The clan’s influence on leadership attitude can be inferred from several other studies on the role of previous leadership, who maintained power by the manipulation of clan lineage (I. Ismail, 2010; Makhubela & Schoeman, 2010). It is evident in post-independence Somalia that except for President Adam Abdulle, most leaders in Somalia directly contributed to the disintegration of the society by depicting attitudes of favouritism and oppressing

their opponents (Cotran & Rubin, 2021). Moreover, whenever Somalia leaders felt that their clan’s support was waning, they formed clan tensions that crowned them to protect their clan and unite it to support them. Further, Somali leaders have also corrupted the political system and prevented establishing solid and inclusive political and economic institutions. For example, President Barre offered all the important positions in the government to his MOD alliance to support the perpetuation of his leadership.

Further, Barre mostly excluded the public from important state military and civilian posts (Ingiriis, 2016b). Thus, again, the compartmentalisation of the Somali society into hostile divisions is attributed to his leadership flaws and attitude. As a result, it created the political divide and rule that has deterred any success in attempts towards nation-building. Nevertheless, recent studies have paid less attention to the disintegration of Somali society as a function of leadership attitude. Therefore, leadership attitude and what attitude change can play in achieving the PCR success in nation-building imply a gap in the current literature.

MATERIALS AND METHODS

The research justification for the chosen methodology stems from the nature of reality or ontology. In this research, ontology is blended by historical and political contexts resulting in the socially constructed reality that can be understood through constructivism and qualitative observational research paradigms (Guarino

& Guizzardi, 2016; Scotland, 2012). It is based on the perception that the nature of reality in contemporary political issues in Somalia is largely a matter of historical forces and realism shaped by both values and contexts. That is to say, social issues arise from historical reality and are, therefore, maintained by both past and present circumstances. As such, understanding and making meaning out of current reality requires an inquiry through a qualitative approach. Consequently, the methodology of this paper follows from both ontology and epistemology (Feast & Melles, 2010; Hassan & Shahid, 2010). Thus, this study shall use a qualitative research methodology to explore the relation between clan structure and leadership attitude in nation-building. This qualitative research will draw from several disciplines, such as sociology, social psychology and political science (Merriam, 2002) and others that describe the meaning of clan structure and its relation to leader attitude in nation-building socially constructed.

Data Collection Instrument

The paper used qualitative methods based on two types of data, namely primary data generated through in-depth interviews with experienced and knowledgeable individuals about the subjects under study (Yakubu & Namadi, 2018). The aim was to explore the relationship between Clan-Structure and leadership attitude in Somali nation-building. The role of the researcher is to interview and analyze the data from selected members.

Techniques of Data Collection

The data collection techniques were interviews for which notes were taken and recorded based on the interviewees' responses. Therefore, the study utilised face-to-face interview to ensure that questions in the interviews guides were meaningful and easily understood by the informants (Rahman & Yakubu, 2017).

Population of the Study

The informants in the study comprise public figures. Ten (10) were interviewed for this study to explore the information needed to achieve the research objective. Interview settings were convenient to the members participating. A high sense of confidentiality was observed. The interviews were guided by semi-structured questions to explore the needed responses.

RESULTS

The goal was to analyse the relationship between Somali Clan-Structure and leader attitude in post-conflict nation-building. The term "informants" is used here as the subjects in this study, who informed us of their perceptions and suggestions. Central to the discussion was the implication of the relationship between Somali Clan-Structure and leader attitude, as a source of the lesson to be adapted for post-conflict nation-building. The data that emerged were analysed through a thematic approach, which effectively and appropriately offers a trail of evidence on how the data revealed relevant issues that explicitly accomplished the objectives set by the study.

Demographical Profile

Table 1 shows all the informants who participated in the study (N=10). Most of the informants (N = 9) were professionals working in public and private sectors from the table. Only one informant was not a professional but still had a critical role as a clan leader. Based on the demographic profile of our informants, it was clear that 90% were elites in a good position to discuss issues of relevance to nation-building in Somalia. The informants also served in various capacities in both politics, finance, diplomacy and education. However, only Informant 8, on the other hand, was not highly educated but represents the perspective of traditional clans in Somalia regarding nation-building.

The Role of Social Identity and Attitude Formation in The Rise and Fall of Siad Barre

The emergence and fall of Siad Barre as a prominent Somali dictator provide significant evidence of how Clan-Structure shapes personal identity and leadership

attitude in nation-building. Going by Tajfel (1982) proposition, clans are important sources of pride and self-esteem that gave Siad Barre a sense of social identity and belonging upon which his leadership attitude rested. Thus, the present study noted the use of brute force to remain in power as a depiction of an aggressive predatory attitude. Therefore, it was not unexpected that internal resistance movements emerged along clan identity lines, for example, the Democratic Front for the Salvation of Somalia (DFSS) formed in 1978 by Majeerteen-Darod and the Somali National Movement (SNM) established by the Isaaq Clan. In addition, the Clan Klatura policy shows that from the emergence of Siad Barre to his fall, the background was set and ripe to display a variety of attitudes evident in the next section.

Attitude Depiction and Pitfall in Nation Building in the Style of Siad Barre

Siad Barre depicted various attitudes. Initially, his military rule adopted an attitude that deliberately disregarded the clan

Table 1
Demographic profile of informants

Informant	Country	Age range	Career Background	Level of Education
Informant 1	Somalia	54 years	Diplomat	MSc
Informant 2	Somalia	37 years	Public Servant	PhD
Informant 3	Somalia	45 years	Public Servant	Msc
Informant 4	Somalia	44 years	Politician	Msc
Informant 5	Somalia	54 years	Academician	PhD
Informant 6	Somalia	35 years	Activist	PhD
Informant 7	Somalia	34 years	Public servant	Msc
Informant 8	Somalia	64 years	Clan leader	Primary School
Informant 9	Somalia	57 years	Cleric	Bachelor's Degree
Informant 10	Somalia	25-34 years	Woman Activist	Bachelor's Degree

component as the official attitude to nation-building in his regime (Farah & Handa, 2015; Tajfel et al., 1971). However, the consequence of disregarding the clan structure resulted in the federal state system he instituted failing, implying that such disregard was functional to the catastrophe in his attitude to nation-building. For example, shortly after seizing power, he depicted a major dictatorial attitude adopted from scientific socialism, which aimed to actualise the unification of the nation and eradicating its ancient clan structure. The socialist attitude to nation-building led to the clan system being officially banned and defined as a serious criminal offence. Further, eradicating all the rudiments of clan ideology was achieved by employing an aggressive predatory attitude that seemed revolutionary. As noted by Informant 6,

It was rhetoric in which Siad Barre presented himself as the “Father” of a modern Somali nation whose “Mother” was his revolution. There was intense radio propaganda at local orientation centres to inculcate this new ideology into the mindset of Somalis. While Barre overtly sought measures to eliminate clan and lineage divisions and sow the seeds of national solidarity. Unfortunately, he was also “underhandedly relying on the older, time-honoured bonds of loyalty.

When Barre realised that scientific socialism was not enough to consolidate his rule after his regime survived an unsuccessful coup in 1978, he depicted

a major slanderous attitude in nation-building. Thus, in place of a constructional democratic strategy in nation-building, Siad Barre’s attitude resorted to heighten the general attitude of Somalis towards clan loyalty. With the heavy reliance on clan structure by Barre, resistance and the consequent formation of armed opposition ensued. In addition, as noted by Informant 3, “A series of events led to widespread public demoralisation and upsurge of clan loyalties, as different groups sought scapegoats to explain the debacle.”

Barre witnessed more armed groups vying to dislodge him from power, so he transitioned into a survivalist attitude. He consolidated nepotism by acknowledging the preeminent standing of the clan institution in Somalia—an attitude that became a compelling reality calling for the clan loyalties he once sought to abolish. Thus, Barre dropped the “scientific socialism” attitude as his guiding ideology by reverting to the oppressive clan structure at the cost of pure constitutional democracy.

Barre consolidated clan power more and more within the Marehan. By 1987, it was projected that more senior officer corps belonged to the President or related clans. The proportion was higher in the artillery and tank brigades within the new southern command unit headed by Siad’s son, General Maslah. (Informant 6)

Concerning the above position, clan dogma, which obligates patrilineal kinsmen to stand with one another, enabled Barre

to reconfigure the military for reliance on clan structure. Furthermore, contrary to expectation, Barre depicted a different set of attitudes by not resorting to Islam. It was evident in the implementation of Clan-Klatura.

In the Clan-Klatura policy, efforts were geared at implementing clan-based governance based on loyalty by substituting government officials with loyal clansmen. The substitution was specifically made from three clans, code-named MOD. (Informant 8)

Thus, a major component of the attitude that served as the basis of the regime's philosophy of nation-building was nepotism. As further explained by Informant 2, "in the code MOD, M represents Barre's patrilineal clan the Marehan; the O for Ogaden, his mother's clan; and D for Dhulbahante, his son in law's clan who was also head of the National Security Service."

Barre's need to ally with these three particular clans reflects the ability of the clan system to foster attitudinal elements in nation-building. However, conversely, and the deleterious effect on national cooperation at the clan level that nation-building could have fostered. Thus, rather than the conventional democratic governance model applied widely for nation-building, this intricate grouping of clan families only enabled Barre to achieve his egoistic satisfaction by generating the necessary level of cooperation otherwise conventionally not attainable through the

socialist attitude. Significantly, clan loyalty shaped Barre's regime attitude towards eventual failure.

Another attitude depicted in nation-building in Barre's regime was divide and rule or the fragmentation of the political system into 62 parties to accommodate clan particularism. Informant 5 noted that "Clan-structure was utilised to differentiate between candidates because choosing a candidate outside of the clan would result in losing access to state funds."

It was implored to instigate a race between clans and mobilise them towards serving as a means to an end, namely seize the spoils of elections in the form of public resources. Thus, access to national resources was made paramount at the expense of national integration. The clan institution remained a gateway to accessing communally controlled resources, which were seen as the most effective mechanism for securing political dominance.

DISCUSSION

Generally, the leadership attitude in the history of Somali nation-building is determined to a greater extent by a personal identity derived from the clan system. Since all political power tends to emanate from the clans as the highest point of political division, the supremacy associated with clan interests forced all potential and incumbent Somali leaders into absolute compliance to cement their respective clans' loyalty. An important personality in the Somali political landscape has been Siad Barre. He was shaped by the clan structure, as

depicted in his leadership style and attitude throughout his emergence and fall. Further, clan affinity defined how Siad Barre related fellow Somalis from other clans in the socio-political process. In this sense, his attitude towards citizenship was not based on democratically determined constitutional duties and responsibilities of being a citizen of Somalia but based on affiliation to a clan-family. Thus, the central theme upon which the attitudinal components of Siad Barre's leadership in Somali politics revolved tends to be around the clan structure. The implication of this on the Somali experience of Siad Barre's nation-building has been a failed attempt.

It is clear that the clan system exercised a strong influence on the legitimacy of Siad Barre's government. In this regard, the criteria for Siad Barre's attitudinal components publicly manifested in executing national development as determined by the influence of Clan-Structure. Thus, Siad Barre's political philosophy derived on the basis for legitimate power via a leadership attitude that reflected the degree of acceptability in the representation of every clan member in his government (Brinkerhoff, 2005). In addition, Siad Barre pretended that clans were in command and had a say in the political and economic issues related to the part of the country they inhabited in his government.

Thus, Siad Barre's ideological mission was to prove that Somalis were not historically familiar with effective democratic leadership styles, but they are very comfortable with leadership

that accommodated all clan and sub-clan aspirations (Fuad et al., 2016; Ingiriis, 2016b). This finding is substantiated by the historic failure of previous leaders in Somalia that have otherwise approached Clan-Structure. Its institutionalisation as the basis for leadership legitimacy has cost Somalia colossal losses in its quest for nation-building. Therefore, a new philosophy must emerge to catalyse the departure of the political process in Somalia from clan dominance to a constitutional democratic process.

CONCLUSION

Conclusively, the perceived centrality of clan structure to Somali culture suggests its culpability in shaping the personalities and hence, the attitude of Somali leaders and their subsequent failure or success. Further, the enduring nature of the clan system in Somali politics suggests the attribution of a great deal of value to its organisational ability. Therefore, it is evident that Somalis would want to see it reflected within the overall attitude of their leaders and their leadership styles. From this study, it is clear that the Somali state's 'failure' and 'collapse' rests on how leadership attitude rests on clan structure.

Future Directions

The present research was conducted among the "elite" in Somalia. Therefore, it would be interesting to know the results that would evolve from the other segments of Somali society like the masses and uneducated persons in rural and remote areas. Future

studies should also focus on the women since, in all likelihood, the results to emerge from such studies will either provide additional information to this study or serve as comparative views on the subject. In the final analysis, future studies should extend the research frontier to include other factors. The different perspectives gathered from such research will guide the new leadership to adopt better strategies for social reintegration.

Recommendations

The study offered the following recommendations:

The informants made various suggestions on the way forward in Somalia's quest for answers in nation-building. While some informants suggested participatory leadership, others suggested the Islamic style of leadership that leans to the past. More informants also recommended overcoming socio-economic disparities and social exclusion in addition to neutrality in international relations. As suggested by some informants, the participatory leadership approach is a potential option if adapted to suit local values, culture and religion by ensuring that all stakeholders are carried along.

Further, the viability of a participatory leadership style tends to be highly dependent on adaptation as an Islamic situational model. Such a model based on Islamic tenets stands to be highly potent due to the solidarity it might enjoy among Somalis. This advantage can be viable for social reconstruction. Furthermore, the research

also found that in adapting the Islamic participatory model of situational leadership, an inclusive framework should be developed to address the socio-economic disparities that perpetuate insecurity and instability to improve the current situation of social inclusion. To further sustain the model, there must be inclusive political, economic and social institutions as major initiatives for integration to ensure broader participation and adequate representation to all groups in the country. The research establishes that the leadership style appropriate for the Somali situation is directing and coaching that imply a model based on Islam and democracy.

Further recommendations by the author are as follows:

- The current PCR needs to mobilise structures towards broadening national solidarity and leadership personalities that accept the wider application of the nation-building principles against clan structure manipulation.
- In place of misappropriating the notion of *Somali Homogeneity* as a means of retaining power, the existing clan structures should serve as aspiration mobilisers towards nation-building and constitutional democracy.
- There is the need to ensure that the mechanisms of political representation are reviewed to prevent individuals with a dark history, such as warlords and Islamist extremists, from representing their

clans in the political process.

- There is the need to broaden public participation through incentives that favourably encourage youth, educated individuals and women across clans to participate fully in the recovery and reconstruction process.
- While respecting clan structure, the leadership should avoid the continuation of clan domination in the political process and devise a more democratic system that is inclusive and sustainable in the long run.
- The desired democratic system should balance clan inclusion with competence by attracting people with integrity and education to represent clans in the political system to discourage spoilers from dominating the system and ensure fair and equitable resource allocation for all Somalis.
- More importantly, the new system should prohibit clan infiltration and influence in the administration, judiciary, law enforcement and military from preventing the state apparatus against some groups while ensuring that all Somalis benefit equally from state services regardless of their clan affiliation.

ACKNOWLEDGEMENTS

The researcher is grateful to the ten discussants, including officials from the Interior Minister, former officials

from the Union of Islamic Courts, the Rector of Institutional Development at Simad University, the Vice-Chancellor of Mogadishu University, Civil Society Activists and the Somali Ambassador to Malaysia.

REFERENCES

- Abdi, C. M. (2011). Moving beyond xenophobia: Structural violence, conflict and encounters with the “other” Africans. *Development Southern Africa*, 28(5), 691-704. <https://doi.org/10.1080/0376835X.2011.623916>
- Adam, H. M. (1994). Formation and recognition of new states: Somaliland in contrast to Eritrea. *Review of African Political Economy*, 21(59), 21-38. <https://doi.org/10.1080/03056249408704034>
- Adam, H. M., & Ford, R. B. (1997). *Mending rips in the sky: Options for Somali communities in the 21st century*. Sea Press.
- Arato, A. (1972). Lukacs’ theory of reification. *Telos*, 1972(11), 25-66. <https://doi.org/10.3817/0372011025>
- Barton, D., & Hamilton, M. (2005). Literacy, reification and the dynamics: Of social interaction. *Beyond Communities of Practice: Language, Power and Social Context*, 14-35. <https://doi.org/10.1017/CBO9780511610554.003>
- Berardi, G. (2002). Commentary on the challenge to change: Participatory research and professional realities. *Society & Natural Resources*, 15(9), 847-852. <https://doi.org/10.1080/08941920290107594>
- Brinkerhoff, D. W. (2005). Rebuilding governance in failed states and post-conflict societies: Core concepts and cross-cutting themes. *Public Administration and Development*, 25(1), 3-14. <https://doi.org/10.1002/pad.352>
- Bryden, M. (2003). No quick fixes: Coming to terms with terrorism, Islam, and statelessness

- in Somalia. *The Journal of Conflict Studies*, XXIII(1), 47-75.
- Cali, A., & Cawad, I. (2001). *Diiwaanka Maansadii Deelley (1979-1980). Ururin iyo faallo. Tenzone poetica in lingua somala* [Collection of poems by Deelley (1979-1980): Collection and commentary: Tenzone poetica in lingua somala]. Harmattan Italia
- Cortez, R. M., & Johnston, W. J. (2020). The Coronavirus crisis in B2B settings: Crisis uniqueness and managerial implications based on social exchange theory. *Industrial Marketing Management*, 88, 125-135. <https://doi.org/10.1016/j.indmarman.2020.05.004>
- Cotran, E., & Rubin, N. N. (Eds.). (2021). *Annual survey of African Law Cb: Volume One: 1967*. Routledge.
- Crosen, R. N. B. (1999). Gender and culture: International experimental evidence from trust games. *JSTOR*, 89(2), 386391.
- Farah, I., & Handa, S. (2015). Exploring post-conflict reconstruction in Somalia: Pulling apart or pulling together? *Development*, 58(1), 112-116. <https://doi.org/10.1057/dev.2015.27>
- Feast, L., & Melles, G. (2010, June 28-July 1). *Epistemological positions in design research: A brief review of the literature* [Paper presentation]. International Conference on Design Education, University of New South Wales, Sydney, Australia.
- Fuad, M., Ali, B. A., & Sanchez-Sibony, O. (2016). *The Somali clan system: A road map to political stability in Somalia* [Unpublished master's thesis]. Texas State University. <https://digital.library.txstate.edu/handle/10877/6122>
- Fukuyama, F. (2008). State-building in the Solomon Islands. *Pacific Economic Bulletin*, 23(3), 1-17.
- Gartman, D. (1991). Culture as class symbolization or mass reification? A critique of Bourdieu's distinction. *American Journal of Sociology*, 97(2), 421-447. <https://doi.org/10.1086/229784>
- Giustozzi, A. (Ed.). (2016). Post-conflict disarmament, demobilization and reintegration: Bringing state-building back in (1st ed.). Routledge. <https://doi.org/10.4324/9781315601656>
- Guarino, N., & Guizzardi, G. (2016). Relationships and events: Towards a general theory of reification and truthmaking. *Lecture Notes in Computer Science (Including Subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)*, 10037 LNAI, Springer, Cham. https://doi.org/10.1007/978-3-319-49130-1_18
- Gure, F., Dahir, M. K., Yusuf, M., & Foster, A. M. (2016). Emergency contraception in post-conflict Somalia: An assessment of awareness and perceptions of need. *Studies in Family Planning*, 47(1), 69-81. <https://doi.org/10.1111/j.1728-4465.2016.00047.x>
- Hassan, A., Mohd Zain, Z., & Na'iem Ajis, M. (2019). Social integration in post conflict Somalia: implications for a situational leadership style framework. *Asian Journal of Multidisciplinary Studies*, 7(3), 41-50.
- Hassan, A., & Shahid, M. A. (2010). Management and development of the awqaf assets. In A. G. Ismail, M. E. Mat Hassan, N. Ismail & S. Shahimi (Eds.), *Proceedings of Seventh International Conference The Tawhidi Epistemology: Zakat And Waqf Economy* (pp. 309-328). Institut Islam Hadhari.
- Iazzolino, G. (2020). Power geometries of encampment. The reproduction of domination and marginality among Somalis refugees in Kakuma. *Geoforum*, 110, 25-34. <https://doi.org/10.1016/j.geoforum.2020.01.010>
- Ingiriis, M. H. (2016a). How Somalia works: Mimicry and the making of Mohamed Siad Barre's Regime in Mogadishu. *Africa Today*, 63(1), 57. <https://doi.org/10.2979/AFRICATODAY.63.1.0057>
- Ingiriis, M. H. (2016b). Many Somalia(s), multiple memories: Remembrances as present politics, past politics as remembrances in war-torn Somali

- discourses. *African Identities*, 14(4), 348-369. <https://doi.org/10.1080/14725843.2016.1143804>
- Ingiriis, M. H. (2016c). *The suicidal state in Somalia: The rise and fall of the Siad Barre regime, 1969–1991*. University Press of America.
- Ingiriis, M. H. (2016d). “We swallowed the state as the state swallowed us”: The genesis, genealogies, and geographies of genocides in Somalia. *African Security*, 9(3), 237-258. <https://doi.org/10.1080/19392206.2016.1208475>
- Insko, C. A., Schopler, J., Kennedy, J. F., Dahl, K. R., Graetz, K. A., & Drigotas, S. M. (1992). Individual-group discontinuity from the differing perspectives of Campbell’s realistic group conflict theory and Tajfel and Turner’s social identity theory. *Social Psychology Quarterly*, 55(3), 272. <https://doi.org/10.2307/2786796>
- Ismail, A. A. (2010). *Somali state failure: Players, incentives and institutions*. Svenska handelshögskolan.
- Ismail, I. (2010). *Governance: The scourge and hope of Somalia*. Trafford Publishing.
- Lewis, I. M. (2002). *A modern history of the Somali: Nation and state in the Horn of Africa, Eastern African Studies*. Ohio University Press.
- Lloyd-Sherlock, P. (2018). Population ageing and health. *Population Ageing and International Development*, 91-116. <https://doi.org/10.2307/j.ctt9qgsfc.11>
- Makhubela, L. M., & Schoeman, M. (2010). *Conflict resolution in Somalia: Learning From failed mediation processes* [Master’s dissertation, University of Pretoria]. <http://hdl.handle.net/2263/28151>
- Mathende, T. L., & Nhapi, T. G. (2018). The nexus of globalisation and global south social policy crafting: Some Zimbabwean perspectives. *The Journal of Pan African Studies (Online)*, 12(1), 499-515.
- Merriam, S. B. (2002). Basic interpretive qualitative research. In S. B. Merriam (Ed.), *Qualitative research in practice* (pp. 37-39). Jossey-Bass.
- Muhammad, H. S. A. N., Azman, M. D., & Rogers, R. A. (2017). Before things fall apart: The role of the Soviet Union in Somalia’s troubled past (1969-1978). *Intellectual Discourse*, 25(2), 409-427.
- Mutahi, P., & Ruteere, M. (2017). *Where is the money? Donor funding for conflict and violence prevention in Eastern Africa* (IDS Evidence Report 217). <https://reliefweb.int/report/south-sudan/where-money-donor-funding-conflict-and-violence-prevention-eastern-africa>
- North, M. S., & Fiske, S. T. (2015). Modern attitudes toward older adults in the aging world: A cross-cultural meta-analysis. *Psychological Bulletin*, 141(5), 993-1021. <https://doi.org/10.1037/a0039469>
- Omar, M. A., & Omar, M. A. (2015). Somali elder care: A guide for healthcare in the West. *Sociology Psychiatry Epidemiology*, 27(9), 113-125.
- Omer, M., Klomsri, T., Tedre, M., Popova, I., Klingberg-Allvin, M., & Osman, F. (2015). E-learning opens the door to the global community. Novice users experiences of e-learning in a Somali University. *Journal of Online Learning and Teaching*, 11(2).
- Putnam, R. D. (2001). Social capital: Measurement and consequences. *Isuma: Canadian Journal of Policy Research*, 2(1), 41-51.
- Putnam, R. D. (2016). Bowling alone: America’s declining social capital. In L. Crothers & C. Lockhart (Eds.), *Culture and Politics: A Reader* (pp. 223-234). Palgrave Macmillan. <https://doi.org/10.1007/978-1-349-62397-6>
- Rabiee, F. (2017). Focus-group interview and data analysis. *Proceedings of the Nutrition Society*, 63(4), 655-660. <https://doi.org/10.1079/PNS2004399>

- Rahman, A., & Yakubu, A. (2017). Jeedo practice among elderly women in Bauchi: A social capital prospects study. *International Journal of Social Science and Economic Research*, 2(12), 5627-5647.
- Russell, T. (2017). 'Where goats connect people': Cultural diffusion of livestock not food production amongst southern African hunter-gatherers during the Later Stone Age. *Journal of Social Archaeology*, 17(2), 115-137. <https://doi.org/10.1177/1469605317701596>
- Scotland, J. (2012). Exploring the philosophical underpinnings of research: Relating ontology and epistemology to the methodology and methods of the scientific, interpretive, and critical research paradigms. *English Language Teaching*, 5(9). <https://doi.org/10.5539/elt.v5n9p9>
- Sermabeikian P. (1994). Our clients, ourselves: The spiritual perspective and social work practice. *Social Work*, 39(2), 178-183. <https://doi.org/10.1093/sw/39.2.178>
- Sheer, V. C. (2015). "Exchange lost" in leader-member exchange theory and research: A "Exchange lost" in leader-member exchange theory and research: A critique and a reconceptualization critique and a reconceptualization. *Leadership*, 11(2), 213-229. <https://doi.org/10.1177/1742715014530935>
- Siisiainen, M. (2003). Two concepts of social capital: Bourdieu vs. Putnam. *International Journal of Contemporary Sociology*, 40(2), 183-204.
- Tajfel, H. (1982). Instrumentality, identity and social comparisons. In H. Tajfel (Ed.), *Social Identity and Intergroup Relations* (pp. 483-507). Cambridge University Press.
- Tajfel, H., Billig, M. G., Bundy, R. P., & Flament, C. (1971). Social categorization and intergroup behaviour. *European Journal of Social Psychology*, 1(2), 149-178. <https://doi.org/10.1002/EJSP.2420010202>
- Tajfel, H., & Robinson, W. P. (2002). *Social groups and identities: Developing the legacy of Henri Tajfel* (W. P. Robinson, Ed.). Butterworth-Heinemann
- Walker, H., & Kavedžija, I. (2015). Values of happiness. *HAU: Journal of Ethnographic Theory Journal of Ethnographic Theory*, 5(53), 1-23. <https://doi.org/10.14318/hau5.3.002>
- Wallen, N. E., & Fraenkel, J. R. (2013). *Educational research: A guide to the process*. Routledge.
- Winston, B., & Fields, D. (2015). Seeking and measuring the essential behaviors of servant leadership. *Leadership and Organization Development Journal*, 36(4), 413-434. <https://doi.org/10.1108/LODJ-10-2013-0135>
- Wu, C. H., & Parker, S. K. (2017). The role of leader support in facilitating proactive work behavior: A perspective from attachment theory. *Journal of Management*, 43(4), 1025-1049. <https://doi.org/10.1177/0149206314544745>
- Yakubu, A., & Namadi, M. M. (2018). The spiritual and religious practice of "jeedo" among elderly women in Bauchi Emirate of north eastern Nigeria. *Journal of Techno-Social*, 1, 1-14. <https://doi.org/10.30880/jts.2018.10.01.001>



Mapping the Use of Boosters in Academic Writing by Malaysian First-Year Doctoral Students

Yueh Yea Lo*, Juliana Othman and Jia Wei Lim

Department of Language & Literacy Education, Faculty of Education, Universiti Malaya, 50603, Kuala Lumpur, Malaysia

ABSTRACT

This article details an attempt to understand better how first-year doctoral students construct persuasive arguments in academic writing by exploring the patterns of boosters in drafts of doctoral research proposals. Eight Malaysian first-year ESL doctoral students produced 43 drafts of doctoral research proposals across four areas of study in education during their first year of doctoral studies. These drafts were analysed by coding the various linguistic items used to persuade readers of a text, and the analysis was based on Hyland's (2005) model of metadiscourse. Results show that the (i) overall frequency of booster markers used is relatively low (n=158), reinforcing the argument that first-year doctoral students lack understanding about the interaction between booster markers and the context in a more complicated discussion in academic writing such as the doctoral research proposal. Then, the (ii) further analysis of booster marker sub-categories indicates that Malaysian first-year doctoral students struggle to make appropriate booster markers with different meanings and strengths in academic writing when used in context. Therefore, our study suggests that direct and explicit teaching of using various booster markers categories should be implemented in postgraduate writing courses to heightened the students' perceptiveness regarding semantic features associated with creating convincing arguments in academic writing.

Keywords: Academic writing, arguments, boosters, first-year doctoral students, metadiscourse, persuasion

ARTICLE INFO

Article history:

Received: 20 May 2021

Accepted: 05 August 2021

Published: 24 September 2021

DOI: <https://doi.org/10.47836/pjssh.29.3.23>

E-mail addresses:

pva170080@siswa.um.edu.my (Yueh Yea Lo)

juliana@um.edu.my (Juliana Othman)

jwlim@um.edu.my (Jia Wei Lim)

* Corresponding author

INTRODUCTION

In the established concept of academic writing as interactional and dialogic, persuasion is seen as an essential feature to realise communicative purposes between the writer and the reader in a text (Ho

& Li, 2018; Hu & Cao, 2011; Hyland, 2005a, 2010; Swales, 2004). In this regard, establishing a good rapport with readers is one of the aims of academic writing. Hyland (2005a) emphasised that boosters provide an impression of conviction and confirmation. It means that in a persuasive genre like academic writing, boosters, which is a group in metadiscourse, can function to persuade readers by making appeals to rationality, credibility and character, and emotions (Hyland, 2005a). In other words, with boosters, academic writers can express referential knowledge and enhance the persuasiveness of their claims among members of the academic community. Therefore, appropriate choice of boosters becomes central in creating academic arguments to fulfil the competing demands of persuasion and objectivity in academic writing.

With the competing demands of persuasion and objectivity in academic writing, academic writers' skills of employing complex linguistic devices (e.g., booster markers) are critical to the negotiation of meaning and in creating convincing academic arguments (Ho & Li, 2018; Hyland, 1998b, 2010). In this case, the employment of linguistic devices in academic discourse is expected to be regulated by general communication rules and practices and accepted by the readership in the wider academic community. Apart from these constraints, linguistic negotiation is equally important with which writers can interact, assist the writer (or reader) to express an opinion, and persuade the readers

of the arguments. This negotiation involves ways academic writers project themselves in academic writing to make the text more convincing. It can be achieved, for example, through the use of boosters (Crismore & Farnsworth, 1989; Dafouz-Milne, 2008; Hyland, 2005a, 2010).

Hyland (2005b, 2010, 2019) and other researchers (Aull & Lancaster, 2014; Ho & Li, 2018) acknowledged persuasion as an important characteristic of academic discourse towards successful academic writing. It is related to the basic nature of academic writing, in particular, forming an objective opinion. The writers' emphasis should be on statements and arguments they wished to present to the readers, not the writer themselves. Following this emphasis on objectivity in academic writing, it is not surprising that scholars find the need to use persuasive devices (booster markers) to engage the readers and convince them of the real (true) value of what is being stated. Here, interaction in academic writing is essentially important for the function it performs when constructing new knowledge. In other words, readers need to assimilate and understand the writer's new information because what counts as a convincing argument is managed for a particular audience of the discipline involved (Hyland, 2017).

Despite recognising boosters as a rhetorical device that can help writers achieve persuasion in academic writing, little empirical research has focused on booster markers in academic writing (Hyland, 1998a, 2004; Ngampradit, 2020; Peacock, 2006;

Vazquez & Giner, 2009). Most of the studies either solely attended to hedges (Crismore & Kopple, 1997; Vazquez & Giner, 2009) or studied hedges and boosters simultaneously (Hu & Cao, 2011; Takimoto, 2015; Vazquez & Giner, 2009). While simultaneous studies of hedges and boosters have extended our understanding of the role hedges and boosters play to balance subjective evaluation and objective information, booster markers were underrepresented in such studies (Ngampradit, 2020). For instance, little is known about how the writer's new knowledge or propositional content will gain more strength and become more reliable through booster markers. Hyland (1998a) expressed it "Even less is known about the role of firm assertion [...] boosters have received little attention in postgraduate writing [...] further research is needed" (p. 350). Hyland's statement helps rationalise the need to examine the semantic features and pragmatic functions of booster markers in postgraduate writing, such as the doctoral research proposal that has rarely been addressed.

In a similar view, research in academic writing has long established that functional metadiscourse plays an essential role in academic writing, owing to different communicative functions (Farnia & Mohammadi, 2019; Ho & Li, 2018; Hong & Cao, 2014; Hyland, 2005a, 2010; Hyland & Tse, 2004; Kim & Lim, 2013; Lee & Deakin, 2016; Li & Wharton, 2012; Mur-Duenas, 2011; Musa et al., 2019). Thus, as a way to understand the functional metadiscourse in negotiating meanings in a text and

establishing a connection with readers of a text, our previous study (Lo et al., 2020) examined the use of metadiscourse in academic writing across four areas of study in education. The results showed that the frequency of all linguistic expressions in the writing drafts differs across time between first written drafts and the final written drafts, collected within the study period. Furthermore, the statistical data indicated that first-year doctoral students writing in different fields of educational research seemed to be inexperienced at using linguistic expressions to signal the intended relationships.

Accordingly, the current study is complementary to our previous ones (Lo et al., 2020). This study is primarily conducted due to the importance of creating convincing arguments in academic writing and the limited studies that explore the use of booster markers among emergent academic writers who write in different fields of educational research. In other words, despite a growing literature that deals with the utilisation of booster markers, however, to the best of our knowledge, few studies, if any, have probed the semantic features of how each category of booster markers (e.g., *boosting lexical verbs*, *boosting phrases*) have different meaning and strength in academic writing when used in context (Demir, 2017; Ngampradit, 2020). Such a gap necessitates a focus on the use of booster markers by Malaysian first-year doctoral students to persuade and convince the readers of their arguments in academic writing. This article aims to shed light on the

booster markers patterns in Malaysian first-year doctoral students' drafts of doctoral research proposals to create convincing arguments. Thus, this study highlights the importance of employing an appropriate choice of boosters in the relevant context. The research question guided this study is: What are the frequency, sub-category, and type of booster markers used by first-year ESL doctoral students who are at the stage of writing their doctoral research proposals?

Boosters in Academic Writing

According to Hyland (2005a), boosters are communicative strategies that use linguistic means to increase or reduce the force of an academic argument. As proposed, boosters can persuade readers of the writers' assertions, restrict the negotiating space between the writer and a reader, and indicate a mutual understanding between writer and reader based on shared community membership. In this case, boosters constitute part of the rhetorical elements in academic writing used by academic writers to achieve their communicative purposes. For such reasons, the importance of boosters in academic discourse lies in their contributions to appropriate context and in signalling the intended relationship with the readers. That is, boosters do not only help writers to achieve communicative purposes, but also reflect writers' degree of confidence in the readers.

The idea of boosters as rhetorical and persuasive strategies has engaged many researchers, who view writing as a space that allows writers to draw on unspoken

conventions of precision and as a form of meaning-making (Hyland, 2005a). Such a view asserts that boosters can influence the interpretation of propositional information in academic writing. Boosters are, therefore, viewed as a tool that marks the writers' conviction and, at the same time, simultaneously projects uncertainty and confidence while presenting their assertions to the readers, thus making their writing more persuasive (Hyland, 1998b, 2005a, 2010; Ho & Li, 2018; Lee & Deakin, 2016). These research studies show that, persuasion in academic writing can be influenced by the use of boosters and also the positioning of and engagement with the readers. It also shows that the appropriate choice of booster markers can persuade the readers in academic writing.

Given the nature of boosters as a persuasive device, appropriate choice of boosters in the relevant context can increase the writers' commitment to action in two ways, namely expressing certainty and emphasis. In expressing certainty and emphasis, it is not uncommon for writers to initially present information or knowledge that both writer and reader shared. It is known as the use of propositions about the available information. This move is widespread when writers introduce propositions dealing with new knowledge. However, when dealing with new knowledge, the writers need to deploy relevant boosters and attach propositions containing new information to offer vital support to the argument, strengthen the writers' position, and leave readers without a doubt (Hyland, 2010).

Doing so, will allow writers to pave the way to highlight specific parts of their statements, enhance persuasiveness through convincing arguments, and perhaps, manage the interaction between writer and reader more effectively.

The importance of these booster markers as a rhetorical device in academic writing was part of Hyland's (2005a) list of metadiscoursal boosters, which are significant to facilitate writers' efforts to create a convincing argument. Hyland's list of metadiscoursal boosters consists of six categories: adjective, adverb, determiner, modal, verb, and phrases. These six boosters are linguistic items that emphasise certainty and construct rapport by marking involvement with the topic and the readers, taking a joint position against other voices (Hyland, 1999). The common characteristics of these booster markers include the modification of words or phrases within a proposition and writers' commitment to the propositional content. For example, *we must believe* (e.g., we must believe that), and *we know* (e.g., we know that) within a proposition will alter the writers' commitment to the propositional content. As boosters are concerned with the writers' confidence in their claims and propositional content, their use strengthens an argument by emphasising the mutual experiences needed to draw the same conclusions as the writer. Therefore, boosters imply that a statement is based on the writers' certainty rather than authority, indicating the extent to which the writer is willing to entertain alternatives and convey a commitment to the text content (Hyland, 2005a).

The literature on boosters acknowledges the vital role of booster markers in the advanced academic writing genre (e.g., postgraduate writing; Hyland, 2004). In particular, the prospect of using appropriate booster markers has the potential to inform the ways academic writers build a sense of capability in presenting new knowledge to their audience. In other words, the new propositional information could be assimilated by the audience and understood the way the writers intended. As a result, appropriate choices of booster markers in academic writing are more likely to convince and persuade readers of the writers' claims, together with disciplinary membership and identity implied (Hyland, 2004, 2009). Several studies (Demir, 2017; Hyland, 2000; Ngampradit, 2020; Vassileva, 2001) have shown that booster markers are an indispensable part of academic writing conventions because they help introduce writers' new knowledge that is presented to the readers to gain more strength and become more reliable, contributing to the growing knowledge development of the discipline involved.

Previous studies of booster markers in academic writing have explored a range of genres such as advertising (Fuertes-Olivera et al., 2001), newspaper editorials (Dafouz-Milne, 2008), research articles (Demir, 2017; Hyland, 1998a; Peacock, 2006; Vassileva, 2001; Vazquez & Giner, 2009), and doctoral dissertations (Ngampradit, 2020). For example, Hyland (1998a) noted that boosters "mark involvement and solidarity with an audience, stressing

shared information, group membership, and direct engagement with readers” (p. 350). Likewise, these research studies show that persuasion in discourse (e.g., new propositional information contained in a statement) can be achieved by employing an appropriate choice of booster markers. It also shows that booster markers can be used to convince readers by strengthening writers’ claims and academic arguments in academic writing (Hyland, 1998a; Ngampradit, 2020).

In recent research studies, Ngampradit (2020) studied the use of boosters in applied linguistics doctoral dissertations of English native writers in the United States and non-native Thai writers from Thailand. This cross-cultural metadiscourse analysis adopted part of Hyland’s (2005a) list of metadiscourse boosters (adjectives, adverb, verb, modal) in the process of searching for booster markers and analysis. It was found that the American writers used more booster markers and demonstrated a wider variety of boosters than the Thai writers. Demir (2017) discussed how native (Anglophone) and non-native writers (non-Anglophone) of English used lexical boosters in their research articles to have native-like academic texts. The study adopted Vassileva’s (2001) taxonomy of boosters (modal, verb, adjective, adverb, determiners), and the corpus consists of articles from diverse English Language Teaching (ELT) journals. It was found that Anglophone writers showed a variety of lexical boosters to produce cohesive and understandable written text compared to non-Anglophone writers.

Although these comparative studies have identified the similarities and differences in the use of metadiscourse boosters in applied linguistic dissertations and research articles on ELT, more research is needed to extend the scope of comparison between writers in postgraduate writing within an L2 context and explore the ways each booster markers have different meanings and strengths in academic writing when used in context. Following the perspective of functional metadiscourse boosters, this study adopted Hyland’s (2005a) list of metadiscourse boosters, which capture the basic principle of communication and have been proven effective in eliciting the types of boosters. Table 1 presents the list of metadiscourse boosters.

METHODS

This study follows the same methodological procedure as the first study (Lo et al., 2020), as described in the following.

The Study

This study is based on analysing of 43 drafts of doctoral research proposals written by eight first-year ESL doctoral students across four areas of study in education from an established Malaysian research university. These drafts, a total of 64,500 words altogether, were collected from first-year doctoral students during their first year of a doctoral studies. The focal point of this study was on the three sections of doctoral dissertation, namely: introduction, literature review, and methodology. It is important to note that these written drafts

Table 1
List of metadiscoursal boosters

Grammatical types	Booster items
Adjective	<i>certain, obvious, clear, definite, sure, true, evident, undeniable, doubtless, incontestable, incontrovertible, indisputable</i>
Adverb	<i>actually, always, certainly, conclusively, decidedly, clearly, definitely, obviously, really, surely, evidently, undeniably, undoubtedly, in fact, indeed, never, truly, of course, (no/without/beyond) doubt, incontrovertibly, indisputably, undisputedly</i>
Determiner	<i>article (a/an, the), demonstrative (this, that, these, those), possessive (my, your, his, her, its, our, their), quantifier (many, much, more, most, some, a great amount of, a good deal of, a considerable amount of, a great body of</i>
Modal	<i>must (possibility), have/has to, be to + infinitive, need to</i>
Verb	<i>believe(d/s), demonstrate(d/s), establish(ed), find(s), know(n), prove(d/s), realise(d/s), show(ed/s/n), think(s), thought, conclude, confirm, enhance, convince, demonstrate, ascertain, establish, ensure</i>
Phrases	Researchers <i>believed</i> that self-confidence <i>actually</i> raise the prospect... from a <i>great amount of study</i> , we <i>know</i> that discourse devices are lexical conventions that....

Note. Adopted from Hyland's (2005a) list of metadiscoursal boosters

were not edited works of others. The only criterion for collecting research proposal drafts was that these writings had to be a part of their doctoral studies. The intention of analysing these drafts was to explore ways emergent academic writers fulfil the competing demands of creating convincing arguments and objectivity in academic writing, of which boosters emerged as a key thread in their efforts to develop as academic writers. Therefore, this article focuses on the use of boosters in academic writing, specifically, on unpublished and ongoing written works within the academic context, which, surprisingly, has not been studied more extensively (Hyland, 2015; Vassileva, 2001).

Data Collection

The corpus analysed in this study was collected in the year 2019. On average, about six to seven drafts of the research proposals were collected from each participant

during their first year of doctoral studies. It is necessary to mention that there was no minimal or maximum number of drafts that the participants have to fulfil. Instead, the participating first-year doctoral students were encouraged to provide their drafts at any time during their first year of doctoral studies from January–December 2019. The purpose of not setting the minimum and the maximum number of drafts was to reduce the participants' level of stress within the timeframe of writing their doctoral research proposals, such as the demand of providing a draft every month. The data collection period was one year, as it is not longitudinal research due to time constraints.

Data Analysis

This study employed a corpus-based design, using quantitative methods. First, the general distribution, average density, and frequency counts were examined using AntConc Build 3.4.3 software developed by Anthony (2014)

for quantitative analysis. It is essential to highlight that manual analysis was carried out after identifying, comparing the variations, and noting signs of change due to the fuzziness of metadiscourse linguistic expressions of boosters in different contexts. Hence, manual analysis was performed by repeating close reading (looking at all booster markers in context). Further analysed, specific booster markers (e.g., *clearly*, *clear*) tend to be multifunctional and context-dependent to avoid ambiguous results. Next, booster markers with different spellings across the forms of English were tagged throughout the reading process (e.g., *analyse* and *analyze*).

During this manual analysis, the booster markers were coded with reference to Hyland's (2005a) model of metadiscourse. Then, the doctoral research proposal's written drafts were read, and the identified metadiscursive expressions were made about Hyland's definition of metadiscourse, classification and typology of metadiscourse. However, this study did not rely solely on the list of metadiscourse. In Ho and Li's (2018) research, it was noted that the metadiscursive of a particular linguistic expression should be made in context instead of ticking off on a list. It is crucially important and relevant in the case of this study, as these participants were writing in different fields of educational research, and relying solely on the list is exhaustive, as the corpus size is 64,500 words altogether. Finally, these identified booster markers were further categorised into a more detailed distribution of boosters (e.g., boosting adjectives,

boosting adverbs, boosting determiners, boosting modal auxiliaries, boosting lexical verbs, and boosting phrases).

Analytical Strategies

The analysis of this study adopted the taxonomy of boosters, comprised of six categories: phrases, lexical verbs, modals, determiners, adverbs, and adjectives (Hyland, 2005a; Vassileva, 2001). The first analytical step consists of general distribution and frequency counts with the help of AntConc Build 3.4.3 software. Then, in examining the identified boosters, the tokens of the six categories of boosters were carefully analysed, individually and manually, based on the context in which they occurred and taking into account their functional meaning. Finally, in-text analysis, each booster marker and its function are explained below and accompanied by excerpts obtained from the participants in this study. To illustrate:

- (a) To increase or strengthen the force of a statement

Example 1: This approach *clearly showed* that the decision to start up a social venture is determined by the institutions in which it occurs (management, planning and policy draft)

- (b) To emphasise the writers' certainty and commitment to propositional information

Example 2: Some instructors believe all class handouts *must* be prepared in advance, taking away the spontaneity in the face-

to-face classroom (curriculum and instructional technology draft)

- (c) To persuade readers of the writers' ideas and claims

Example 3: *In fact*, stressful events that happened in work contribute to a person's feelings and behaviour, observed in many other psychology studies.... (counselling and psychology draft)

- (d) To express collegiality, avoid disagreement and being open to different interpretations in the academic community

Example 4: Therefore, it *can be asserted* that teachers have dual roles: being an instructor and, at the same time, an assessor (Rea-Dickins, 2004; language and literacy education draft)

Finally, further analysis of booster markers sub-categories based on the adopted taxonomy of boosters was carried out. As Hyland (2005a) emphasised, boosters are also known as certainty markers, emphatics and intensifiers. These markers are an indispensable part of writing conventions, particularly in academic writing, as it helps to create an emphatic impression in the reader and frame messages that appeal to appropriate community-recognised relationships. Furthermore, it means that presenting complex ideas with appropriate use of booster markers and positioning in a sentence could result in writing being more accessible to the readers with a degree of authority that increases the persuasion effect in writing (Hyland, 2000).

Ethics

Before collecting the data, ethical approval was obtained from the university. Participation in this study adhere to the Research Governance Framework of the institution and is entirely voluntary. First, participants were offered a face-to-face verbal explanation of the study and accompanied with written information. Then, a consent form that explained the nature of the participants' involvement and sought for the participation was given. The participants were also given a period of time (one day up to one week), to consider the invitation. Following this, a face-to-face meeting was arranged to address any questions that potential participants may have. After the participants agreed with the specifications in the consent letter and had the letter signed, steps to maximise confidentiality and maintaining research integrity, as research practice became the researchers' objective. For example, all identified elements were removed from the data and instead coded and assigned pseudonyms.

RESULTS AND DISCUSSION

This section presents the findings obtained from the analysis of 43 corpora (drafts of doctoral research proposals) produced by eight first-year doctoral students during the writing time of their doctoral research proposal. Following is the overall analysis of booster markers employed in academic writing, which shows that the frequency of booster markers usage differs across the four areas of study in education. Finally,

the distribution of booster marker types identified in the data is presented. In this final section, further analysis of booster markers sub-categories was carried out to observe more closely what linguistic expression was used by participants, related to persuading and convincing the readers of the truth of their propositions as writers.

Overall Frequency of Booster Markers in Academic Writing

Table 2 below shows the overall frequency of the various categories of booster markers (boosting phrases, boosting lexical verbs, boosting modal auxiliaries, boosting determiners, boosting adverbs, and boosting adjectives) used in the 43 drafts of doctoral research proposals across four areas of study. Here, it is essential to note that the following sections on booster markers are more detailed than other linguistic items because the former differentiate how each booster marker has a different meaning and strength in academic writing while linguistic

items carry general language functions. For example, adverbs modify a verb, an adjective, or a whole sentence. In contrast, boosting adverbs depends on the context in which they occur. Their connotation relies upon the quality and type of the linguistic item that is modified, largely adjectives. Meanwhile, boosting adverbs may be unable to change the semantics of utterance. However, they can considerably modify its meaning with emphasis and stress to indicate importance. Essentially, boosting adverbs performs a specific function (to intensify the meaning, amplifying the meaning of a word, or toning down the feeling of the word) and show a degree of strength when used in context (from strongest to the weakest form).

As shown in Table 2, the overall frequency variations of booster markers are different in the first-year doctoral students’ drafts of doctoral research proposals. From the data, booster markers are most frequently found in drafts from

Table 2
Overall frequency of various categories of booster markers from 43 drafts of doctoral research proposal

Booster markers	CIT	EMPP	EPC	LALE	Sum of each category
Boosting phrases	1	1	0	1	3 (1.9%)
Boosting lexical verbs	8	7	2	4	21 (13.3%)
Boosting modal auxiliaries	20	14	3	12	49 (31.0%)
Boosting determiners	8	5	1	2	16 (10.1%)
Boosting adverbs	25	21	4	16	66 (41.8%)
Boosting adjectives	1	1	0	1	3 (1.9%)
Total booster markers count	63(39.9%)	49 (31.0%)	10 (6.3%)	36 (22.8%)	158 (100%)
No. of sentences	1256	1000	1368	1296	4920
Average density	0.05	0.05	0.01	0.03	0.14

Note. CIT = Curriculum and instructional technology; EMPP = Educational management, planning, and policy; EPC = Educational psychology and counselling; LALE = Language and literacy education

curriculum and instructional technology, N= 63 (39.9%), followed by educational management, planning, and policy, N= 49 (31.0%), language and literacy education, N= 36 (22.8%), and education psychology and counselling, N= 10 (6.3%). Indeed, this variation of booster markers usage across four areas of study could result from various reasons, such as the different levels of awareness on booster markers functions in academic writing among these first-year doctoral students. In addition, this could also be their pre-conceived writing experiences, where there could be a lack of understanding regarding the interaction between booster markers and context, especially in a more complicated discussion in academic writing such as a doctoral research proposal. Nonetheless, it is worthy to note that, as emphasised in our previous study (Lo et al., 2020), the different levels of metadiscourse used in academic writing across different areas of study do not propose that the field of practice is different. However, it is more of how the participants used the booster markers to engage in their field of research.

Table 2 shows that boosting adverbs recorded the highest frequency, N= 66 (41.8%), in all written drafts compared to other booster markers. This stronger preference for boosting adverbs could be attributed to the fact that first-year doctoral students needed to indicate different ways of expressing their certainty about a proposition to their readers. Thus, boosting adverbs were used frequently to foreground the certainty of the statements or places to emphasise the information presented to the

readers: '*clearly*', '*obviously*', '*extremely*', and '*highly*', instead of adopting a more conservative or neutral tone (Hyland, 2004). However, it does mean, that although these expressions could increase the doctoral students' commitment as writers to their claims, they became more vulnerable as their claims might be proven otherwise. Accordingly, inappropriate or overuse of adverbs can give the impression that the writer is subjective towards the topic. As a result, some of these first-year ESL doctoral students might focus on replacing '*-ly*' adverb with the adjective or verb or limiting adverb use in academic writing.

Additionally, Table 2 shows an interesting phenomenon, whereby drafts from educational psychology and counselling have the lowest, N= 10 (6.3%) frequency of booster markers in the corpus. This very low normalised frequency of occurrence could be due to emergent academic writers' lack of understanding in the context of interaction or less appreciation for boosters as a communicative strategy that could increase or reduce the force of propositions. In other words, they might be less invested engaging in a discussion as writers with their readers. Therefore, it is unlikely that this low usage of booster markers found in drafts from educational psychology and counselling is due to the differences in practice. Seen in this light, the ways students engage with their chosen research field is different seem to be more relevant.

Overall, this low use of boosters generally reflects the first-year ESL doctoral students' uncertainties in employing appropriate

boosters in an ESL context. These students are likely facing more challenges to using booster markers in relevant registers because they are required to negotiate the academic language and linguistic demands in an ESL context, in which many of them may not be fully proficient yet (Hyland, 2019). In this case, first-year ESL doctoral students' linguistic insecurity in creating arguments and expressing themselves as writers may be potentially related to their second language writing proficiency. This finding also supports other studies with the view that ESL learners are less skilful in employing boosters in relevant registers that complement the formal nature of academic writing (Demir, 2017; Hinkel, 2004; Ngampradit, 2020). Hinkel (2004), for instance, found that most ESL learners in her studies resort to using "I think" or "it is really good" when they need to express emphasis as opposed to using more standard forms of the same function, which points to a lack of register awareness.

Distribution of Booster Markers in Academic Writing

Figure 1 shows the frequency of occurrences and ranked distribution of the booster markers found in the 43 drafts of a doctoral research proposal.

As shown in Figure 1, it is necessary to highlight that there is limited use of boosting phrases (e.g., *it is essentially important, as it is known*) and boosting adjectives (e.g., *obvious, undeniable, beyond doubt*) by these emergent academic writers. This limited use of boosting phrases and adjectives may indicate that first-year doctoral students could consider themselves as writers in their propositions as a risk. It is particularly relevant in first-year doctoral students, who do not have a clear disciplinary understanding of their areas of studies yet. In simple terms, when first-year doctoral students who are newcomers to the academy are uncertain about their disciplinary knowledge, they might be uncomfortable boosting their propositions

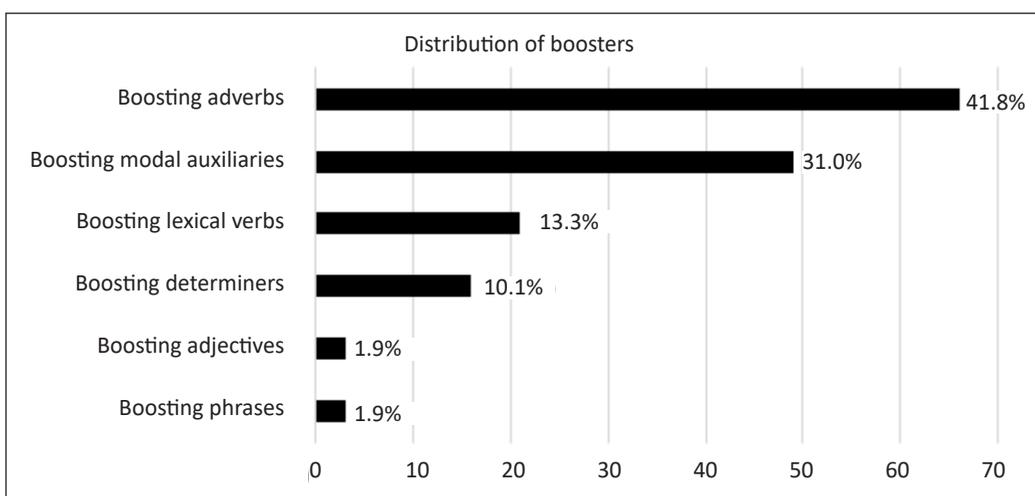


Figure 1. Distribution of booster markers in academic writing

to a certain degree. However, it should be noted that, as they gradually become more able to present arguments supported by reliable sources, they are likely to feel more comfortable using confidence markers as strong as ‘*obviously*’ and ‘*undeniably*’.

From Figure 1, boosting adverbs (e.g., *clearly*, *extremely*, *highly*) recorded the most, N= 66 (41.8%) frequent sub-categories of booster markers in the corpus. This frequency far surpassed that of other categories of boosters. This high usage of boosting adverbs suggests that such words are seen as the primary means through which first-year doctoral students convey their personal opinions about the research title as emergent academic writers to their readers. This result attests to the fact that is boosting adverbs help writers to support a claim or express certainty with confidence. In relation to the aspect of writers’ certainty, these first-year doctoral students likely intend to promote their ideas and hope that their propositions would be accepted by the readers, who represent the wider academic community. It is consistent with what Hyland (2005a) observed in his study, revealing that, writers used words such as *clearly*, *decisively*, and *obviously* to sway the reader and create unity with the audience.

As shown in Figure 1, the second most frequent sub-category is boosting modal auxiliary (e.g., *can*, *may*, *might*). Within the hierarchy of boosting modal auxiliary, ‘*would*’ has the highest total frequency of usage compared to other categories of booster markers. This result implies that emergent academic writers like first-year doctoral students favour this category of a marker to express their confidences as writers over arguments in their academic writings. It should be noted that the difference in the distribution of boosting adverbs, N=66 (41.8%) and modal auxiliary, N= 49 (31.0%), was small when comparing the distribution of different categories of boosting markers. This difference may indicate that emergent academic writers were less skilful in expressing logical possibility. It is also plausible, as first-year doctoral students do not have clear understanding of their intentions as academic writers yet. As a result, they may be putting forward a general statement based on their observations that is more likely to result in over-claiming or over-generalising.

Another important point to consider is that these boosting modal auxiliaries denote either deontic or epistemic modality (Table 3). From Table 3, two different kinds of meanings can be expressed by boosting modal auxiliaries, known as deontic and

Table 3
Boosting modal auxiliaries in different categories and meanings

Boosting modal auxiliaries	Deontic (intrinsic) meaning	Epistemic (extrinsic) meaning
will, would, shall	volition	prediction
can, could, may, might	permission, ability	possibility
must, should	obligation	necessity

epistemic. Deontic represents a degree of volition, permission, ability, and obligation, while epistemic conveys a degree of chance through logical prediction, probability, or necessity (Biber & Finegan, 1989; Hyland, 2005b; Orta, 2010). While boosting modal auxiliaries helps to indicate the logical possibility, particular emphasis is placed on the use of each boosting modal auxiliaries, considering that each has a different meaning and degree of strength when used in context to demonstrate the critical function of stance expression. To illustrate:

- (a) You *can* create position in writing through attitude towards the topic discussed.
- (b) You *could* create position in writing through attitude towards the topic discussed.
- (c) You *may* create position in writing through attitude towards the topic discussed.
- (d) You *might* create position in writing through attitude towards the topic discussed.

With regard to deontic meaning, examples (a) to (d) show the decreasing ranking in permission. Sentence (a) indicates the strongest form of permission, and (d) is the weakest and most polite form of such ranking.

Considering the importance of creating convincing arguments in academic writing, semantically, accurate sentences are essential to convey the intended meaning according to the functions of the boosting modal auxiliaries used. However, Hyland and Milton (1997) emphasised that modal

auxiliaries could sometimes be ambiguous in their meanings as they are multi-functional, as shown in the research data. For example, the linguistic marker, such as, *could* can express ability and permission as well as possibility. It is consistent with what Hyland and Milton (1997) observed in their study, revealing that novice writers struggled to relate particular linguistic markers to specific functions as deontic and epistemic meanings can be signalled in many different ways. It, in turn, could lead to great difficulties, specifically for first-year doctoral students, in negotiating the meaning of the proposition with the readers.

The third most frequent sub-category is boosting lexical verbs (e.g., *demonstrated*, *showed*, and *proven*). Within the hierarchy of boosting lexical verbs, ‘*showed*’ and ‘*demonstrated*’ was most favoured, N=21 (13.3%) by these emergent academic writers who are writing in different fields of educational research. Further analysis of these boosting lexical verbs showed that the two most frequent sub-types of boosting lexical verbs are empathic verbs and empathic (Table 4).

Table 4
Percentage of sub-types in boosting lexical verbs

Boosting lexical verbs	Empathic verbs	Empathic
demonstrated	41%	-
showed	53%	-
proven	-	6%

Table 4 shows the frequency of boosting lexical verbs used by these first-year ESL doctoral students. Among these three

boosting lexical verbs (*demonstrated*, *showed*, and *proven*) used by these first-year ESL doctoral students, emphatic verbs and emphatic were found. Emphatic is a form that involves adding an adverb before the verb to the existing sentence (e.g., *strongly*, *completely*, *really*). The emphatic forms are used in only two tenses, the present tense and the past tense. It is because the emphatic form must address something that either has happened or is currently happening.

While boosting lexical verbs helps to express action or other predicate meaning, emphatic and emphatic verbs clearly have the effect of emphasising the verb in question with a greater degree of attention and stress to it. To illustrate:

- (a) Written language is used in everyday social contexts.
- (b) Written language is *increasingly* used in everyday social contexts. (Emphatic form)

With regard to emphatic form, examples (a) and (b) show the increasing emphasis and stress in the sentence. Sentence (b) indicates a greater degree of attention and (a) shows a weaker extent of emphasis. In contrast, an emphatic verb is a form that involves combining some verbs to the present tense (*do* or *does*) and to the past tense (*did*). To illustrate:

- (c) The normality assumption verified via SPSS *did show* a violation. (Emphatic verbs form in the past tense)
- (d) Proper usage of grammar, although necessary, *does not lend* itself to effective writing. (Emphatic form in the present tense)

Regarding the form of the emphatic verbs, example (c) emphasises the fact that something (*did show*) happens while (d) gives greater emphasis (*does not lend*) to the idea expressed by the verb.

As shown in Table 4, the strong use of emphatic verbs (*demonstrated*, *showed*) may reflect that first-year doctoral students who were required to write in a second language, in which many may not be fully proficient (Matsuda et al., 2013) wanted to use expressions that are of less complex in terms of lexico-grammar such as, '*proven*' or other expressions (e.g., *in fact*, *no doubt*; Ho & Li, 2018). It is also likely that these emergent academic writers prefer to avoid complex expressions as they view such markers as being restricted to spoken language. However, Simon-Vandenberg and Aijmer (2003) note that such complex emphatic expression is frequent in both spoken and written discourse. The accurate usage in an appropriate context can signal the intended relationship. More importantly, these boosting lexical verbs can perform acts, such as expressing a strong conviction that will give rise to persuasive effects on readers. The fourth most frequent sub-category is boosting determiners (e.g., *a considerable number of*, *a great number of*, *a large number of*). While boosting determiners helps to identify specific or generic things and ideas (using articles and pronouns) and how many things are (in terms of numbers), special emphasis is placed on the use of each boosting determinant considering that, each has a different degree of strength when used

in context to clarify words and sentence precision. To illustrate:

- (a) *A great number of* past studies that explored classroom writing competence found that most learners are still facing difficulties....
- (b) *A large number of* past studies that explored classroom writing competence found that most learners are still facing difficulties....
- (c) *A considerable number of* past studies that explored classroom writing competence found that most learners are still facing difficulties....

With regard to the determiner type in the above examples, examples (a) to (c) show the decreasing ranking in quantity. Sentence (a) indicates the strongest form of quantifying, and (d) is the weakest form of such ranking. This result implies that first-year doctoral students tend to express caution to some extent in academic writing. To a certain degree, this suggests that these emergent academic writers prefer detachment to commitment in writing their doctoral research proposals. In response to this aspect of caution and detachment in writing, it is vital to highlight that, although writers are encouraged to pledge for plausible reasoning, researchers have warned about mixing writers caution with lack of involvement or engagement

in writing because they might not be sufficiently persuasive, if writers are always accommodating (Crismore & Farnsworth, 1989; Dafouz-Milne, 2008; Hyland, 2005a; Lee & Deakin, 2016).

The figures in Table 4 illustrate the further analysis of sub-types of boosting determiners and revealed that some boosting determinants were utilised more than others. Finally, Table 5 presents the percentage of sub-types in boosting determiners.

As shown in Table 5, ‘will’ was used most (59%) by the doctoral students. While ‘will’ is the most commonly used boosting determiner in the corpus, it is worthy to note that ‘will’ characterises the highest degree of certainty within the hierarchy of boosting determiners. This relatively high degree of occurrence could be because such function word does not have other forms or synonyms to be replaced with. For example, first-year doctoral students express their reference of ideas or phrases in the context with the use of ‘will’ that perform one grammatical function within sentences in the English language.

The data in Table 5 shows an imbalanced distribution of boosting determiners was spotted, and only four types of boosting determiners (*will*, *many/much*, and *quite*) or otherwise known as quantifiers, were used by these first-year ESL doctoral students. The former (*will*) being the most

Table 5
Percentage of sub-types in boosting determiners

Boosting determiners	a great number of	a large number of	a considerable number of
Determiner types (n)	10	5	2
Degree of occurrence	59%	29%	12%

frequent and the latter (*quite*) being the least frequent boosting determiner expressions. It indicates that first-year doctoral students depend on limited varieties of boosting determinants. Perhaps, these first-year doctoral writers have inadequate linguistic repertoire in boosting expressions and lack of facility and certainty in using these markers effectively in creating convincing arguments in academic writing (Ho & Li, 2018; Hu & Cao, 2011; Hyland & Milton, 1997).

CONCLUSION

This study has attempted to understanding better academic discourse in academic writing by exploring the patterns of booster markers in drafts of doctoral research proposals. The focus of this article was twofold. First, to find the differences in frequency, sub-categories, and types of boosters employed by emergent academic writers, like first-year doctoral students writing in different fields of educational research. Second, on a more specific level, to focus on the persuasive role of booster markers in academic writing.

The overall findings have shown a relatively low degree of booster markers (n=158) in these first-year ESL doctoral students' written drafts of their research proposals. To some extent, using boosters in a text might be influenced by individual choice as writers to engage with and in constructing a persuasive text that appeals to their chosen fields of research. However, these choices are likely not only constrained by discourse norms, rhetorical styles of each

discipline, and disciplinary characteristics, but also by the first-year ESL doctoral students' understanding of the role of interaction and engagement in academic writing. It is supported by Ngampradit's (2020) studies that found L2 writers with little knowledge of reader-writer interaction and lower language proficiency appear to use fewer booster markers in their academic writing.

In addition, this study has shown that the booster markers occurrence varies for all participants in the drafts across four areas of study in education across time, during their first year of doctoral studies. Here, it is clear that the doctoral students' second language proficiency and metadiscourse booster markers knowledge, may have contributed to how they employ booster markers in their writing. It should also be noted that according to previous research, lower use of boosters in academic writing could be due to writers' lower language proficiency and lack of lexical diversity in academic writing (Ngampradit, 2020). Therefore, these first-year ESL doctoral students may face more challenges in the L2 writing process because they need to develop second language proficiency in creating convincing arguments, familiarise themselves with the institutional and disciplinary writing conventions while negotiating a representation of self to create a particular writer identity.

A relatively low number of booster usage was also recorded in the further analysis of booster markers sub-categories, resulting in weaker persuasive appeals. It

suggests that first-year doctoral students need to become more familiar and confident in choosing and positioning various booster markers in creating a persuasive text. Such a skill would further signal the intended relationship and engagement with the readers more effectively. While the number or variety of booster markers deployed in academic writing do not automatically enhance the persuasiveness of an argument and the writing as a whole (Ho & Li, 2018), a reluctance or lack of awareness of the existence, as well as, use of booster markers means that the emergent academic writer does not have one of the tools of the trade, as it were, at his or her disposal.

Therefore, the pedagogical implication of this study is that greater attention should be paid to the introduction and explanation of semantic features of boosters associated with the purpose of persuasion in academic writing. Furthermore, the lower and less varied use of booster markers in academic writing by first-year ESL doctoral students in this study was written by those who have completed a research project in their master's degree. Their limited use of booster markers might result from insufficient input of metadiscoursal booster markers knowledge during their master's degree education. Thus, teachers and the curriculum should emphasise the forms and functions of various booster markers in postgraduate education. With this, the students' perceptions can be trained to understand the semantic features of persuading and convincing readers in the writing.

Hyland (2019), suggested that students with realistic writing strategies do not necessarily foreground the idea that they can employ linguistic expressions (e.g., booster markers) effectively in writing. Therefore, future research can be carried out to examine how boosters were deployed to pursue persuasive appeals through qualitative analysis of emergent academic writers' written work. It will allow us to understand better the issues of overuse, underuse, and ineffective use of boosters and provide pertinent information on the needs of emergent academic writers in creating convincing arguments and constructing persuasive texts in academic writing.

ACKNOWLEDGMENTS

The authors would like to thank the participants for their willingness to share their drafts. We would also like to express our sincere gratitude to the reviewers for their comments on the earlier version of this article. This work was conducted with the financial support (UM.TNC2/IPPP/81/10/1) provided by the Institute of Research Management & Monitoring, University of Malaya.

REFERENCES

- Anthony, L. (2014). AntConc (Version 3.4.4) [Computer Software]. Waseda University. <http://www.laurenceanthony.net/>
- Aull, L. L., & Lancaster, Z. (2014). Linguistic markers of stance in early and advanced academic writing: A corpus-based comparison. *Written Communication, 31*(2), 151-183. <https://doi.org/10.1177/0741088314527055>

- Biber, D., & Finegan, E. (1989). Styles of Stance in English lexical and grammatical marking of evidentiality and affect. *Text*, 9, 93-124. <https://doi.org/10.1515/text.1.1989.9.1.93>
- Crismore, A., & Farnsworth, R. (1989). Mr. Darwin and his readers: Exploring interpersonal metadiscourse as a dimension of ethos. *Rhetorical Review*, 8(1), 91-112. <https://doi.org/10.1080/07350198909388880>
- Crismore, A., & Kopple, W. J. V. (1997). Hedges and readers: Effects on attitudes and learning. In S. Markkanen & H. Schroder (Eds.), *Hedging and discourses: Approaches to the analysis of pragmatic phenomenon in academic texts* (pp. 83-114). Walter de Gruyter and Company.
- Dafouz-Milne, E. (2008). The pragmatic role of textual and interpersonal metadiscourse markers in the construction and attainment of persuasion: A cross-linguistic study of newspaper discourse. *Journal of Pragmatics*, 40(1), 95-113. <https://doi.org/10.1016/j.pragma.2007.10.003>
- Demir, C. (2017). Competence in lexical boosters and nativeness in academic writing of English: The possible relation. *Journal of Language and Linguistic Studies*, 13(2), 593-614. <https://www.jlls.org/index.php/jlls/article/view/647/333>
- Farnia, M., & Mohammadi, N. (2019). Cross-cultural analysis of interpersonal metadiscourse markers in persuasive local newspaper articles. *Discourse and Interaction*, 11(2), 27-44. <https://doi.org/10.5817/DI2018-2-27>
- Fuertes-Olivera, P. A., Velasco-Sacristan, M., Arribas-Bano, A., & Samaniego-Fernandez, E. (2001). Persuasion and advertising English: Metadiscourse in slogans and headlines. *Journal of Pragmatics*, 33(8), 1291-1307. [https://doi.org/10.1016/S0378-2166\(01\)80026-6](https://doi.org/10.1016/S0378-2166(01)80026-6)
- Hinkel, E. (2004). *Teaching academics ESL writing*. Routledge
- Ho, V., & Li, C. (2018). The use of metadiscourse and persuasion: An analysis of first-year university students' timed argumentative essays. *Journal of English for Academic Purposes*, 33, 53-68. <https://doi.org/10.1016/j.jeap.2018.02.001>
- Hong, H., & Cao, F. (2014). Interactional metadiscourse in young EFL learner writing: A corpus based study. *International Journal of Corpus Linguistics*, 19(2), 201-224. <https://doi.org/10.1075/ijcl.19.2.03hon>
- Hu, G., & Cao, F. (2011). Hedging and boosting in abstracts of applied linguistics articles: A comparative study of English and Chinese medium journals. *Journal of Pragmatics*, 43(11), 2795-2809. <https://doi.org/10.1016/j.pragma.2011.04.007>
- Hyland, K. (1998a). Boosting, hedging and the negotiation of academic knowledge. *Text & Talk*, 18(3), 349-382. <https://doi.org/10.1515/text.1.1998.18.3.349>
- Hyland, K. (1998b). Persuasion and context. *Journal of Pragmatics*, 30(4), 437-455. [https://doi.org/10.1016/S0378-2166\(98\)00009-5](https://doi.org/10.1016/S0378-2166(98)00009-5)
- Hyland, K. (1999). Academic attribution: Citation and the construction of disciplinary knowledge. *Applied Linguistics*, 20(3), 341-367. <https://doi.org/10.1093/applin/20.3.341>
- Hyland, K. (2000). Hedges, boosters and lexical invisibility: Noticing modifiers in academic texts. *Language Awareness*, 9(4), 179-197. <https://doi.org/10.1080/09658410008667145>
- Hyland, K. (2004). Disciplinary interactions: Metadiscourse in L2 postgraduate writing. *Journal of Second Language Writing*, 13(2), 133-151. <https://doi.org/10.1016/j.jslw.2004.02.001>
- Hyland, K. (2005a). *Metadiscourse: Exploring interaction in writing*. Continuum.
- Hyland, K. (2005b). Stance and engagement: A model of interaction in academic discourse. *Discourse Studies*, 7(2), 173-192. <https://doi.org/10.1177/1461445605050365>
- Hyland, K. (2009). *Academic discourse: English in a global context*. Continuum.

- Hyland, K. (2010). Metadiscourse: Mapping interactions in academic writing. *Nordic Journal of English Studies*, 9(2), 125-143. <http://doi.org/10.35360/njes.220>
- Hyland, K. (2015). *Teaching and researching writing*. Routledge.
- Hyland, K. (2017). Metadiscourse: What is it and where is it going? *Journal of Pragmatics*, 113, 16-29. <https://doi.org/10.1016/j.pragma.2017.03.007>
- Hyland, K. (2019). *Second language writing*. Cambridge University Press.
- Hyland, K., & Milton, J. (1997). Qualification and certainty in L1 and L2 students' writing. *Journal of Second Language Writing*, 6(2), 183-205. [https://doi.org/10.1016/S1060-3743\(97\)90033-3](https://doi.org/10.1016/S1060-3743(97)90033-3)
- Hyland, K., & Tse, P. (2004). Metadiscourse in academic writing: A reappraisal. *Applied Linguistics*, 25(2), 156-177. <https://doi.org/10.1093/applin/25.2.156>
- Kim, L. C., & Lim, J. M. H. (2013). Metadiscourse in English and Chinese research article introductions. *Discourse Studies*, 15(2), 129-146. <https://doi.org/10.1177/1461445612471476>
- Lee, J. J., & Deakin, L. (2016). Interactions in L1 and L2 undergraduate's student writing: Interactional metadiscourse in successful and less-successful argumentative essays. *Journal of Second Language Writing*, 33(3), 21-34. <https://doi.org/10.1016/j.jslw.2016.06.004>
- Li, T., & Wharton, S. (2012). Metadiscourse repertoire of L1 Mandarin undergraduates writing in English: A cross-contextual, cross-disciplinary study. *Journal of English for Academic Purposes*, 11(4), 345-356. <https://doi.org/10.1016/j.jeap.2012.07.004>
- Lo, Y. Y., Othman, J., & Lim, J. W. (2020). The use of metadiscourse in academic writing by Malaysian first-year ESL doctoral students. *Indonesian Journal of Applied Linguistics*, 10(1), 271-281. <https://doi.org/10.17509/ijal.v10i1.25069>
- Matsuda, P. K., Saenkhum, T., & Accardi, S. (2013). Writing teachers; perceptions of the presence and the needs of second language writers: An institutional case study. *Journal of Second Language Writing*, 22(1), 68-86. <https://doi.org/10.1016/j.jslw.2012.10.001>
- Mur-Duenas, P. (2011). An intercultural analysis of metadiscourse features in research articles written in English and in Spanish. *Journal of Pragmatics*, 43, 3068-3079. <https://doi.org/10.1016/j.pragma.2011.05.002>
- Musa, A., Hussin, S., & Ho, I. A. (2019). Interaction in academic L2 writing: An analysis of interactional metadiscourse strategies in Applied Linguistics research articles. *3L: Language, Linguistics, Literature*®, 25(3), 16-32. <http://doi.org/10.17576/3L-2019-2503-02>
- Ngampradit, K. (2020). A corpus-based study of metadiscoursal boosters in applied linguistics dissertations written in Thailand and in the United States. In *Variation in time and space* (pp. 321-350). De Gruyter. <https://doi.org/10.1515/9783110604719-013>
- Orta, I. V. (2010). A contrastive analysis of the use of modal verbs in the expression of epistemic stance in business management research articles in English and Spain. *Iberica*, 19, 77-96. <https://www.redalyc.org/pdf/2870/287024099005.pdf>
- Peacock, M. (2006). A cross-disciplinary comparison of boosting in research articles. *Corpora*, 1, 61-84. <https://doi.org/10.3366/cor.2006.1.1.61>
- Rea-Dickins, P. (2004). Understanding teachers as agents of assessment. *Language Testing*, 21(3), 251-258. <https://doi.org/10.1191/0265532204lt283ed>
- Simon-Vandenberg, A. M., & Aijmer, K. (2003). The expectation marker of course in a cross-linguistic perspective. *Languages in Contrast*, 4(1), 13-43. <https://doi.org/10.1075/lic.4.1.03sim>

- Swales, J. (2004). *Research genres: Exploration and applications*. Cambridge University Press.
- Takimoto, M. (2015). A corpus-based analysis of hedges and boosters in English academic articles. *Indonesian Journal of Applied Linguistics*, 5(1), 95-105. <https://doi.org/10.17509/ijal.v5i1.836>
- Vassileva, I. (2001). Commitment and detachment in English and Bulgarian academic writing. *English for Specific Purposes*, 20(1), 83-102. [https://doi.org/10.1016/S0889-4906\(99\)00029-0](https://doi.org/10.1016/S0889-4906(99)00029-0)
- Vazquez, O. I., & Giner, D. (2009). Writing with conviction: The use of boosters in modelling persuasion in academic discourses. *Revista Alicantina Estudios Ingleses*, 22, 219-237. <https://doi.org/10.14198/raei.2009.22.14>



Effects of Resistance Training and Whole-Body Electromyostimulation on Muscular Strength in Female Collegiate Softball Players

Raja Nurul Jannat Raja Hussain^{1*} and Maisarah Shari²

¹*Department of Sports Science, Faculty of Sports Science and Recreation, Universiti Teknologi MARA Seremban 70300, Negeri Sembilan, Malaysia*

²*Department of Physical and Health, Faculty of Education, Universiti Teknologi MARA, Puncak Alam 42300, Selangor, Malaysia*

ABSTRACT

Strength and conditioning coaches frequently use traditional resistance training (TRT) to build strength. However, in recent years, whole-body electromyostimulation (WB-EMS) was used in elite athletes to increase muscle strength. This study aimed to assess the effect of two different types of training on muscular strength. Sixty female collegiate players (Age = 23.52±1.89 years, Height = 156.20±1.71cm; Mass = 53.21±3.17kg) participated in this study and were randomly assigned to three training groups. All groups trained as usual for eight weeks, except for the first group, which received additional TRT. The second group received additional electrical stimulation training, and the third group did not receive any additional training following the regular softball bat swing training. Muscular strength (upper and lower body) was assessed by a 3RM bench press and a 3RM squat test before and after the eight-week programme. The primary findings indicate that after eight weeks of training, upper body and lower body strength increased significantly in both the TRT and WB-EMS groups ($p = 0.000$ and $p = 0.000$, respectively) in comparison to the control group. However, the t value indicated that the TRT group improved both upper body strength (20.18) and lower body strength (29.18) more than the WB-EMS group (upper body = 6.18; lower body = 6.47). The findings demonstrate the efficacy of both

training modalities for increasing muscular strength and suggest that TRT be prioritised over whole-body electrical stimulation training for increasing muscular strength in collegiate softball players.

Keywords: Electromyostimulation, intensity, softball, strength

ARTICLE INFO

Article history:

Received: 15 June 2021

Accepted: 27 July 2021

Published: 24 September 2021

DOI: <https://doi.org/10.47836/pjssh.29.3.24>

E-mail addresses:

nuruljannat@uitm.edu.my (Raja Nurul Jannat Raja Hussain)

maisarahshari@uitm.edu.my (Maisarah Shari)

* Corresponding author

INTRODUCTION

Softball can be regarded as a popular recreational and competitive sport played commonly by women and men worldwide. This sport requires complex skills such as running, throwing, catching, pitching, and batting. These skills require accuracy, speed, and strength (Milanovich & Nesbit, 2014; Park et al., 2020). Therefore, many conditioning coaches seek an optimal training programme to improve softball skills and performance. One of the training programmes is resistance training, which has been noted to be an eminent method for increasing muscular strength, particularly the main muscles used in softball (arms, chest, core, thigh, and glutes) (DeRenne et al., 2001; Stuempfle et al., 2004). Following a resistance training programme, these studies also found more outstanding performance in throwing, pitching, and batting among softball players.

Resistance training has been commonly used for the last 30 years to improve muscular strength in school, amateur, and professional athletes (Nunes et al., 2021; Stricker et al., 2020; Szymanski et al., 2009; Szymanski, McIntyre et al., 2007). A traditional resistance training (TRT) session lasts up to 60 minutes (Moro et al., 2020). However, coaches have limited time to train their athletes (Ludwig et al., 2020). For example, an average, a college softball team has a maximum of 20 hours of training time, in which skill and conditioning practices need to be allocated. If a team takes two-and-a-half hours to do skill practice on each typical six-day training

schedule, they will have only five hours of conditioning practice each week. As a result, they frequently overlook conditioning practice to concentrate on game techniques and tactics. Time is a crucial factor to the coaches; it contributes to players having an undermanned strength base, which subsequently deteriorates their athletic performance (Sugimoto et al., 2017).

Therefore, a time-saving training programme comprising high-efficiency muscle adaptation stimulus can be favourable to coaches. One of the alternative training approaches available is muscle stimulation through electromyostimulation (EMS), which appears to be promising for developing and improving fundamental strength capacities (such as sprinting and jumping) and increasing athletes' maximal strength (Bhave, 2021; Billot et al., 2010; Filipovic et al., 2016; Gondin et al., 2006; Strasunskas, 2020). The stimulation of muscles with electrodes applied to the skin has been recognised of physical therapy for a long time (Ludwig et al., 2020). Filipovic et al. (2012) demonstrated that EMS could also be used in sports to enhance training and individual strength abilities (e.g., maximal strength, speed-strength, and power). The method increased neuromuscular muscle fibre recruitment and muscular adaptations, such as muscle fibre change or hypertrophy (Maffiuletti et al., 2006). Therefore, the EMS can be a pleasant addition to traditional athletic training.

Gregory and Bickel (2005) found that electrical stimulation had caused more indirect involuntary contractions

mediated by the central nervous system. Low-frequency (approximately 50–120 Hz) EMS has been shown to increase muscle tension, resulting in increased metabolic and mechanical stress on the muscular structures, hence triggering neuronal and hormonal adaptation processes (Gregory & Bickel, 2005; Jubeau et al., 2008; Nosaka et al., 2011). Numerous studies on the effects of EMS on athletes also found a significant increase in strength (Dehail et al., 2008; Filipovic et al., 2019; Ludwig et al., 2020) after EMS training. Babault et al. (2007) reported a significant increase in strength and power for selected muscles (quadriceps femoris, gluteus maximus, and triceps) over a 12-week training period. However, such improvements did not benefit rugby's technical skills, such as scrummaging and sprinting. In one study by Herrero et al. (2006), a combination of EMS and plyometric training improved quadriceps femoris maximal strength, vertical jump, and sprint. However, the same study also found that electrostimulation alone did not decrease sprint velocity and that its benefits were not greater than those observed when combined with plyometric training.

Previous studies (Jubeau et al., 2008; Nosaka et al., 2011; Sanchez et al., 2005) have applied a single electrode EMS to specific muscles. However, the new generation of whole-body EMS (WB-EMS) device allowed for simultaneous training of multiple muscle groups via an electrode belt and vest system. Other studies had found that when WB-EMS stimulation was performed with isometric

contraction and at maximum contraction, the chances of muscular damage may increase (Kemmler & von Stengel, 2013; Stöllberger & Finsterer, 2019). Therefore, adjusting to the intensity of training while on WB-EMS is challenging. When not used properly, WB-EMS exercises can result in health risks hence questioning the benefit of this training mode. Accordingly, recent studies sought to examine the effects of WB-EMS on health parameters and efficiency (Filipovic et al., 2016, 2019; Kemmler et al., 2018), and recommendations for a safe and efficient implementation were proposed (Hussain et al., 2016, Kemmler et al., 2018). However, it is widely recognised that when WB-EMS training is correctly implemented and monitored, it can be a safe method of developing physical performance and wellbeing in healthy adults and athletes.

EMS can be advantageous to coaches with limited physical conditioning training time available. However, only a few studies were conducted on athletes using the WB-EMS approach compared to studies concerning the use of a single electrode EMS (Filipovic et al., 2016). Previous studies concerning the WB-EMS use primarily concern trainings for increasing muscle mass and reducing abdominal fat (Kemmler & von Stengel, 2013) and energy expenditure (Kemmler et al., 2012) among sedentary and older women. Another study sought to improve resting metabolic rate and body composition (Kemmler et al., 2010). However, little has been explored on the effects of WB-EMS on general fitness performance, such as muscle strength.

Given the knowledge gap, the current study seeks to compare the effects of TRT on the muscular strength of female college softball players in a WB-EMS programme. Female players were selected because compared to the male softball teams, the Malaysian women’s softball teams have more potential to excel in the future following their consistent participation in the Southeast Asian Games.

METHODS

Participants

Eighty volunteer female softball players came for screening. However, twenty of them did not meet the inclusion criteria, leaving sixty healthy female collegiate

softball players (age: $M=23.52$, $SD=1.89$ years old, height: $M=156.20$, $SD=1.71$ cm, weight: $M=53.21$, $SD=3.17$ kg) for recruitment (Figure 1). The inclusion criteria were as follows: (i) must be in the official collegiate softball team roster, (ii) have experience in resistance training, and (iii) have no self-reported sickness, neurological problems, mental illness, or significant current and past injuries that could place them at risk while performing exercises and training. In addition, all participants were tested on their upper-lower body strength. As a result, showed no differences in their strength test, a fish-bowl technique was used to randomly assign them into three groups (TRT, WB-EMS, CTR), each comprising

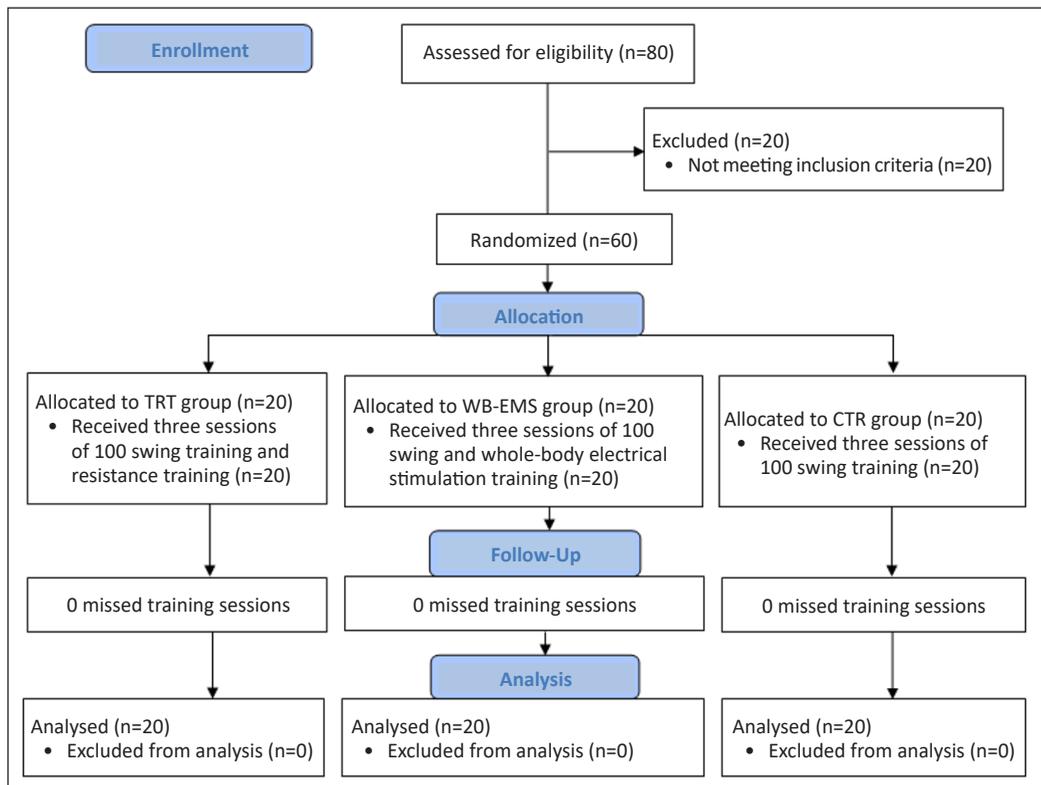


Figure 1. CONSORT 2010 flow diagram

20 participants. This study was approved by the Research Ethics Committee, Universiti Teknologi MARA (600-RMI 5/1/6).

Experimental Design and Procedures

The effects of interventions on muscular strength were measured using a randomised pretest-posttest control group design. The players' muscular strengths were measured using three rounds of repetition maximum (3RM) bench press and squat tests. Multiple-repetition tests are known to be a reliable, valid, and safe method for predicting 1RM among beginners and intermediate athletes (Ruivo et al., 2016) with a validity value of $r = 0.84 - 0.92$. The procedure and guideline for conducting both tests were retrieved from National Strength and Conditioning Association (NSCA) and Earle et al. (2004). Bryzcki's equation was used to calculate the estimated 1RM of all the players (Ruivo et al., 2016).

Testing Procedures

3RM Bench Press. The participants performed full-body dynamic warm-up exercises prior to the 3RM bench press test. Then, a specific warm-up of 5 to 10 repetitions with a light to moderate load was applied. The test was conducted using an Olympic barbell (15–20 kg) and a flat bench. Following the warm-up, a 1-minute rest period was given. Next, a range from 4 to 9 kg of the load was added, and the players were allowed to complete 3 to 5 repetitions. Then, a 4-minute rest was provided before the load was increased to the player's near-maximal-load ability, and they were allowed

to complete 3 repetitions. If the player successfully pressed for three repetitions, a 3-minute rest was given, and then the load was increased. Then, the player re-attempted the 3RM. If she failed, a 3-minute rest was given, and the load was decreased by 2 to 4 kg. Then, the player re-attempted the 3RM. Adding and decreasing the load was repeated until the player completed the 3RM with the proper technique. Ideally, the 3RM was measured within 3 to 5 testings (Baechle & Earle, 2008).

3RM Squat. Following the 3RM bench press test, the participants performed a specific warm-up of 5 to 10 repetitions with light to moderate load. The test was conducted using an Olympic barbell (15–20 kg) and a squat rack. Following the warm-up, a 1-minute rest period was given. Next, a range from 14 to 18 kg of the load was added, and the players were allowed to complete 3 to 5 repetitions. Then, a 4-minute rest was provided before the load was increased to the player's near-maximal-load ability, and they were allowed to complete 3 repetitions. If the player successfully pressed for three repetitions, a 3-minute rest was given, and then the load was increased. Then, the player was asked to re-attempt the 3RM. If she failed, a 3-minute rest was given, and the load was decreased by 7 to 9 kg. Then, the player was asked to re-attempt the 3RM. Adding and decreasing the load was repeated until the player completed the 3RM with the proper technique. Ideally, the 3RM was measured within 3 to 5 testings (Baechle & Earle, 2008).

Training Intervention. Three training groups were involved in this study. The training frequency for all the training groups was 3 days per week (Monday, Wednesday, Friday), and the duration of each session was varied based on the type of training. The first group was a TRT group, which consisted of 20 players. This group was asked to perform resistance exercises after a normal-swing training session (Table 1). The normal-swing training was divided into 5 sets, with 20 swings per set, and all the players were told to use the same bat (DemaRini; 34-inch; 24-Oz) for the entire eight-week training. The resistance training was performed in the gym using free weights, dumbbells, and machines. The training was planned according to a stepwise periodised method for improving muscular

strength in baseball and softball players (Stone et al., 2000; Szymanski, Szymanski et al., 2007; Szymanski et al., 2004). Progressive overload was implemented in this training in which all the exercises began with high repetition, low intensity (low volume) to low repetitions, and high intensity (high volume). Sixty-five per cent of the estimated 1RM was set for the first week and increased by 5% (as tolerated) for each week of training until it reached 80% of 1RM at week four. Then, at the end of the fourth week, the 3RM testing was repeated to determine a new predicted 1RM. The intensity started at 85% of the predicted 1RM for the following week, i.e. the fifth week, and was increased by 5% from the sixth to the eighth week. If, the participant could complete more

Table 1
Resistance training programme

Variables	Week 1 to week 4			Week 5 to week 8		
	Sets	Reps		Sets	Reps	
Warm-up	2	10		2	10	
Swing practice	5	20		5	20	
	Sets	Reps	%RM	Sets	Reps	%RM
Warm-up	2	10	50-60	2	10	50-60
Parallel squat	3	6-8	65-80	3	2-6	85-90
Stiff leg deadlift	3	6-8	65-80	3	2-6	85-90
Barbell bench press	3	6-8	65-80	3	2-6	85-90
Triceps push down	2	10-12	50-65	2	8-12	70-75
Dumbbell biceps curl	2	10-12	50-65	2	8-12	70-75
Seated Row	2	10-12	50-65	2	8-12	70-75
Weighted Ball Exercise	Sets	Reps	Load (kg)	Sets	Reps	Load (kg)
Hitters throw	2	6	5	2	8	4
Standing figure 8	2	6	5	2	8	4
Speed rotation	2	6	5	2	8	4
Standing side throw	2	6	5	2	8	4
Squat and throw	2	6	5	2	8	4

Note. Reps=Repetitions, %RM= percentage of repetition maximum

than the prescribed repetitions during the eighth week of training, the intensity was gradually increased. If the individual could not complete the repetitions, the load was reduced by the smallest amount possible in the subsequent exercise session. The TRT group took approximately 1 hour and 30 minutes to complete both swing and resistance training in each exercise session.

The second group was the whole-body electromyostimulation (WB-EMS) group, which consisted of 20 players who performed an electrical stimulation exercise after a normal-swing training session (Table 2). The group performed the exercise in a studio using a whole-body electrical stimulation machine (miha-boodytec, Augsburg, Germany). The application unit was connected via electrical cords to a stimulation vest and belts (Figure 2). Bilaterally paired surface electrodes were integrated. Eight muscle areas could be stimulated synchronously with freely

selectable impulse intensities (0–120 mA) for each pair of electrodes. In this study, nine pairs of electrodes were applied around the players' biceps, triceps, pectoralis major, latissimus dorsi, obliques, lower back, glutes, quadriceps, and hamstring muscles. The vest comes in various sizes, ranging from XS to XL. Each player was asked to wear a vest that fit her, and the trainer made sure that the locations of all the electrodes covered all the muscles involved in the training. This group's training programme design and variables were similar to the resistance training but differed in intensity unit (electrical voltage). The players performed the electrical stimulation using manufactured biphasic rectangular wave pulse current - 85 Hz of a width of 350 s, with maximal tolerance of 50 to 80 milliamper (mA), depending on week and intensity. Each single lift impulse lasted 5 seconds and was followed by a 5-second rest period. Progressive overload was also implemented in this training; all the exercises started with high repetition and low intensity (low volume) and progressed to low repetition and high intensity (high volume). However, because the loading unit was different in both training methods, the repetition maximum milliamper (RMM) was determined using previously published procedures (Hussain et al., 2016).

Prior to the electrical stimulation training, all the players in the WB-EMS group underwent three familiarisation sessions to accustom them to the electrical stimulation sensation. During the sessions, safety precautions, such as the pain feeling and technique in performing the exercises,



Figure 2. WB-EMS vest and belts

were explained and checked by a qualified trainer. Then, an estimate of 1RMM of bench press and squat were conducted to determine the maximum impulse frequency that a player can contract for both exercises. The impulse frequency for the first 4 weeks of training was calculated based on the estimated 1RMM test result. Sixty-five per cent of the estimated 1RMM was set for the first week and increased by 5% (as tolerated) for each week of training until it reached 80% of 1RMM at week four. At the end of the fourth week, the 3RM test was repeated to determine a new predicted 1RMM. The intensity started at 85% of the predicted 1RMM for the following week (the fifth week) and increased by 5% from the sixth week to the eighth week. If, during the eight weeks of training, a

participant could complete more than the prescribed repetitions, the intensity was gradually increased. If the individual could not complete the repetitions, the load was reduced by the smallest amount possible in the subsequent exercise session. The WB-EMS training group took approximately 60 minutes to complete both swing and whole-body electrical stimulation training in each exercise session.

The third group was the control (CTR) group, which also consisted of 20 players. This group performed only three sessions of swing training, similar to the TRT and WB-EMS groups. The swing practice was adopted from the study by Szymanski et al. (2009), which was able to demonstrate an increase in baseball players' performance. Coaches have also used this programme

Table 2
Whole-body electromyostimulation training programme

Variables	Week 1 to week 4			Week 5 to week 8		
	Sets	Reps		Sets	Reps	
Warm-up	2	10		2	10	
Swing practice	5	20		5	20	
	Sets	Reps	%RMM	Sets	Reps	%RMM
Warm-up	2	10	50-60	2	10	50-60
Parallel squat	3	6-8	65-80	3	2-6	85-90
Stiff leg deadlift	3	6-8	65-80	3	2-6	85-90
Barbell bench press	3	6-8	65-80	3	2-6	85-90
Triceps push down	2	10-12	50-65	2	8-12	70-75
Dumbbell biceps curl	2	10-12	50-65	2	8-12	70-75
Seated Row	2	10-12	50-65	2	8-12	70-75
Ball Exercise	Sets	Reps	%RMM	Sets	Reps	%RMM
Hitters throw	2	6	80	2	8	75
Standing figure 8	2	6	80	2	8	75
Speed rotation	2	6	80	2	8	75
Standing side throw	2	6	80	2	8	75
Squat and throw	2	6	80	2	8	75

Note. Reps=Repetitions, %RMM= percentage of repetition maximum miliAmpere

during softball practice daily. Although the CTR group was a control group, the participants must complete several sets of swing training. Each routine began with a warm-up consisting of two sets of ten repetitions of swinging a standard bat. The participants must then swing for 5 sets of 20 times. For the entire eight weeks, the participants trained with a standard bat. The CTR group took approximately 30 minutes to complete swing training in each exercise session.

Data Analysis

A Kolmogorov-Smirnov test for normality was performed before the analysis. First, it was determined that all parameters were normally distributed. Next, a paired sample t-test was used to compare the predicted 1RM between the groups at baseline and after week eight. Then, Levene's test was used to verify the assumption of homogenous variances. Finally, a one-way analysis of variance (ANOVA) on gain (mean difference) score was used to identify the significant difference between all training groups. All the data were analysed

using SPSS 23 (IBM®, Armonk, NY, USA) with a statistically significant value determined at an alpha level of $p \leq .05$.

RESULTS

After eight weeks of training, both the TRT and WB-EMS groups showed improvement in the pre-test and post-test for upper and lower body strengths with a significance value of .000 for bench press and squat tests (Table 3) compared to the CTR group ($p \geq .05$).

Further analysis was conducted to determine which group showed more remarkable improvement in upper and lower body strengths. The one-way ANOVA test (Table 4) indicates a statistically significant difference between the groups in the bench press [$F(2, 57) = 120.038, p = .000$]. The Tukey posthoc test revealed that upper body strength was significantly improved in the TRT (7.37 ± 1.63 kg, $p = .000$) and WB-EMS (2.37 ± 1.72 kg, $p = .000$) groups compared to the CTR group (-0.68 ± 1.62 kg). It was pertaining to lower body strength, and a statistically significant difference was noted between the groups

Table 3
Paired sample t-test for upper and lower body strength

Groups	Pre mean (sd)	Post mean (sd)	Mean difference	t-value	p
Bench Press					
TRT	25.67 (3.40)	33.04 (4.29)	7.37	20.18	.000
WB-EMS	24.08 (3.50)	26.46 (3.07)	2.38	6.18	.000
CTR	25.10 (3.02)	25.33 (2.88)	0.23	1.45	.163
Squat					
TRT	43.06 (2.68)	51.46 (2.76)	8.40	29.01	.000
WB-EMS	42.04 (2.53)	46.01 (2.36)	3.97	6.47	.000
CTR	42.71 (2.15)	42.83 (1.93)	0.11	0.561	.582

Table 4
Analysis of variance (ANOVA) for strength

		Sum of squares	df	Mean square	F	Sig.
Bench Press	Between Groups	660.789	2	330.395	120.038	.000
	Within Groups	156.888	57	2.752		
	Total	817.677	59			
Squat	Between Groups	635.256	2	317.628	61.810	.000
	Within Groups	292.910	57	5.139		
	Total	928.166	59			

Table 5
Multiple Comparison

Variables	(I) Group	(J) Group	Mean difference	Standard error	Sig.
Bench Press	TRT	WB-EMS	4.99*	.525	.000
		CTR	8.05*	.525	.000
Squat	TRT	WB-EMS	4.43*	.717	.000
		CTR	7.95*	.717	.000

Note. *The mean difference is significant at the 0.05 level

in the bench press as determined by the one-way ANOVA test [$F(2, 57) = 61.81$, $p = .000$]. The Tukey posthoc test revealed that upper body strength was significantly improved in the TRT (8.40 ± 1.29 kg, $p = .000$) and WB-EMS (3.97 ± 2.74 kg, $p = .000$) groups compared to the CTR group (0.45 ± 2.49 kg). Multiple comparison tests were conducted to identify which group elicited more remarkable changes in upper and lower body strengths. Table 5 shows a statistically significant difference between the TRT and WB-EMS ($p = .000$) groups in upper and lower body strengths. Therefore, it can be identified that the TRT group elicited more remarkable muscular strength changes than the WB-EMS group.

DISCUSSION

This study was designed to investigate the effects of superimposed WB-EMS

on collegiate softball players' muscular strength. The addition of TRT and WB-EMS training sessions was found to demonstrate improvement in the players' muscular strength. It seems like the addition of three sessions of resistance training or WB-EMS after a 100-swing practice had significant effects on the performances of the 3RM bench press and squat strength tests among the collegiate female softball players. After eight weeks of training, a significant increase in the mean predicted 1RM bench press and the squat test. The increases in maximal strength are comparable to those seen in local EMS studies of trained and elite athletes after 12–28 sessions (Babault et al., 2007; Billot et al., 2010; Filipovic et al., 2011, 2012).

Despite the significant improvement in the bench press and squat scores, the improvement was marginal. While such a

response is difficult to explain, the different improvement rates were likely related to the players' experience level. The players involved were collegiate, some of whom are at the beginning of their careers. Most of them have a beginner level of resistance training experience (< 3 months). Hoffman et al. (2011) suggested that experienced, resistance-trained players may need up to 2 years to achieve greater significant strength improvements. Also, most collegiate coaches were part-time coaches with possibly limited time to train players' conditioning. These coaches might have focused on improving the players' technical and tactical abilities rather than biomotor abilities, such as muscular strength. Despite the slight improvement the collegiate female softball players showed on the bench press and squat scores, all the players showed no difference in their strength scores before the intervention; they showed improvement after eight weeks of training.

Improvement of neural adaptation was one of the causes of increased muscle strength in resistance training (Suchomel et al., 2018) and full-body electromyostimulation (Gondin et al., 2006; Maffiuletti et al., 2000). Additionally, improvements in both/ either central nervous system (e.g., neuronal drive) and/or the muscle (e.g., hypertrophy) explained the strength gains following training. Although there have been no EMG or cross-sectional area measurements in the current study to confirm that the strength improvement occurred at the muscle or central nervous system, the EMS training was assumed to have resulted in neural

adaptation rather than muscle adaptation. Only minor changes were reported in a cross-sectional area (CSA) during the first three to eight weeks of resistance and electrical stimulation training (Aagaard et al., 2002; Aldayel, 2010). A study by Narici et al. (1989) was one of the earliest studies measuring the changes in CSA, maximum voluntary contraction (MVC), and neural activation in quadriceps muscle after eight weeks of resistance training. The study showed significant improvement in all three measurements. However, CSA improvement was reported below 50% compared to MVC and neural activation, which was measured using electromyography. This observation is also in line with Moritani and Devries's (1980) study. Therefore, it would be reasonable to expect that the increase in muscle strength found in this study could improve neural activation compared to the CSA. Additionally, electrical stimulation was found to activate the nerve's intramuscular branches rather than the muscle fibres directly (Aldayel, 2010).

Collins (2007) found that by the transcutaneous peripheral nerve stimulation, direct muscle electrostimulation causes muscle contraction, induced directly by depolarising motoneurons or indirectly by depolarising sensory afferents. The stimulation recruits motor units differently from physiological muscle recruitment during voluntary contraction, which may explain the strength gain observed following electrostimulation training in healthy subjects. Electrostimulation was frequently thought to recruit motor units in the reverse

order of voluntary drive, contradicting Hennemann's "size principle". According to this principle, slow motor units associated with small-diameter motoneuron axons are active before fast motor units associated with larger-diameter axons. In contrast to voluntary contraction, the current view implies that recruitment does not occur in a synchronised pattern (Dehail et al., 2008). The electrode surface, location, and type, as well as the stimulated muscle, all appear to affect the conductive volume and current density, which affects the recruitment pattern. When repeated electrical stimulations are used, such as during muscle training, an adaptation of muscle physiology is observed in healthy subjects. The cross-sectional area of type-I muscle fibres or the entire muscle group that was trained has increased (Gondin et al., 2006; Herrero et al., 2006). Such was associated with an increase in the IIA isoform of myosin's heavy chains (Maffiuletti et al., 2006) and appeared to be greater when the voluntary contraction was combined with stimulation (Sanchez et al., 2005). These changes are dependent on the type of stimulation used and may be associated with an increase in a trained muscle's maximal strength and electrical activity (Gondin et al., 2006; Maffiuletti et al., 2006; Sanchez et al., 2005).

In addition, both the training groups received a training programme that operates on the theory of progressive overload, which is one of the factors that could improve an athlete's fitness performance. Progressive overload is a fundamental strength-training principle achieved by varying variables,

such as intensity, volume, rest times, and frequency (Whaley et al., 2020). The training load (intensity) in the current study was started slowly and gradually increased until it reached 90 per cent of 1RM at the end of the exercise. Progressive overload mechanism was shown to affect one's hormonal, acute metabolic, neural, and cardiovascular responses to exercises (Kraemer & Ratamess, 2005; Kraemer et al., 2006; Ratamess et al., 2009, Whaley et al., 2020).

Increased stress on skeletal muscle eventually led to improvements in muscle size increment and modification of contractile characteristics (Bird et al., 2005). Overload and progressive principles were also found to lead to muscular strength adjustment and increased dynamic force. This finding also supports the previous studies (Szymanski et al., 2009; Szymanski et al., 2007a; Szymanski et al., 2007b), which found dynamic strength improvement related to the implementation of the progressive overload principle.

The current study also discovered that WB-EMS provided safe training with no detrimental effect on players' performance. The WB-EMS approach can also be an alternative training for improving players' performance as the training consumes less training time. Although the current study showed improvement in dynamic strength, more studies are required to identify the underlying effects of WB-EMS on athlete's sports performance at different training frequencies, intensities, and duration of training. Although this study can reach

some conclusions about the effectiveness of both the TRT and WB-EMS training, the underlying mechanism of the training was not fully explored. Therefore, a conclusion can be drawn that TRT has improved muscular strength, but no conclusive evidence was derived on the best training mode. A further investigation related to electromyography (EMG) analysis, particularly at the cell level, is needed to clarify the effects of the possible underlying mechanisms of WB-EMS training. Such studies could help justify the changes that occur in the human body after WB-EMS training.

CONCLUSION

The present study demonstrated that inducing TRT and WB-EMS interventions to regular softball training for eight weeks resulted in increased muscular strength among the softball players. The findings also note that among the two training modes conducted in this study, TRT demonstrated a more considerable improvement in both upper and lower body strengths compared to WB-EMS.

ACKNOWLEDGEMENTS

We gratefully acknowledge the support of Faculty of Sports Science University Teknologi MARA gymnasium and Miha BodyTec (United Lifestyle). None of the authors has any conflict of interest. We are also grateful for the grant from Research Management Institute (RMI): 600-RMI/MyRA 5/3/LESTARI (32/2016).

REFERENCES

- Aagaard, P., Simonsen, E. B., Andersen, J. L., Magnusson, P., & Dyhre-Poulsen, P. (2002). Neural adaptation to resistance training: Changes in evoked V-wave and H-reflex responses. *Journal of Applied Physiology*, 92(6), 2309-2318. <https://doi.org/10.1152/jappphysiol.01185.2001>
- Aldayel, A. A. (2010). *Comparison of acute physiological effects between alternating current and pulsed current electrical muscle stimulation* [Doctoral dissertation, Edith Cowan University]. Edith Cowan University Publishing. <https://ro.ecu.edu.au/theses/131/>
- Babault, N., Cometti, G., Bernardin, M., Pousson, M., & Chatard, J.-C. (2007). Effects of electromyostimulation training on muscle strength and power of elite rugby players. *Journal of Strength and Conditioning Research*, 21(2), 431-437. <https://doi.org/10.1519/00124278-200705000-00025>
- Baeckle, T. R., & Earle, R. W. (Eds.). (2008). *Essentials of strength training and conditioning*. Human Kinetics.
- Bhave, P. T. A. (2021). Neuromuscular electrical stimulation increases muscle strength, reduces pain, and improves functional recovery. *International Journal Orthopaedic Sports Medicine*, 2(1), 1007.
- Billot, M., Martin, A., Paizis, C., Cometti, C., & Babault, N. (2010). Effects of an electrostimulation training program on strength, jumping, and kicking capacities in soccer players. *The Journal of Strength & Conditioning Research*, 24(5), 1407-1413. <https://doi.org/10.1519/JSC.0b013e3181d43790>
- Bird, S. P., Tarpinning, K. M., & Marino, F. E. (2005). Designing resistance training programmes to enhance muscular fitness. *Sports Medicine*, 35(10), 841-851. <https://doi.org/10.2165/00007256-200535100-00002>

- Collins, D. F. (2007). Central contributions to contractions evoked by tetanic neuromuscular electrical stimulation. *Exercise and Sport Sciences Reviews*, 35(3), 102-109. <https://doi.org/10.1097/jes.0b013e3180a0321b>
- Dehail, P., Duclos, C., & Barat, M. (2008). Electrical stimulation and muscle strengthening. *Annales de Réadaptation et de Médecine Physique*, 51(6), 441-451. <https://doi.org/10.1016/j.annrmp.2008.05.001>
- DeRenne, C., Ho, K. W., & Murphy, J. C. (2001). Effects of general, special, and specific resistance training on throwing velocity in baseball: A brief review. *The Journal of Strength & Conditioning Research*, 15(1), 148-156. <https://doi.org/10.1519/00124278-200102000-00026>
- Earle, R. W., Baechle, T. R., & National Strength & Conditioning Association. (2004). *NSCA's essentials of personal training*. Human Kinetics.
- Filipovic A., DeMarees M., Grau M., Hollinger A., Seeger B., Schiffer T., Bloch W., Gehlert S. (2019). superimposed whole-body electrostimulation augments strength adaptations and type II myofiber growth in soccer players during a competitive season. *Frontiers in Physiology*, 10, 1187. <https://doi.org/10.3389/fphys.2019.01187>
- Filipovic, A., Grau, M., Kleinöder, H., Zimmer, P., Hollmann, W., & Bloch, W. (2016). Effects of a whole-body electrostimulation program on strength, sprinting, jumping, and kicking capacity in elite soccer players. *Journal of Sports Science & Medicine*, 15(4), 639-648.
- Filipovic, A., Kleinöder, H., Dörmann, U., & Mester, J. (2011). Electromyostimulation—a systematic review of the influence of training regimens and stimulation parameters on effectiveness in electromyostimulation training of selected strength parameters. *The Journal of Strength & Conditioning Research*, 25(11), 3218-3238. <https://doi.org/10.1519/JSC.0b013e318212e3ce>
- Filipovic, A., Kleinöder, H., Dörmann, U., & Mester, J. (2012). Electromyostimulation—a systematic review of the effects of different electromyostimulation methods on selected strength parameters in trained and elite athletes. *The Journal of Strength & Conditioning Research*, 26(9), 2600-2614. <https://doi.org/10.1519/JSC.0b013e31823f2cd1>
- Gondin, J., Guette, M., Ballay, Y., & Martin, A. (2006). Neural and muscular changes to detraining after electrostimulation training. *European Journal of Applied Physiology*, 97(2), 165-173. <https://doi.org/10.1007/s00421-006-0159-z>
- Gregory, C. M., & Bickel, C. S. (2005). Recruitment patterns in human skeletal muscle during electrical stimulation. *Physical Therapy*, 85(4), 358-364. <https://doi.org/10.1093/ptj/85.4.358>
- Herrero, J. A., Izquierdo, M., Maffiuletti, N. A., & Garcia-Lopez, J. (2006). Electromyostimulation and plyometric training effects on jumping and sprint time. *International Journal of Sports Medicine*, 27(07), 533-539. <https://doi.org/10.1055/s-2005-865845>
- Hoffman, J. R., Ratamess, N. A., & Kang, J. (2011). Performance changes during a college playing career in NCAA division III football athletes. *The Journal of Strength & Conditioning Research*, 25(9), 2351-2357. <https://doi.org/10.1519/JSC.0b013e31821743df>
- Hussain, R. N. J. R., Kee, K. M., Razman, R., Ismail, S. I., Shari, M., & Ideris, N. M. (2016). Relationship between electromyostimulation and free weight exercises in multiple repetition maximum strength test. In *International Conference on Movement, Health and Exercise* (pp. 83-87). Springer, Singapore. https://doi.org/10.1007/978-981-10-3737-5_17
- Jubeau, M., Sartorio, A., Marinone, P. G., Agosti, F., Van Hoecke, J., Nosaka, K., & Maffiuletti, N. A. (2008). Comparison between voluntary and stimulated contractions of the quadriceps

- femoris for growth hormone response and muscle damage. *Journal of Applied Physiology*, 104(1), 75-81. <https://doi.org/10.1152/jappphysiol.00335.2007>
- Kemmler, W., Schliffka, R., Mayhew, J. L., & von Stengel, S. (2010). Effects of whole-body electromyostimulation on resting metabolic rate, body composition, and maximum strength in postmenopausal women: The training and electrostimulation trial. *The Journal of Strength & Conditioning Research*, 24(7), 1880-1887. <https://doi.org/10.1519/JSC.0b013e3181ddaee>
- Kemmler, W., & von Stengel, S. (2013). Whole-body electromyostimulation as a means to impact muscle mass and abdominal body fat in lean, sedentary, older female adults: Subanalysis of the TEST-III trial. *Clinical Interventions in Aging*, 8, 1353. <https://doi.org/10.2147/CIA.S52337>
- Kemmler, W., Von Stengel, S., Schwarz, J., & Mayhew, J. L. (2012). Effect of whole-body electromyostimulation on energy expenditure during exercise. *The Journal of Strength & Conditioning Research*, 26(1), 240-245. <https://doi.org/10.1519/JSC.0b013e31821a3a11>
- Kemmler, W., Weissenfels, A., Willert, S., Shojaa, M., von Stengel, S., Filipovic, A., Kleinöder, H., Berger, J., & Fröhlich, M. (2018). Efficacy and safety of low frequency whole-body electromyostimulation (WB-EMS) to improve health-related outcomes in non-athletic adults. A systematic review. *Frontiers in Physiology*, 9, 573. <https://doi.org/10.3389/fphys.2018.00573>
- Kraemer, W. J., & Ratamess, N. A. (2005). Hormonal responses and adaptations to resistance exercise and training. *Sports Medicine*, 35(4), 339-361. <https://doi.org/10.2165/00007256-200535040-00004>
- Kraemer, W. J., Spiering, B. A., Volek, J. S., Ratamess, N. A., Sharman, M. J., Rubin, M. R., French, D. N., Silvestre, R., Hatfield, D. L., Van Heest, J. L., Vingren, J. L., Judelson, D. A., Deshenes, M. R., & Maresh, C. M. (2006). Androgenic responses to resistance exercise: Effects of feeding and L-carnitine. *Medicine & Science in Sports & Exercise*, 38(7), 1288-1296. <https://doi.org/10.1249/01.mss.0000227314.85728.35>
- Ludwig, O., Berger, J., Schuh, T., Backfisch, M., Becker, S., & Fröhlich, M. (2020). Can a superimposed whole-body electromyostimulation intervention enhance the effects of a 10-week athletic strength training in youth elite soccer players?. *Journal of Sports Science & Medicine*, 19(3), 535-546.
- Maffiuletti, N. A., Gometti, C., Amiridis, I. G., Martin, A., Pousson, M., & Chatard, J. C. (2000). The effects of electromyostimulation training and basketball practice on muscle strength and jumping ability. *International journal of sports medicine*, 21(06), 437-443. <https://doi.org/10.1055/s-2000-3837>
- Maffiuletti, N. A., Zory, R., Miotti, D., Pellegrino, M. A., Jubeau, M., & Bottinelli, R. (2006). Neuromuscular adaptations to electrostimulation resistance training. *American Journal of Physical Medicine & Rehabilitation*, 85(2), 167-175. <https://doi.org/10.1097/01.phm.0000197570.03343.18>
- Milanovich, M., & Nesbit, S. M. (2014). A three-dimensional kinematic and kinetic study of the college-level female softball swing. *Journal of Sports Science & Medicine*, 13(1), 180.
- Moritani, T., & Devries, H. A. (1980). Potential for gross muscle hypertrophy in older men. *Journal of Gerontology*, 35(5), 672-682. <https://doi.org/10.1093/geronj/35.5.672>
- Moro, T., Marcolin, G., Bianco, A., Bolzetta, F., Berton, L., Sergi, G., & Paoli, A. (2020). Effects of 6 weeks of traditional resistance training or high intensity interval resistance training on body composition, aerobic power and strength in healthy young subjects: A randomized parallel trial. *International Journal of Environmental*

- Research and Public Health*, 17(11), 4093. <https://doi.org/10.3390/ijerph17114093>
- Narici, M. V., Roi, G. S., Landoni, L., Minetti, A. E., & Cerretelli, P. (1989). Changes in force, cross-sectional area and neural activation during strength training and detraining of the human quadriceps. *European Journal of Applied Physiology and Occupational Physiology*, 59(4), 310-319. <https://doi.org/10.1007/BF02388334>
- Nosaka, K., Aldayel, A., Jubeau, M., & Chen, T. C. (2011). Muscle damage induced by electrical stimulation. *European Journal of Applied Physiology*, 111(10), 2427-2437. <https://doi.org/10.1007/s00421-011-2086-x>
- Nunes, J. P., Grgic, J., Cunha, P. M., Ribeiro, A. S., Schoenfeld, B. J., de Salles, B. F., & Cyrino, E. S. (2021). What influence does resistance exercise order have on muscular strength gains and muscle hypertrophy? A systematic review and meta-analysis. *European Journal of Sport Science*, 21(2), 149-157. <https://doi.org/10.1080/17461391.2020.1733672>
- Park, J., Hong, C., & Cheon, W. (2020). Investigation on the relation among the body composition, physical fitness, and field test of female softball players. *International Journal Of Protection, Security & Investigation*, 5(1), 1-13. <http://doi.org/10.22471/protective.2020.5.1.01>
- Ratamess, N., Alvar, B., Evetoch, T., Housh, T., Kibler, W., Kraemer, W., & Triplett, N. T. (2009). Progression models in resistance training for healthy adults [ACSM position stand]. *Medicine & Science in Sports & Exercise*, 41(3), 687-708. <https://doi.org/10.1249/mss.0b013e3181915670>
- Ruivo, R., Carita, A., & Pezarat-Correia, P. (2016). Effects of a 16-week strength-training program on soccer players. *Science & Sports*, 31(5), e107-e113. <https://doi.org/10.1016/j.scispo.2016.02.008>
- Sanchez, B. R., Puche, P. P., & González-Badillo, J. J. (2005). Percutaneous electrical stimulation in strength training: An update. *The Journal of Strength & Conditioning Research*, 19(2), 438-448. <https://doi.org/10.1519/00124278-200505000-00033>
- Stöllberger, C., & Finsterer, J. (2019). Side effects of whole-body electro-myo-stimulation. *Wiener Medizinische Wochenschrift*, 169(7), 173-180. <https://doi.org/10.1007/s10354-018-0655-x>
- Stone, M. H., Potteiger, J. A., Pierce, K. C., Proulx, C. M., O'bryant, H. S., Johnson, R. L., & Stone, M. E. (2000). Comparison of the effects of three different weight-training programs on the one repetition maximum squat. *The Journal of Strength & Conditioning Research*, 14(3), 332-337. <https://doi.org/10.1519/00124278-200008000-00015>
- Strasunskas, D. (2020). *Impact of strength training on basketball athletes* [Master's dissertation, University of Iceland] University of Iceland Publishing. <https://skemman.is/bitstream/1946/36689/1/Impact%20of%20strength%20training%20on%20basketball%20athletes%20pdf.pdf>
- Stricker, P. R., Faigenbaum, A. D., & McCambridge, T. M. (2020). Resistance training for children and adolescents. *Pediatrics*, 145(6). <https://doi.org/10.21037/tp.2017.04.01>
- Stuempfle, K. J., Crawford, B. E., Petrie, D. F., & Kirkpatrick, M. T. (2004). Effect of hydro resistance training on bat velocity. *Journal of Exercise Physiology Online*, 7(2), 63-69.
- Suchomel, T. J., Nimphius, S., Bellon, C. R., & Stone, M. H. (2018). The importance of muscular strength: training considerations. *Sports Medicine*, 48(4), 765-785. <https://doi.org/10.1007/s40279-018-0862-z>
- Sugimoto, D., Mattacola, C. G., Bush, H. M., Thomas, S. M., Foss, K. D. B., Myer, G. D., & Hewett, T. E. (2017). Preventive neuromuscular training for young female athletes: Comparison of coach and athlete compliance rates. *Journal*

- of Athletic Training*, 52(1), 58- 64. <https://doi.org/10.4085/1062-6050-51.12.20>
- Szymanski, D. J., DeRenne, C., & Spaniol, F. (2009). Contributing factors for increased bat swing velocity. *The Journal of Strength & Conditioning Research*, 23(4), 1338-1352. <https://doi.org/10.1519/JSC.0b013e318194e09c>
- Szymanski, D. J., McIntyre, J., Szymanski, J., Bradford, T., Schade, R., Madsen, N., & Pascoe, D. (2007a). Effect of torso rotational strength on angular hip, angular shoulder, and linear bat velocities of high school baseball players. *The Journal of Strength & Conditioning Research*, 21(4), 1117-1125. <https://doi.org/10.1519/00124278-200711000-00024>
- Szymanski, D. J., Szymanski, J., Bradford, T., Schade, R., & Pascoe, D. (2007b). Effect of twelve weeks of medicine ball training on high school baseball players. *The Journal of Strength & Conditioning Research*, 21(3), 894-901. <https://doi.org/10.1519/00124278-200708000-00041>
- Szymanski, D. J., Szymanski, J. M., Molloy, J. M., & Pascoe, D. D. (2004). Effect of 12 weeks of wrist and forearm training on high school baseball players. *The Journal of Strength & Conditioning Research*, 18(3), 432-440. <https://doi.org/10.1519/00124278-200408000-00007>
- Whaley, O., Larson, A., & DeBeliso, M. (2020). Progressive movement training: An analysis of its effects on muscular strength and power development. *Medicine and Science in Sports and Exercise*, 52(17), 210-211. <https://doi.org/10.1249/01.mss.0000675840.15637.df>



Review article

Bibliometric Analysis of Research on Peer Feedback in Teaching and Learning

Catherine Nguoi Chui Lam^{1*} and Hadina Habil²

¹*School of Education, Faculty of Social Sciences and Humanities, Universiti Teknologi Malaysia, 81310 Skudai, Malaysia*

²*Language Academy, Faculty of Social Sciences and Humanities, Universiti Teknologi Malaysia, 81310 Skudai, Malaysia*

ABSTRACT

A growing body of literature has highlighted the pivotal role of peer feedback in teaching and learning. However, a paucity of studies explore the trend of literature in this research area, particularly using a bibliometric approach. Therefore, this study was conducted to reveal the major trends in the research area and construct an intellectual landscape of the relevant studies in the field. Bibliometric details of a total of 276 research articles, published from 1985 to 2020 (August), were retrieved from the *Scopus* database for further analysis. In particular, the publication trend, the most productive countries, the most productive authors, the top ten source titles, and keywords used in the research area, were explored using bibliometric indicators. The rapid growth of publications on peer feedback was observed since 2010, with a sharp peak noted in 2019. Furthermore, writing context was found as the central focus of peer feedback research. Among others, three key themes that surfaced out of term-occurrence analysis included: impacts/effects of using peer feedback approach, sub-themes concerning peer feedback implementation, and peer feedback in writing context. Additionally, from the review of 30 top-cited publications, 3 prominent themes: effects of using peer feedback approach, effective or ineffective peer feedback,

and potential challenges or issues in peer feedback implementation emerged. Based on the findings, this paper concludes with some recommended avenues for future research.

Keywords: Bibliometric analysis, citation counts, peer feedback, publication trend, teaching and learning

ARTICLE INFO

Article history:

Received: 21 January 2021

Accepted: 22 July 2021

Published: 24 September 2021

DOI: <https://doi.org/10.47836/pjssh.29.3.25>

E-mail addresses:

catherinenguoi@yahoo.com (Catherine Nguoi Chui Lam)

hadina@utm.my (Hadina Habil)

* Corresponding author

INTRODUCTION

The term “peer feedback” has been defined as “a communication process through which learners enter into dialogues related to performance and standards” (Liu & Carless, 2006, p. 280). As it was addressed, students make evaluations and judgments (Nicol et al., 2014). The role of peer feedback (PF) in student learning has long been documented in the literature. According to Vygotsky (1978), learning occurs when a learner is led to achieving a goal beyond his unassisted efforts with the assistance from his/her peer, who is ‘the more knowledgeable other’. In other words, with peer scaffolding, a learner can close the gap between what he/she is able to do independently and what he/she can potentially do with the help of a more competent peer in the zone of proximal development. As peers share the common ground of understanding languages, problems, and knowledge (Cho & MacArthur, 2010), PF might be easier to understand than expert feedback. For example, it was found that learners with high language anxiety might have difficulties processing teachers’ corrective feedback successfully (Sheen, 2008). Providing PF is cognitively engaging (Carless & Boud, 2018) as it involves higher-order thinking processes, such as application of criteria, diagnosing problems, and suggesting solutions (Nicol et al., 2014), it can be used effectively to facilitate student learning. This is echoed by Strake and Kumar (2010) when it was postulated that effective PF can have positive impacts on students’ critical thinking skills and self-regulated learning.

Furthermore, recent empirical studies have lent credence to the fact that PF can be used as an effective instructional strategy to facilitate student learning, particularly in promoting students’ deep self-reflection (Al-Qunayeer, 2019; Chien et al., 2019; Dressler et al., 2019; Li & Li, 2017; Mulder et al., 2014; Vorobel & Kim, 2017; Wu et al., 2015; Yang, 2015; Yu, 2019; Zheng et al., 2017), enabling students to obtain new ideas and perspectives to work on the task (Liu, 2016; Noroozi & Hatami, 2019; Shang, 2019; Yang, 2015), providing opportunities for students to get peer support on language-related issues (Akiyama, 2017; Li & Li, 2017; Montero-Fleta et al., 2015; Qing, 2019; Yu, 2019) as well as opportunities to learn from a variety of sources (Ge, 2019; Wu, 2019; Yu, 2019).

Although PF has been widely researched in teaching and learning, there is limited published data on the trend of literature in this research area, particularly using a bibliometric approach. Hence, to provide a general overview of the main themes and current dynamics of PF publications in teaching and learning and to synthesize the existing literature so that important issues can be highlighted, bibliometric analysis and a critical review of the top-cited PF publications were undertaken. The findings, particularly on the potential research areas, will be of particular interest to practitioners interested in using PF as an instructional approach and scholars who wish to expand their investigation in this research domain. Moreover, as Zhang (2020) described, a bibliometric analysis may also function as a ‘mini-guide to assist scholars and students

new to the particular research domain. In particular, this study will address the following research questions:

- What is the current trend of publications on peer feedback (PF) in teaching and learning regarding the number of publications, citations per year, publication countries, the most productive authors, and top 10 source titles?
- What are the most popular themes in publications on PF in teaching and learning?
- What are the significant issues raised in 30 top-cited publications on PF in teaching and learning?

LITERATURE REVIEW

Bibliometric analysis is defined as “the process of extracting measurable data through statistical analysis of published research studies and how the knowledge within a publication is used” (Agarwal et al., 2016, p. 297), which involves one to organise, classify and quantitatively evaluate the patterns emerged from the data (Gupta, 1988). Numerous studies have provided evidence to support the use of bibliometric analysis in doing the scientific evaluation, such as in revealing historical development (Young & Belanger, 1983), quantifying existing trends (Durieux & Gevenois, 2010), helping researchers to obtain reliable indicators showing the quality of publications (Góngora-Orjuela, 2010) and keep track of the scope of a given research domain (Chang et al., 2015), increasing the objectivity of review studies (Zupic &

Čater, 2015), detecting major themes in a field (de Bellis, 2009) and predicting the research trends in the future (Ma et al., 2016). Arik and Arik (2017) highlighted that bibliometric analysis is deemed important in social sciences and humanities. For instance, bibliometric analyses were conducted to look into scientific production of educational technology in higher education (Rodríguez-Jiménez et al., 2019), second language writing (Arik & Arik, 2017), technology-enhanced language learning (Chen et al., 2018), applications of wearable devices in English education (Cheng & Yao, 2019) and early childhood education (Khodabandelou et al., 2018). Metrics such as the number of publications and citation counts, h-index, Journal Impact Factor, the Eigenfactor, and article-level metrics can be used to measure the scholarly impact of an individual researcher and institution (Agarwal et al., 2016). However, it was highlighted that number of publications alone is insufficient to inform the actual impact of publications. The number of citations that reflect the extent to which a publication has been useful to other researchers can indicate the global impact and influence of an author’s research. In the present study, metrics such as the number of publications, citation counts, citations per year, h-index, keyword, and term co-occurrence analyses were explored to overview publications on PF in teaching and learning.

METHODS

The data used in the bibliometric analysis were obtained from the *Scopus* database as of

8 August 2020. *Scopus* is acknowledged for its prestige and rigour as a large depository of peer-reviewed literature. Owing to its superior coverage of high-quality journals across different fields (Mongeon & Paul-Hus, 2016), it is widely used to perform bibliometric analyses (e.g. Ahmi & Nasir, 2019; Kollé et al., 2018; Sweileh, 2018). Initial query was performed with keywords such as “peer feedback” and “peer review”. However, many false-positive results were yielded. After several iterations, a query string of TITLE (“peer feedback”) was finally used to conduct the literature search, following the four-phase PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines

(Moher et al., 2010), as shown in Figure 1. Initial search has yielded a total of 441 document results. Following the procedure of other bibliometric studies (see Muritala, 2020; Özdağoğlu et al., 2019; Sweileh, 2020) and critical analysis (see Sivarajah et al., 2017), only journal articles were considered. As indicated by Kraus et al. (2020, p. 1034), as the most ‘valuable’ source in research, searching limited to ‘journal articles only’ can help “to create a more transparent process that can be applied globally”.

Muritala (2020) also found that most online reviews considered only journal articles, suggesting that it is still possible to have a critical appraisal of a research topic

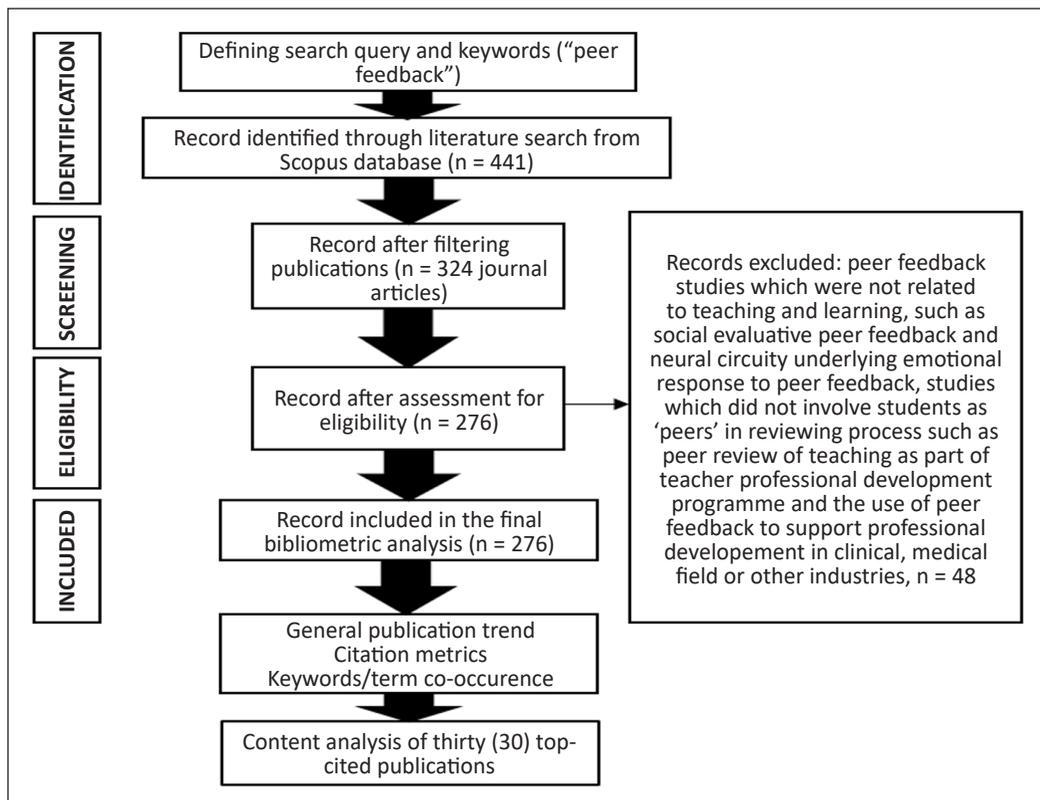


Figure 1. Data collection procedures

with published journal articles only. As a result, a total of 324 journal articles were identified from the database. As the main focus of this study is on PF in the teaching and learning context, a few rounds of screening were performed through reading the titles, abstracts, or main texts to exclude irrelevant studies. As a result, the final database, which consists of 276 articles, was used to conduct the bibliometric analysis. *VOS viewer*, which is a computer program developed to create, visualise and explore bibliometric science maps (Van Eck & Waltman, 2010), was used to conduct the keyword and term co-occurrence analyses, *Harzing's Publish and Perish software* was used to calculate citation metrics while *Microsoft Excel* was used to calculate the frequencies of the published materials and compute the relevant graphs and charts. Finally, the last step involved a critical review of the 30 most-cited PF publications to highlight the significant themes and issues raised.

RESULTS AND DISCUSSION

Based on the data obtained, the bibliometric attributes, such as publication and citation by year, countries/regions of publication, the 10 most active source titles, and the top 10 most influential authors in the field were analysed and presented.

Publication Trend

The number of Publications and Citations.

Figure 2 depicts how publications on peer feedback (PF) have been distributed from the very beginning of 1985 (the first recorded occurrence) to 8 August 2020, which amounts to 276 publications. It was noted that the production of publications in last year alone, reaching 48, represents 17.4% of the total production. In general, the data up to 2019 demonstrates a positive growth of publication trends over time, reflecting the growing interest of scholars in PF studies. However, it was noted that the early development of publications on PF is quite slow until 2010, in which the

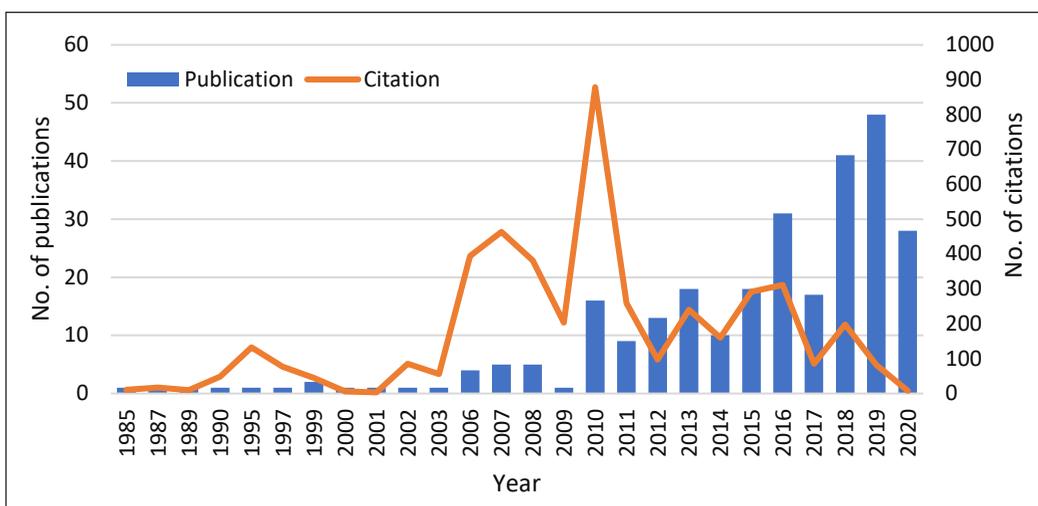


Figure 2. Publication and citation by year

total citation counts have reached their peak of 878, with the highest h-index ($h=11$) recorded in the same year (see Table 1). Since then, the number of publications has increased in its volume almost every year.

The first peak of citations ($TC=463$) was observed as early as 2007. However, a closer examination of the three top-cited publications in 2007 revealed an interesting fact that these studies (Ertmer et al., 2007;

Guardado & Shi, 2007; Tseng & Tsai, 2007) share the same research focus, i.e. related to online PF. It is worth noting that the year 2007 has witnessed widespread use of the smartphone, an internet-enabled device due to the digital revolution, thus propagating numerous opportunities for diffusion of *digital technology* in classroom learning. It *helps to explain* the marked shift of the focus of studies and *notable*

Table 1
Publication and citation by year

Year	TP	P (%)	CP (%)	NCP	TC	C/P	C/CP	h	g
1985	1	0.36	0.36	1	11	11	11	1	1
1987	1	0.36	0.72	1	17	17	17	1	1
1989	1	0.36	1.09	1	10	10	10	1	1
1990	1	0.36	1.45	1	48	48	48	1	1
1995	1	0.36	1.81	1	132	132	132	1	1
1997	1	0.36	2.17	1	77	77	77	1	1
1999	2	0.72	2.90	2	45	22.50	22.50	2	2
2000	1	0.36	3.26	1	6	6	6	1	1
2001	1	0.36	3.62	1	3	3	3	1	1
2002	1	0.36	3.99	1	85	85	85	1	1
2003	1	0.36	4.35	1	56	56	56	1	1
2006	4	1.45	5.80	4	394	98.50	98.50	3	4
2007	5	1.81	7.61	5	463	92.60	92.60	5	5
2008	5	1.81	9.42	5	381	76.20	76.20	5	5
2009	1	0.36	9.78	1	203	203	203	1	1
2010	16	5.80	15.58	15	878	54.88	58.53	11	16
2011	9	3.26	18.84	8	259	28.78	32.38	6	9
2012	13	4.71	23.55	12	97	7.46	8.08	6	9
2013	18	6.52	30.07	17	240	13.33	14.12	11	15
2014	10	3.62	33.70	9	160	16.00	17.78	7	10
2015	18	6.52	40.22	18	292	16.22	16.22	10	17
2016	31	11.23	51.45	29	311	10.03	10.72	10	17
2017	17	6.16	57.61	16	85	5.00	5.31	5	8
2018	41	14.86	72.46	29	198	4.83	6.83	9	12
2019	48	17.39	89.86	28	82	1.71	2.93	5	6
2020	28	10.14	100.00	7	8	0.29	1.14	1	1
Total	276	100.00		215	4541	1096.33	1111.84	107	147

Notes. TP=total number of publications; P= percentage; CP= cumulative percentage; NCP=number of cited publications; TC=total citations; C/P=average citations per publication; C/CP=average citations per cited publication; h=h-index; g=g-index

contribution of publications after 2010, despite some slight fluctuations in the number of publications and citations over the years. It is anticipated that PF publications will continue their momentum after 2020 as the exponential increase of online learning after the *Covid-19* outbreak (Dhawan, 2020) might create more opportunities for PF integration in view of its significant value in online learning (Van Popta et al., 2017).

Countries of Publication. The articles featured in the sample come from 43 countries worldwide, with the top 10 publishing countries listed in Table 2. United States tops the list with 67 publications and 51 cited publications, followed by Netherlands ($TP= 28$, $NCP= 27$), China ($TP= 21$, $NCP= 17$), United Kingdom ($TP= 20$, $NCP= 18$) and Taiwan ($TP= 17$, $NCP= 15$). In terms of total citations, United States is the leading country with a total of 1297 citations, followed by the Netherlands ($TC= 822$), Hong Kong ($TC= 567$), and Taiwan

($TC= 462$). Considering the value of the h-index, countries such as United States ($h=15$), Netherlands ($h=12$), and Taiwan ($h=10$) play the leading roles in the overall body of research work.

Top 10 Source Titles. Table 3 shows the top 10 source titles where the PF articles have been published. These 10 source titles represent 24.28% of the total publications identified. The journal which published the most PF studies was *Assessment and Evaluation in Higher Education* (6.52%), followed by *Computers and Education* (2.90%), *European Journal of Psychology of Education* (2.17%), and *System* (2.17%).

Citation Analysis. Table 4 gives an overview of citation metrics for all the 276 PF articles. Citation analysis is one of the most prevalent methods used to measure the impact of a research publication (Ding & Cronin, 2011). As depicted, a total number of 4541 citation counts have been reported

Table 2
Top 10 countries that contributed to the publication

Country	TP	NCP	TC	C/P	h	g
United States	67	51	1297	19.36	15	35
Netherlands	28	27	822	29.36	12	28
China	21	17	146	6.95	7	11
United Kingdom	20	18	189	9.45	7	13
Taiwan	17	15	462	27.18	10	17
Canada	15	11	136	9.07	5	11
Hong Kong	15	13	567	37.8	8	15
Macao	14	12	146	10.43	7	12
Australia	13	10	88	6.77	6	9
Germany	13	11	210	16.15	5	13

Notes. TP=total number of publications; NCP=number of cited publications; TC=total citations; C/P=average citations per publication; h=h-index; g=g-index

Table 3
Top 10 source title

Source title	TP	P (%)
Assessment and Evaluation in Higher Education	18	6.52
Computers and Education	8	2.90
European Journal of Psychology of Education	6	2.17
System	6	2.17
Educational Technology and Society	5	1.81
Learning and Instruction	5	1.81
Medical Science Educator	5	1.81
Teaching in Higher Education	5	1.81
Turkish Online Journal of Distance Education	5	1.81
Innovations in Education and Teaching International	4	1.45
Total	67	24.28

Notes. TP= Total publication; P= percentage

Table 4
Citations metrics

Metrics	Data
Papers	276
Citations	4541
Years	35
Cites_Year	129.74
Cites_Paper	16.45
Cites_Author	2200.32
Papers_Author	144.99
Authors_Paper	2.54
h_index	31
g_index	60

in 35 years, and an average of 129.74 citation counts per year was recorded.

Top 10 Most Productive Authors. Based on the total number of publications, the top ten authors in the field are listed in Table 5. In total, there are four authors from the Netherlands, two authors from Germany and United States, respectively, and 1 author from Macao and Hong Kong, respectively.

It was found that Yu. S affiliated with Universidade de Macau, Macao is the most productive author contributing 15 PF publications. The highest number of cited publications (NCP=13) and h-index (h=7) were also recorded. Strijbos, J. W., affiliated with Ludwig-Maximilians-Universität München, Germany, and Schunn, C.D., affiliated with the University of Pittsburgh, United States are among the most prolific authors. The latter contributed 7 and 6 publications, respectively. As for total citation counts, Schunn, C.D. (TC=280), Prins, F.J. (TC= 199), and Strijbos, J.W (TC=198) are among the leading authors. Prins, F.J. and Schunn, C.D. have received the highest average citations per publication. In terms of h-index, Schunn, C. D and Lee, I. are also among the most influential authors, with an h-index of 5.

The Most Popular Themes in Research Author Keyword Analysis. A word cloud was generated to depict the top 100 author

times), wiki (4 times), Facebook (5 times), and mobile (3 times) were also identified. These keywords can serve as a good reference for scholars to generate search strings for future bibliometric or systematic analyses on online PF.

Keyword Co-occurrence. Keywords of a publication can reveal much critical information about a research topic (Tian et al., 2018) and therefore are always used to explore hotspots in a particular research field (Huang et al., 2020). In this study, all keywords from the publications were analysed for their co-occurrences using *VOSviewer* (Figure 4). Keyword co-occurrence analysis is concerned with the proximity of similar keywords in publications of the same research topic. Of all the 964 keywords, 48 were found to meet the minimum threshold of 5 occurrences. The top three (3) clusters disclosed prominent themes concerning the use of PF in writing context (*selected keywords*: peer assessment, peer review, academic writing,

writing, collaborative learning, L2 writing, reflection, EFL writing, writing instruction, online peer feedback), medical education (medical education, medical students, undergraduates, evaluation, peer group, feedback system) and clinical simulation in educational contexts (patient simulation, video recording, clinical competence, standards, procedures, constructive feedback, educational measurement, psychology, education). ‘Writing context’ cluster has the largest number of keywords, signifying that it is the most centralised field for PF studies.

Term Co-occurrences. Analysis of co-occurrences of terms in titles and abstracts of PF publications was also conducted to explore the prevalent themes and popular topics in the field. Of all 5170 terms used in titles and abstracts, 145 terms were found to have a minimum of 10 occurrences. A network map of the keyword nodes was generated with a threshold of a minimum of 10 occurrences using *VOSviewer* (Figure

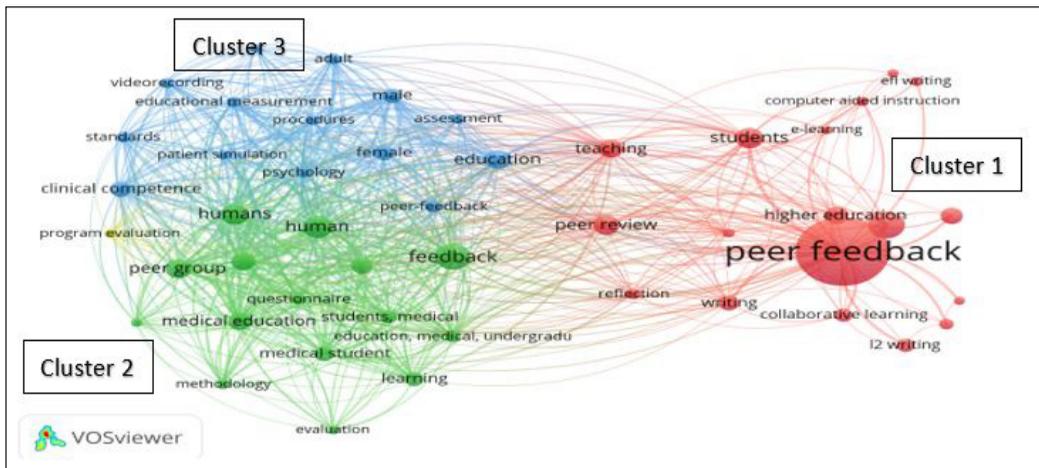


Figure 4. Co-occurrence analysis of all keywords

2012) and student ability to make judgments on their peers' oral presentation skills (Patri, 2002) were reported. Combined peer comments and ratings were considered effective in improving dance performance (Hsia et al., 2016). Both qualities were found to significantly predict students' question-generation performance (Yu & Wu, 2013). Liu and Carless (2006) also proposed integrating peer feedback with peer assessment to foster peer feedback effectiveness. Also, Gielen et al. (2010b) findings confirmed that PF could be used to substitute teacher feedback as there was no significant difference in students' progress on essay marks in both conditions. Moreover, more progress was observed in the extended feedback condition with question form. Li et al. (2010) shared interesting findings, in which a significant relationship between the quality of PF provided for others and the quality of the students' final projects was found. Similarly, in another study (Dominick et al., 1997), students who were only involved in feedback-giving also demonstrated effective team behaviour, just like feedback groups. These two studies have thus suggested that students' active engagement during peer review can help them to perform better. However, if PF consists of only general and social comments, it might be harmful to student learning. As evidenced in Xie et al.'s (2008) study, PF negatively affected students' reflective thinking skills. Students' test anxiety increased in peer feedback conditions (Van den Boom et al., 2007). In another study (Ertmer, 2007), no significant improvement in students' postings was reported.

The positive effects of using the PF approach were found not only at the tertiary level of education, as evidenced in these studies (Dominick, 1997; Hsia et al., 2016; Li et al., 2010; Patri, 2002; Tseng & Tsai, 2007; Xie, 2012), but also at secondary (Gielen et al., 2010b; Phielix et al., 2010, 2011) and primary level (Brakel, 1990; Yu & Wu, 2013). Though it was found that most of these studies involved online PF (e.g. Hsia et al., 2016; Li et al., 2010; Tseng & Tsai, 2007; Phielix et al., 2010, 2011; Xie, 2012; Yu & Wu, 2013), successful implementation of PF in offline mode, either face-to-face or paper-based (see Brakel, 1990; Gielen et al., 2010b; Patri, 2002) was also reported. Most of these studies were conducted in writing context (Brakel, 1990; Gielen et al., 2010b; Phielix et al., 2010, 2011) and involved mostly online tasks or projects such as itinerary projects (Tseng & Tsai, 2007), online discussion (Xie, 2012) and question generation (Yu & Wu, 2013), Webquest projects (Li et al., 2010), weblogging journals (Xie et al., 2008) and discussion postings (Ertmer, 2007), thus calling for further exploration into the effects of PF in other contexts.

The advantages and disadvantages of technology-supported PF activities can be discussed from the affective, practical and technical aspects (Chen, 2014). Helping students overcome their concerns about non-native accents, social norm bias and cultural barriers might induce heavy workload feelings. Affordances of technology allow students to respond spontaneously, rehearse their responses, work at their own pace, express ideas, build considerable audience

awareness and a sense of responsibility. However, issues such as confusion and the time-consuming nature of the tasks were also highlighted. While technical functionalities provided students with many learning opportunities, such as easy retrieval for reflection work, authentic and communicative learning, more space in giving comments and reduced face-threatening experience, technical problems such as unstable servers, slow connections, and low accessibility to system etc. were also evident.

Effective vs Ineffective Peer Feedback.

Many studies (n=5) have significant findings concerning the different types of PF or feedback features deemed more helpful for student learning. For example, while Gielen et al. (2010a) found that PF with the presence of justification has a significant impact on students with low pre-test performance in writing, Nelson and Schunn (2009) revealed that decreased understanding was associated with feedback with explanations to problems. Furthermore, didactic feedback, characterised by lengthy explanations given to guide the peers, was also reported to have possible countereffects on the quality of student projects (Tseng and Tsai, 2007). While many studies offered corroborating evidence on the effective use of suggestion or solution feedback, such as in contributing to increased understanding (Nelson & Schunn, 2009) and successful feedback uptake (Van der Pol et al., 2008) as well as its significance at the beginning of peer assessment activities (Tseng & Tsai,

2007), Gielen et al. (2010a) found that the presence of suggestions, together with other quality criteria, such as appropriateness, specificity and clear formulation did not have a significant impact on performance improvement.

Similarly, even though elaborated specific feedback, which consists of information on the position, error type and suggestions on how to proceed, was perceived as more adequate, it was less effective than concise general feedback (Strijbos et al., 2010). Therefore, it is unexpected as feedback features such as the location of the problem and summary of performance were associated with increased understanding, which was the only significant mediator of feedback implementation (Nelson & Schunn, 2009). In Tseng and Tsai's (2007) study, it was found that reinforcing feedback, which is characterised by positive or supporting expressions, was helpful to promote better quality student projects. On the other hand, the possible countereffect of corrective feedback on the quality of student projects was also reported (Tseng & Tsai, 2007).

Potential Challenges / Issues of Peer Feedback Implementation.

The analysis revealed that there were five (5) main issues which were highlighted in the selected PF studies, i.e. lack of high-quality PF (n=7), students' negative perceptions on PF (n=4), students' lack of confidence in providing feedback / in their peers' ability to provide feedback (n=3), sociocultural factors (n=3) and face-saving issue (n=2).

Lack of High-Quality Peer Feedback.

Nilson (2003) pointed out that intrusion of emotion into evaluation, ignorance of professional expectations and work standards and laziness in evaluating work or writing up feedback were the three main issues concerning the quality of student PF. PF was restricted to certain writing features, such as grammar, mechanics and style, while there was a lack of feedback on content and organisation (Lin & Yang, 2011). Similarly, in another study (Hsia et al., 2016), several students complained that peer comments were too brief or vague to understand. Meanwhile, in comparison with tutor feedback, Van den Boom et al. (2007) revealed a lack of intended feedback as students did not actively co-reflect peer's work. Van den Berg et al. (2006) also revealed that PF focused mainly on evaluating the product and content; a lack of process-oriented feedback was observed. Also, Ware and O'Dowd's (2008) study noted limitations of peers' metalinguistic comments. Even though 83% of the revision-oriented PF were scientifically accurate, the numerous favourable judgments given were not found to support the improvement of learner products (Hovardas et al., 2014). Patchan and Schunn (2015) also discovered that PF from low reviewers received more praise and less criticism. So, to overcome these inadequacies, a more rigorous training or scaffolding (Hovardas et al., 2014), which includes awareness-raising activities (Ware & O'Dowd, 2008) and guiding prompts (Gielen et al., 2010a), the use of both written and oral feedback (Van den Berg et al., 2006), feedback items which require students to

perform tasks or mini-assignments, such as identifying or highlighting parts of the work evaluated to obtain student feedback (Nilson, 2003), observation instruction method (Van Steendam et al., 2010), a follow-up face-to-face class discussion to clarify problematic comments (Guardado & Shi, 2007) and extra scaffolding for students with lower writing ability to produce more criticism (Patchan & Schunn, 2015) were proposed.

Negative Perceptions on Peer Feedback.

While students acknowledged that PF activity allows them to get access to multiple perspectives (Ertmer, 2007; Hsia et al., 2016), express their ideas (Ertmer, 2007) and that it was helpful, comparative and of sufficient depth to aid their learning (Cushing et al., 2011), issues such as the lack of quality online PF, misunderstandings which might be resulted from a lack of immediate interaction and uncomfortable feelings when interacting with an anonymous peer were raised (Guardado & Shi, 2007). Moreover, only 44% of the students found PF was highly useful, only 23% considered giving PF was truly helpful, and up to 63% did not wish to use PF again (Gielen et al., 2010b). Even though most students valued PF, instructor feedback was still perceived as more important than PF (Ertmer, 2007). The reasons given were the concern of not getting quality feedback, the time-consuming nature of the task and potential biases. Also, an unequivocal preference on teacher feedback over PF was reported in Zhang's (1995) study.

Students' Lack of Confidence in Providing PF / in Their Peers' Ability to Provide PF. Students expressed their concerns about them being qualified to provide PF (Ertmer, 2007). Similarly, students expressed their hesitations in providing PF due to their limited language proficiency as non-native English speakers (Guardado & Shi, 2007). In another study (Hovardas et al., 2014), students stated that they took expert feedback (66.7%) into account more than PF (27.8%). The issue dwells on their reluctance to accept their peers as capable assessors.

The sociocultural factors. Zhang's (1995) study traced student resistance to PF, which involved 86.4% Asian students, raising the sociocultural issue. Similarly, conducted in the Asian context (Hsia et al., 2016), cultural factor was highlighted as one of the possible reasons why students who accept peer ratings showed better dance skill performance than those with only online peer comments. Furthermore, students' difficulties in expressing their opinions on peers' performance were reported, drawing upon previous studies. It was highlighted that Asian students tend to have fewer in-class peer interactions and pay more attention to ratings than comments. Moreover, it was revealed that students' Japanese cultural background was one of the contributing factors which resulted in students' ignorance of PF (40.9%). These findings thus suggested a need to pay due attention to cultural contexts when conducting PF activities.

Face-saving issue. Students were found to use a polite tone and give general suggestions, trying to be inoffensive and avoid embarrassing others (Lin & Yang, 2011). However, some expressed their anxiety to give negative or corrective feedback for fear of hurting their peers (Cushing et al., 2011). It was highlighted that PF training should help students overcome reluctance or increase their comfort levels in criticizing or giving negative feedback to peers (Lin & Yang, 2011). Using pseudonyms instead of real names was suggested. Besides, it is crucial to explain the value of collaborative PF and procedures, establish a supportive context and create a scaffolding framework.

CONCLUSION

This paper presents a comprehensive overview of the research trend of peer feedback (PF) studies in teaching and learning. A few conclusions were drawn as follows. First, the bibliometric analysis indicated positive growth in publications on PF since 2010, reaching its peak in the year 2019. Second, the growth trajectory of this literature since the beginning of the 21st century suggests that if the same trend continues, an increase in the figures can be expected. Third, given that the rise of online learning during the *COVID-19* pandemic might offer extra credence to online PF activity given its critical role in online teaching and learning, the upward trend of publications is highly anticipated.

Keyword and term analyses have revealed many topics or research themes

that have gained tremendous interest from scholars over the last 35 years (1985-2020). These topics include effects or impacts of PF, research sub-themes such as student performance, student motivation, students' perception, beliefs, attitude and experience, strategy and approach used, opportunities or benefits, challenges or problems, PF training, online PF, usefulness and effectiveness of PF approach in student learning and the use of PF in a second language or foreign language writing. Though writing is the central focus of PF studies in teaching and learning, this topic has also gained attention from other fields, evidenced by the clusters of medical education and clinical simulation in educational contexts.

Some potential avenues for future researchers are suggested as follows. Since certain research areas such as the effects/ effectiveness of peer feedback use, strategy use, and peer feedback use in writing context have gained a certain level of maturity in the field, future research can look into the use of peer feedback in other aspects, such as speaking context. Further review of the top-cited publications also confirmed the paucity of studies in this domain. It is worth noting that with the advancement of technology and rapid growth of communicative affordances of mobile media, which can better support the teaching of dynamic skills of speaking, it is anticipated that exploration into the role of mobile-assisted PF in promoting students' speaking skills will be of particular significance to practitioners in the field. Furthermore, despite such significant research advancements on the topic, as

demonstrated by the rich keyword variations, the density visualisation revealed that some terms related to tools, such as video and web, have a relatively lower density.

Therefore, future researchers might also consider exploring how PF, using more creative tools such as videos or web-based tools, can be incorporated to promote student learning in a pedagogically sound manner. Also, as the review found inconsistent findings regarding the effectiveness of different types/features of PF, there is a need for more research to be conducted in this aspect. Though subjected to different learning contexts, it is generally agreed that it needs to be acted on for PF to be effective. Even though elaborated PF is considered adequate, it might render passive and dependent students, as Tseng and Tsai (2007) highlighted. This issue thus deserves further investigation. With these issues in mind, further investigation into ways to raise a 'mindful reception' of PF among learners, as suggested by Gielen et al. (2010), would be practically and empirically crucial. Furthermore, as highlighted, learners' agreement with PF showed a significant relationship with its use for revision (Van der Pol et al., 2008); future researchers can thus explore how learners receive and integrate PF in improving their work. As issues such as the lack of high-quality PF, students' negative perceptions on PF, students' lack of confidence and sociocultural factors were highlighted as obvious challenges for successful PF implementation, future studies should endeavour to reduce such conflicts.

Limitations help to open up new vistas for future research. In this study, the literature search was conducted using the phrase ‘peer feedback’ on publication titles. Thereby some studies which did not use the key phrase in the titles were not listed. Future studies can use more keywords for the query or consider using a search strategy with titles, abstracts and keywords to expand the scope for analysis. Furthermore, since this study only focused on the *Scopus* database, future research can look into publications from other databases, such as *WoS*. Despite these limitations, this study has captured a bird’s eye view of the current trend of publications on PF in teaching and learning and shed some light on some potential research hotspots which can serve as a reference for researchers who are new in the research domain.

ACKNOWLEDGEMENTS

The authors would like to thank the anonymous reviewers for their insightful comments and suggestions to improve the quality of this work.

REFERENCES

- Ahmi, A., & Nasir, M. H. M. (2019). Examining the trend of the research on eXtensible Business Reporting Language (XBRL): A bibliometric. *International Journal of Innovation, Creativity and Change*, 5(2), 1145-1167.
- Agarwal, A., Durairajanayagam, D., Tatagari, S., Esteves, S. C., Harlev, A., Henkel, R., Roychoudhury, S., Homa, S., Puchalt, N. G., Ramasamy, R., & Majzoub, A. (2016). Bibliometrics: Tracking research impact by selecting the appropriate metrics. *Asian Journal of Andrology*, 18(2), 296-309. <https://doi.org/10.4103/1008-682X.171582>
- Akiyama, Y. (2017). Learner beliefs and corrective feedback in telecollaboration: A longitudinal investigation. *System*, 64, 58-73. <https://doi.org/10.1016/j.system.2016.12.007>
- Al-Qunayeer, H. S. (2019). Supporting postgraduates in research proposals through peer feedback in a Malaysian university. *Journal of Further and Higher Education*, 44(7), 956-970. <https://doi.org/10.1080/0309877X.2019.1627299>
- Arik, B. T., & Arik, E. (2017). Second language writing publications in Web of Science: A bibliometric analysis. *Publications*, 5(1), 4. <https://doi.org/10.3390/publications5010004>
- Brakel, V. L. (1990). The revising processes of sixth-grade writers with and without peer feedback. *The Journal of Educational Research*, 84(1), 22-29. <https://doi.org/10.1080/00220671.1990.10885987>
- Caputo, A., Marzi, G., Pellegrini, M. M., & Rialti, R. (2018). Conflict management in family businesses: A bibliometric analysis and systematic literature review. *International Journal of Conflict Management*, 29(4), 519-542. <https://doi.org/10.1108/IJCM-02-2018-0027>
- Carless, D., & Boud, D. (2018). The development of student feedback literacy: Enabling uptake of feedback. *Assessment & Evaluation in Higher Education*, 43(8), 1315-1325. <https://doi.org/10.1080/02602938.2018.1463354>
- Chang, Y. W., Huang, M. H., & Lin, C. W. (2015). Evolution of research subjects in library and information science based on keyword, bibliographical coupling, and co-citation analyses. *Scientometrics*, 105, 2071-2087. <https://doi.org/10.1007/s11192-015-1762-8>
- Chen, T. (2014). *Technology-supported peer feedback in ESL/EFL writing classes: A research synthesis*. *Computer Assisted Language Learning*, 29(2),

- 365-397. <https://doi.org/10.1080/09588221.2014.960942>
- Chen, X., Chen, J., Wu, D., Xie, Y., & Li, J. (2016). Mapping the research trends by co-word analysis based on keywords from funded project. *Procedia Computer Science*, *91*, 547-555. <https://doi.org/10.1016/j.procs.2016.07.140>
- Chen, X., Hao, J., Chen, J., Hua, S., & Hao, T. (2018). A bibliometric analysis of the research status of the technology enhanced language learning. In *International Symposium on Emerging Technologies for Education* (pp. 169-179). Springer.
- Cheng, L., & Yao, J. (2019, June). Bibliometric analysis of wearable devices and their applications to English education. In *Proceedings of the 2019 International Conference on Modern Educational Technology* (pp. 35-38). Association for Computing Machinery. <https://doi.org/10.1145/3341042.3341059>
- Chien, S.-Y., Hwang G.-J., & Jong, M. S.-Y. (2019). Effects of peer assessment within the context of spherical video-based virtual reality on EFL students' English-speaking performance and learning perceptions. *Computers & Education*, *146*, 103751. <https://doi.org/10.1016/j.compedu.2019.103751>
- Cho, K., & MacArthur, C. (2010). Student revision with peer and expert reviewing. *Learning and Instruction*, *20*(4), 328-338. <https://doi.org/10.1016/j.learninstruc.2009.08.006>
- Cushing, A., Abbott, S., Lothian, D., Hall, A., & Westwood, O. M. R. (2011). Peer feedback as an aid to learning – What do we want? Feedback. When do we want it? Now! *Medical Teacher*, *33*(2), e105-e112. <https://doi.org/10.3109/0142159x.2011.542522>
- de Bellis, N. (2009). *Bibliometrics and citation analysis: From the science citation index to cybermetrics*. Scarecrow Press.
- Dhawan, S. (2020). Online learning: A panacea in the time of COVID-19 crisis. *Journal of Educational Technology Systems*, *49*(1), 5-22. <https://doi.org/10.1177/0047239520934018>
- Ding, Y., & Cronin, B. (2011). Popular and/or prestigious? Measures of scholarly esteem. *Information Processing and Management*, *47*(1), 80-96. <https://doi.org/10.1016/j.ipm.2010.01.002>
- Dominick, P. G., Reilly, R. R., & MCGourty, J. W. (1997). The effects of peer feedback on team member behavior. *Group & Organization Management*, *22*(4), 508-520. <https://doi.org/10.1177/1059601197224006>
- Dressler, R., Chu, M. W., Crossman, K., & Hilman, B. (2019). Quantity and quality of uptake: Examining surface and meaning-level feedback provided by peers and an instructor in a graduate research course. *Assessing Writing*, *39*, 14-24. <https://doi.org/10.1016/j.asw.2018.11.001>
- Durieux, V., & Gevenois, P. A. (2010). Bibliometric indicators: Quality measurements of scientific publication. *Radiology*, *255*(2), 342-351. <https://doi.org/10.1148/radiol.09090626>
- Ertmer, P. A., Richardson, J. C., Belland, B., Camin, D., Connolly, P., Coulthard, G., Lei, K., & Mong, C. (2007). Using peer feedback to enhance the quality of student online postings: An exploratory study. *Journal of Computer-Mediated Communication*, *12*(2), 412-433. <https://doi.org/10.1111/j.1083-6101.2007.00331.x>
- Ge, Z.-G. (2019). Exploring the effect of video feedback from unknown peers on e-learners' English-Chinese translation performance. *Computer Assisted Language Learning*, 1-21. <https://doi.org/10.1080/09588221.2019.1677721>
- Gielen, S., Peeters, E., Dochy, F., Onghena, P., & Struyven, K. (2010a). Improving the effectiveness of peer feedback for learning. *Learning*

- and instruction*, 20(4), 304-315. <https://doi.org/10.1016/j.learninstruc.2009.08.007>
- Gielen, S., Tops, L., Dochy, F., Onghena, P., & Smeets, S. (2010b). A comparative study of peer and teacher feedback and of various peer feedback forms in a secondary school writing curriculum. *British Educational Research Journal*, 36(1), 143-162. <https://doi.org/10.1080/01411920902894070>
- Góngora-Orjuela, A. (2010). The importance of bibliometric studies. The Orinoquia case. *ORINOQUIA*, 14(2), 121-122. <https://doi.org/10.22579/20112629.85>
- Guardado, M., & Shi, L. (2007). ESL students' experiences of online peer feedback. *Computers and Composition*, 24(4), 443-461. <https://doi.org/10.1016/j.compcom.2007.03.002>
- Gupta, I. (1988). *Bibliometric research: Growth of biomedical literature*. SBA Publications.
- Hovardas, T., Tsivitanidou, O. E., & Zacharia, Z. C. (2014). Peer versus expert feedback: An investigation of the quality of peer feedback among secondary school students. *Computers & Education*, 71, 133-152. <https://doi.org/10.1016/j.compedu.2013.09.019>
- Hsia, L.-H., Huang, I., & Hwang, G.-J. (2016). Effects of different online peer-feedback approaches on students' performance skills, motivation and self-efficacy in a dance course. *Computers & Education*, 96, 55-71. <https://doi.org/10.1016/j.compedu.2016.02.004>
- Hu, J., & Zhang, Y. (2015). Research patterns and trends of Recommendation System in China using co-word analysis. *Information Processing & Management*, 51(4), 329-339. <https://doi.org/10.1016/j.ipm.2015.02.002>
- Huang, L., Zhou, M., Lv, J., & Chen, K. (2020). Trends in global research in forest carbon sequestration: A bibliometric analysis. *Journal of Cleaner Production*, 252, 119908. <https://doi.org/10.1016/j.jclepro.2019.119908>
- Khodabandelou, R., Mehran, G., & Nimehchisalem, V. (2018). A bibliometric analysis of 21st century research trends in early childhood education. *Revista Publicando*, 5, 137-163.
- Kolle, S. R., Shettar, I., Kumar, V., & Parameshwar, G. S. (2018). Publication trends in literature on eBooks: A Scopus based bibliometric analysis. *Collection and Curation*, 37(3), 119-127. <https://doi.org/10.1108/CC-07-2017-0027>
- Kraus, S., Breier, M., & Dasi-Rodríguez, S. (2020). The art of crafting a systematic literature review in entrepreneurship research. *International Entrepreneurship and Management Journal*, 16(3), 1023-1042. <https://doi.org/10.1007/s11365-020-00635-4>
- Li, M., & Li, J. (2017). Online peer review using Turnitin in first-year writing classes. *Computers and Composition*, 46, 21-38. <https://doi.org/10.1016/j.compcom.2017.09.001>
- Li, L., Liu, X., & Steckelberg, A. L. (2010). Assessor or assessee: How student learning improves by giving and receiving peer feedback. *British Journal of Educational Technology*, 41(3), 525-536. <https://doi.org/10.1111/j.1467-8535.2009.00968.x>
- Lin, W. C., & Yang, S. C. (2011). Exploring students' perceptions of integrating Wiki technology and peer feedback into English writing courses. *English Teaching: Practice and Critique*, 10(2), 88-103. <http://education.waikato.ac.nz/research/files/etpc/files/2011v10n2dial1.pdf>
- Liu, M. H. (2016). Blending a class video blog to optimize student learning outcomes in higher education. *Internet and Higher Education*, 30, 44-53. <https://doi.org/10.1016/j.iheduc.2016.03.001>
- Liu, N.-F., & Carless, D. (2006). Peer feedback: The learning element of peer assessment. *Teaching*

- in Higher Education*, 11(3), 279-290. <https://doi.org/10.1080/13562510600680582>
- Ma, Y., Dong, M., Zhou, K., Mita, C., Liu, J., & Wayne, P. M. (2016). Publication trends in acupuncture research: A 20-year bibliometric analysis based on PubMed. *PloS one*, 11(12), e0168123. <https://doi.org/10.1371/journal.pone.0168123>
- Moher, D., Liberati, A., Tetzlaff, J., & Altman, D. G. (2010). Preferred reporting items for systematic reviews and meta-analyses: The PRISMA statement. *International Journal of Surgery*, 8(5), 336-341. <https://doi.org/10.1016/j.ijssu.2010.02.007>
- Mongeon, P., & Paul-Hus, A. (2016). The journal coverage of Web of Science and Scopus: A comparative analysis. *Scientometrics*, 106, 213-228. <https://doi.org/10.1007/s11192-015-1765-5>
- Montero-Fleta, B., Pérez-Sabater, C., & Pérez-Sabater, M. L. (2015). Microblogging and blended learning: Peer response in tertiary education. *Procedia - Social and Behavioral Sciences*, 191, 1590-1595. <https://doi.org/10.1016/j.sbspro.2015.04.384>
- Mulder, R. A., Pearce, J. M., & Baik, C. (2014). Peer review in higher education: Student perceptions before and after participation. *Active Learning in Higher Education*, 15(2), 157-171. <https://doi.org/10.1177/1469787414527391>
- Muritala, B. A., Sánchez-Rebull, M. V., & Hernández-Lara, A. B. (2020). A bibliometric analysis of online reviews research in tourism and hospitality. *Sustainability*, 12(23), 9977. <https://doi.org/10.3390/su12239977>
- Nelson, M. M., & Schunn, C. D. (2009). The nature of feedback: How different types of peer feedback affect writing performance. *Instructional Science*, 37(4), 375-401. <https://doi.org/10.1007/s11251-008-9053-x>
- Nicol, D., Thomson, A., & Breslin, C. (2014). Rethinking feedback practices in higher education: A peer review perspective. *Assessment & Evaluation in Higher Education*, 39(1), 102-122. <https://doi.org/10.1080/02602938.2013.795518>
- Nilson, L. B. (2003). Improving student peer feedback. *College Teaching*, 51(1), 34-38. <https://doi.org/10.1080/87567550309596408>
- Noroozi, O., & Hatami, J. (2019) The effects of online peer feedback and epistemic beliefs on students' argumentation-based learning. *Innovations in Education and Teaching International*, 56(5), 548-557. <https://doi.org/10.1080/14703297.2018.1431143>
- Özdağoğlu, A., Özdağoğlu, G., Topoyan, M., & Damar, M. (2019). A predictive filtering approach for clarifying bibliometric datasets: An example on the research articles related to industry 4.0. *Technology Analysis & Strategic Management*, 32(2), 158-174. <https://doi.org/10.1080/09537325.2019.1645826>
- Patchan, M. M., & Schunn, C. D. (2015). Understanding the benefits of providing peer feedback: How students respond to peers' texts of varying quality. *Instructional Science*, 43(5), 591-614. <https://doi.org/10.1007/s11251-015-9353-x>
- Patri, M. (2002). The influence of peer feedback on self- and peer-assessment of oral skills. *Language Testing*, 19(2), 109-131. <https://doi.org/10.1191/0265532202lt224oa>
- Phielix, C., Prins, F. J., & Kirschner, P. A. (2010). Awareness of group performance in a CSCL-environment: Effects of peer feedback and reflection. *Computers in Human Behavior*, 26(2), 151-161. <https://doi.org/10.1016/j.chb.2009.10.011>
- Phielix, C., Prins, F. J., Kirschner, P. A., Erkens, G., & Jaspers, J. (2011). Group awareness of social and cognitive performance in a CSCL environment: Effects of a peer feedback and reflection tool.

- Computers in Human Behavior*, 27(3), 1087-1102. <https://doi.org/10.1016/j.chb.2010.06.024>
- Qing, M. (2019). Examining the role of inter-group peer online feedback on wiki writing in an EAP context. *Computer Assisted Language Learning*, 33(3), 197-216. <https://doi.org/10.1080/09588221.2018.1556703>
- Rialti, R., Marzi, G., Ciappei, C., & Busso, D. (2019). Big data and dynamic capabilities: A bibliometric analysis and systematic literature review. *Management Decision*, 57(8), 2052-2068. <https://doi.org/10.1108/MD-07-2018-0821>
- Rodríguez-Jiménez, C., Sanz-Prieto, M., & Alonso-García, S. (2019). Technology and higher education: A bibliometric analysis. *Education Sciences*, 9(3), 169. <https://doi.org/10.3390/educsci9030169>
- Shang, H.-F. (2019). Exploring online peer feedback and automated corrective feedback on EFL writing performance. *Interactive Learning Environments*, 1-13. <https://doi.org/10.1080/10494820.2019.1629601>
- Sheen, Y. (2008). Recasts, language anxiety, modified output, and L2 learning. *Language Learning*, 58(4), 835-874. <https://doi.org/10.1111/j.1467-9922.2008.00480.x>
- Sinkovics, R. R., & Sinkovics, N. (2016). Enhancing the foundations for theorising through bibliometric mapping. *International Marketing Review*, 33(3), 327-350. <https://doi.org/10.1108/IMR-10-2014-0341>
- Sivarajah, U., Kamal, M. M., Irani, Z., & Weerakkody, V. (2017). Critical analysis of Big Data challenges and analytical methods. *Journal of Business Research*, 70, 263-286. <https://doi.org/10.1016/j.jbusres.2016.08.001>
- Strake, E., & Kumar, V. (2010). Feedback and self-regulated learning: Insights from supervisors' and PHD examiners reports. *Reflective Practises*, 11(1), 19-32. <https://doi.org/10.1080/14623940903525140>
- Strijbos, J. W., Narciss, S., & Dünnebier, K. (2010). Peer feedback content and sender's competence level in academic writing revision tasks: Are they critical for feedback perceptions and efficiency? *Learning and Instruction*, 20(4), 291-303. <https://doi.org/10.1016/j.learninstruc.2009.08.008>
- Sweileh, W. M. (2018). Research trends on human trafficking: A bibliometric analysis using Scopus database. *Global Health*, 14, 106. <https://doi.org/10.1186/s12992-018-0427-9>
- Sweileh, W. M. (2020). Bibliometric analysis of global scientific literature on vaccine hesitancy in peer-reviewed journals (1990-2019). *BMC Public Health*, 20(1), 1-15. <https://doi.org/10.1186/s12889-020-09368-z>
- Tian, X., Geng, Y., Sarkis, J., Zhong, S., (2018). Trends and features of embodied flows associated with international trade based on bibliometric analysis. *Resources, Conservation and Recycling*, 31, 148-157. <https://doi.org/10.1016/j.resconrec.2018.01.002>
- Tseng, S. C., & Tsai, C. C. (2007). On-line peer assessment and the role of the peer feedback: A study of high school computer course. *Computers & Education*, 49(4), 1161-1174. <https://doi.org/10.1016/j.compedu.2006.01.007>
- Van den Berg, I., Admiraal, W., & Pilot, A. (2006). Designing student peer assessment in higher education: Analysis of written and oral peer feedback. *Teaching in Higher Education*, 11(2), 135-147. <https://doi.org/10.1080/13562510500527685>
- Van den Boom, G., Paas, F., & van Merriënboer, J. J. G. (2007). Effects of elicited reflections combined with tutor or peer feedback on self-regulated learning and learning outcomes. *Learning and Instruction*, 17(5), 532-548. <https://doi.org/10.1016/j.learninstruc.2007.09.003>

- Van der Pol, J., van den Berg, B. A. M., Admiraal, W. F., & Simons, P. R. J. (2008). The nature, reception, and use of online peer feedback in higher education. *Computers & Education*, 51(4), 1804-1817. <https://doi.org/10.1016/j.compedu.2008.06.001>
- Van Eck, N. J., & Waltman, L. (2010). Software survey: VOSviewer, a computer program for bibliometric mapping. *Scientometrics*, 84(2), 523-538. <https://doi.org/10.1007/s11192-009-0146-3>
- Van Popta, E., Kral, M., Camp, G., Martens, R. L., & Simons, P. R.-J. (2017). Exploring the value of peer feedback in online learning for the provider. *Educational Research Review*, 20, 24-34. <https://doi.org/10.1016/j.edurev.2016.10.003>
- Van Steendam, E., Rijlaarsdam, G., Sercu, L., & Van den Bergh, H. (2010). The effect of instruction type and dyadic or individual emulation on the quality of higher-order peer feedback in EFL. *Learning and Instruction*, 20(4), 316-327. <https://doi.org/10.1016/j.learninstruc.2009.08.009>
- Vorobel, O., & Kim, D. (2017). Adolescent ELLs' collaborative writing practices in face-to-face and online contexts: From perceptions to action. *System*, 65, 78-89. <https://doi.org/10.1016/j.system.2017.01.008>
- Vygotsky, L. S. (1978). Interaction between learning and development. In L. S. Vygotsky & M. Cole (Eds.), *Mind in society: The development of higher psychological processes* (pp. 79-91.). Harvard University Press.
- Ware, P., & O'Dowd, R. (2008). Peer feedback on language form in telecollaboration. *Language Learning & Technology*, 12(1), 43-63.
- Wu, W.-C. V., Petit, E., & Chen, C.-H. (2015). EFL writing revision with blind expert and peer review using a CMC open forum. *Computer Assisted Language Learning*, 28(1), 58-80. <https://doi.org/10.1080/09588221.2014.937442>
- Wu, Z. (2019). Lower English proficiency means poorer feedback performance? A mixed-methods study. *Assessing Writing*, 41, 14-24. <https://doi.org/10.1016/j.asw.2019.05.001>
- Xie, K. (2012). What do the numbers say? The influence of motivation and peer feedback on students' behaviour in online discussions. *British Journal of Educational Technology*, 44(2), 288-301. <https://doi.org/10.1111/j.1467-8535.2012.01291.x>
- Xie, Y., Ke, F., & Sharma, P. (2008). The effect of peer feedback for blogging on college students' reflective learning processes. *The Internet and Higher Education*, 11(1), 18-25. <https://doi.org/10.1016/j.iheduc.2007.11.001>
- Yang, Y.-F. (2015). Transforming and constructing academic knowledge through online peer feedback in summary writing. *Computer Assisted Language Learning*, 29(4), 683-702. <https://doi.org/10.1080/09588221.2015.1016440>
- Young, H., & Belanger, T. (1983). *The ALA glossary of library and information science*. American Library Association.
- Yu, S. (2019). Learning from giving peer feedback on postgraduate theses: Voices from Master's students in the Macau EFL context. *Assessing Writing*, 40, 42-52. <https://doi.org/10.1016/j.asw.2019.03.004>
- Yu, F. Y., & Wu, C. P. (2013). Predictive effects of online peer feedback types on performance quality. *Journal of Educational Technology & Society*, 16(1), 332-341. <https://www.jstor.org/stable/jeductechsoci.16.1.332>
- Zhang, S. (1995). Reexamining the affective advantage of peer feedback in the ESL writing class. *Journal of Second Language Writing*,

- 4(3), 209-222. [https://doi.org/10.1016/1060-3743\(95\)90010-1](https://doi.org/10.1016/1060-3743(95)90010-1)
- Zhang, X. (2020). A bibliometric analysis of second language acquisition between 1997 and 2018. *Studies in Second Language Acquisition*, 42(1), 199-222. <https://doi.org/10.1017/S0272263119000573>
- Zheng, L., Cui, P., Li, X., & Huang, R. (2017). Synchronous discussion between assessors and assessees in web-based peer assessment: Impact on writing performance, feedback quality, meta-cognitive awareness and self-efficacy. *Assessment & Evaluation in Higher Education*, 43(3), 500-514. <https://doi.org/10.1080/02602938.2017.1370533>
- Zupic, I., & Čater, T. (2015). Bibliometric methods in management and organization. *Organizational Research Methods*, 18(3), 429-472. <https://doi.org/10.1177/1094428114562629>

Review article

A Systematic Analysis on the Admissibility of Digital Documents as Evidence in Malaysian Syariah Courts

Wan Abdul Fattah Wan Ismail*, Ahmad Syukran Baharuddin, Lukman Abdul Mutalib and Mohamad Aniq Aiman Alias

Faculty of Syariah and Law Universiti Sains Islam Malaysia, Bandar Baru Nilai, 71800 Nilai, Negeri Sembilan, Malaysia

ABSTRACT

Digital document is a relatively new form of evidence, particularly for use in the Malaysian Syariah courts. This scenario contrasts with civil courts, which started using digital documents in court proceedings as early as the 1950s. The use of the digital document as evidence is intended to strengthen other methods of proof further. However, the Syariah courts are still less exposed to a new proofing method because there are no specific provisions according to Islamic law to allow it. Not only that, but Syariah law practitioners are also rarely exposed to cases related to the use of digital documents. Therefore, this qualitative study will analyse the admissibility of the digital document as evidence under Islamic law through a systematic analysis. This study uses the PRISMA methodology with the range of data stored on the web at www.scopus.com and <http://myjurnal.my>, which brings together thousands of scientific writings worldwide. The final screening results found a total of 21 articles that discussed the practice of digital documents as evidence under Islamic law. Furthermore, from the final filter, the researchers found several works of literature that previously discussed the usage of digital documents as evidence in a trial proceeding, which indirectly shows that the Syariah court has begun to accept this type of evidence.

It is expected that the results of this study will assist legal practitioners in the Syariah court and become a reference point for researchers, academics and the public in Malaysia.

Keywords: Admissibility, digital documents, evidence, Islamic law, PRISMA, Syariah court

ARTICLE INFO

Article history:

Received: 23 March 2021

Accepted: 06 July 2021

Published: 24 September 2021

DOI: <https://doi.org/10.47836/pjssh.29.3.26>

E-mail addresses:

wanfattah@usim.edu.my (Wan Abdul Fattah Wan Ismail)

ahmadsyukran@usim.edu.my (Ahmad Syukran Baharuddin)

lukman@usim.edu.my (Lukman Abdul Mutalib)

aniqalias1997@gmail.com (Mohamad Aniq Aiman Alias)

* Corresponding author

INTRODUCTION

A digital document is a new form of proof, particularly for use in Malaysian Syariah court. So it is because digital records in a court proceeding can be used to prove or convict a person in a case and acquit an innocent person (Ahmad et al., 2020). Not only that, with the significant changes in time and facilities, digital documents also have begun to become one of the primary reference materials for each affair. Thus, it has replace old-fashioned forms that rely solely on pens and papers (Wan Ismail, 2016). Besides, he also assumes that the community has begun to accept digital documents daily, such as billing, money transfers, job applications and others, because of its fast nature and saving time.

On the other hand, the civil court has been using this method since the 1950s. Digital documents are used as evidence submitted to civil courts to strengthen the prosecution (Wan Ismail, 2020). Not only that, but the principle of digital evidence acceptance in Malaysian civil courts is already well known in comparison with the Syariah court. For example, in the case of *PP v. Datuk Hj Sahar Arpan* (2007), the civil court considers that copies of faxes and microfilms used in the proceedings are included in the definition of the document based on section 3 of the Evidence Act [Act 56] (1950).

However, this situation differs from the Syariah court as the definition of a digital document according to Islamic law still does not have a clear place in terms of its position as a means of proof. In addition,

the issue of the admissibility of digital documents by the Syariah courts is also not fully discussed in detail, as the legal Syariah practitioners lack the exposure to allow this type of proofing method. Accordingly, for this study, the researchers will observe literature and the writing of published journal articles from two databases, namely, MyJurnal and Scopus, to study the admissibility of digital documents under Islamic law. Furthermore, through a previous literature review, this study is expected to identify the position of the digital document according to Islamic Syariah law, its admissibility in the Malaysian Syariah court, and some suggestions to improve Syariah legal practitioners when allowing digital documents as evidence in a court proceeding.

METHODS

The methodology plays an essential role in achieving the study's objectives. Therefore, this study's method for data collection is to do a specific search that focuses on two selected databases, namely the MyJurnal and Scopus websites. MyJurnal is one of the literature collection databases published in Malaysia, which can be accessed at <http://myjurnal.my>. Meanwhile, Scopus is an academic literature database that holds thousands of selected writings from around the world, and it can be retrieved through <https://www.scopus.com/>.

During the identification phase, the researchers will enrich the keywords. The higher the number of keywords researchers use, the greater the number

of potential articles retrieved from the databases. The general keywords used by researchers to find articles in MyJurnal and Scopus are: “Document”, “Digital Document”, “Admissibility”, “Syariah Court”, “Electronic Document”, “Electronic Evidence” and “*Kaedah Pembuktian*”. According to Shaffril et al. (2020), it is essential to provide many keywords into a database to produce more data related to the topic. However, the negative side of this method is, it will also offer irrelevant articles. If the researchers only use a specific keyword, the results from the database will produce more relevant articles, but there is a risk of losing potentially valuable documents. Figures 1 and 2 show the example of the query string in the databases used in this research: MyJurnal and Scopus.

From the figures above, the researchers use query string in the database, a mixture of symbols and coding that allows them to

combine all keywords when searching and prevent repetitive searches. The period of literature publication is also limited from the year 2000 to 2020. Based on the initial search results, 61 journals and articles were found in MyJurnal, while 188 journals and articles were found in Scopus. The researchers must also follow several criteria when searching the data in the databases, as shown in Table 1.

Table 1
List of criteria, eligibility and study exceptions

Criteria	Eligibility	Excluded
Literature Type	Journal Articles	Journal Articles (review paper), Editorial, Conference Working Papers, Chapters in Books
Country	Malaysia	Other Countries

In general, this study will use the PRISMA method since this paper is based on systematic analysis and meta-analysis

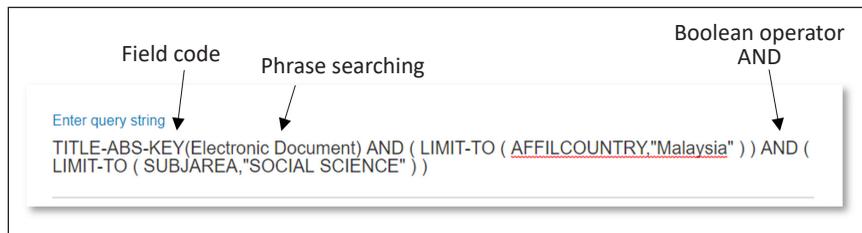


Figure 1. The examples of search/query string develop in Scopus

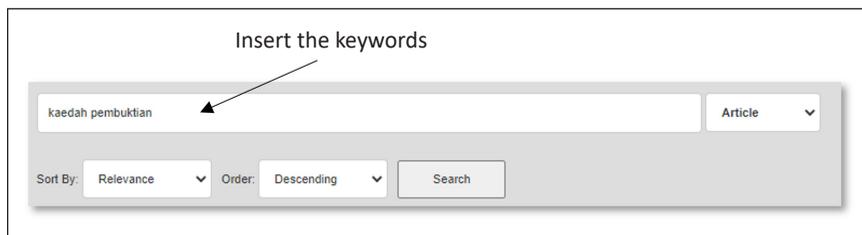


Figure 2. The examples of search/query string develop in MyJurnal

(Liberati et al., 2009). The data analysis started by compiling all the details of journal articles using Microsoft Excel in case there are repetitions of articles in both databases. In that case, the data from Scopus will be retained, and the data from MyJurnal will be deleted. It is because Scopus is preferred, and this database holds thousands of selected writings from all over the globe. The process of filtering is carried out to prevent the recurrence of data during the information analysis process.

As a result, eight articles in MyJurnal have been filtered and removed because

there are multiple duplicated articles in both databases. Therefore, the final total amount of literature to be identified from the two databases is 241. However, only 21 articles are useful which discussed and related to this topic after the last screening record, while the remaining 220 articles diverted from the issue. Therefore, the order of the data analysis has been divided by the researchers according to the year of publication, the number of authors involved in the journal article, the analysis of 21 interesting articles from the final screening, and the study on the admissibility of digital documents as

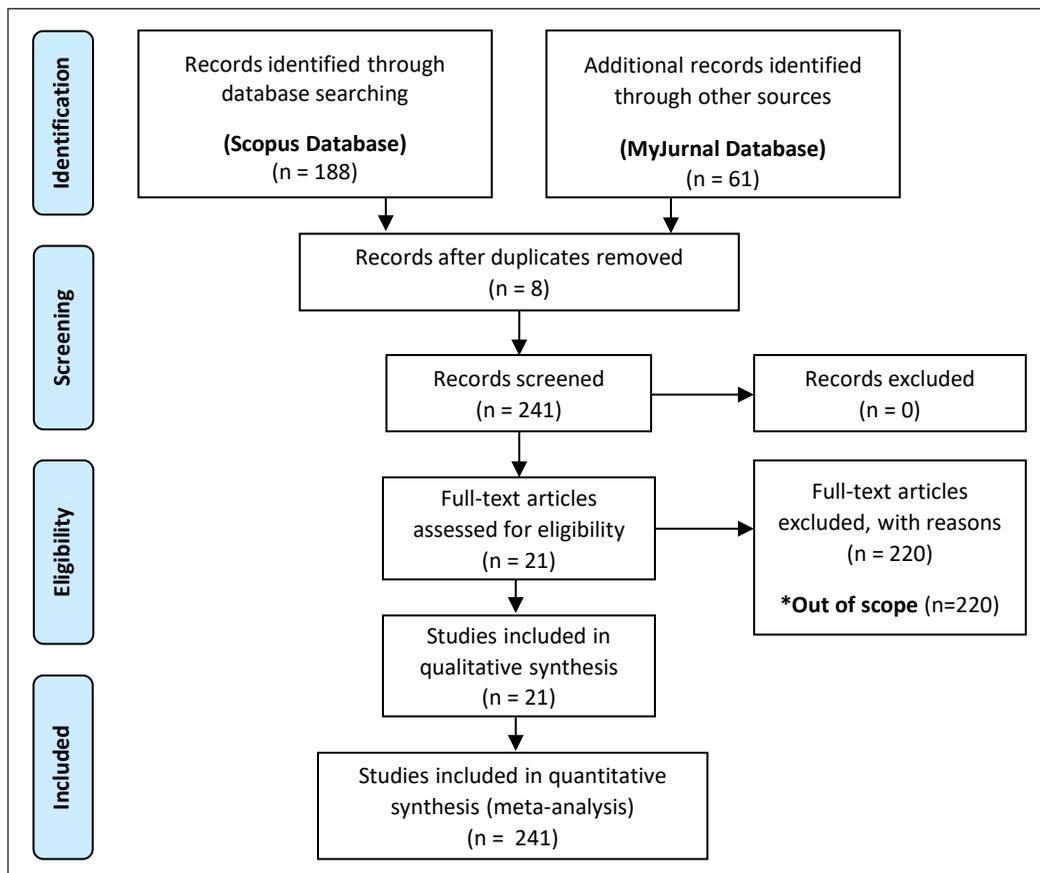


Figure 3. The flow chart of the study based on the PRISMA Systematic Analysis Methodology

evidence by referring to Islamic law. Figure 3 shows the flow chart of the research based on the PRISMA systematic analysis methodology.

RESULTS

The Number of Literature by Year of Publication

Based on the search results obtained by inserting all keywords into the database, 241 publications were discovered after removing duplicated articles. Table 2 displays a comparison of reports published

in the MyJurnal and Scopus categorised by year of publication.

The Amount of Literature by Number of Authors

Table 3 displays the amount of literature based on the number of authors in these 21 articles pertaining to this topic. The articles are divided into four (4) categories which are:

- (a) One author;
- (b) Two authors;
- (c) Three authors;
- (d) Four authors or more.

Table 2
Number of articles based on year of publication

Year of Publication	Number of Publication		Total	Percentage (%)
	(MyJurnal)	(Scopus)		
2020	0	11	11	4.56
2019	7	27	34	14.11
2018	6	21	27	11.2
2017	4	19	23	9.54
2016	5	14	19	7.88
2015	7	29	36	14.94
2014	6	11	17	0.71
2013	0	8	8	3.32
2012	1	10	11	4.56
2011	1	6	7	2.9
2010	2	4	6	2.49
2009	2	4	6	2.49
2008	5	2	7	2.9
2007	1	11	12	4.98
2006	2	1	3	1.24
2005	0	1	1	0.41
2004	2	0	2	0.83
2003	1	5	6	2.49
2002	0	3	3	1.24
2001	1	0	1	0.41
2000	0	1	1	0.41
Total	53	188	241	100%

Based on the results in MyJurnal, articles written by ‘four or more authors’ are the highest number, which is five articles (38.5%). It is followed by one author consisting of four articles (30.8%), two authors comprising of three articles (23%), and an article written by three authors consists of one article (7.7%).

Meanwhile, in Scopus (Table 4), articles written by ‘four or more authors’ are the highest number: six articles (75%), followed by articles written by two authors consisting of two articles (25%). However, there is no record in the Scopus database regarding this topic written by one and three authors.

Table 3
Number of publications by number of authors in MyJurnal database

Number of Authors	Number of Article (MyJurnal)	Percentage (%)
One author	4	30.8
Two authors	3	23
Three authors	1	7.7
Four authors or more	5	38.5
Total	13	100

Table 4
Number of publications by number of authors in Scopus database

Number of Authors	Number of Article (Scopus)	Percentage (%)
One author	0	0
Two authors	2	25
Three authors	0	0
Four authors or more	6	75
Total	8	100

DISCUSSIONS

Analysis of Articles from the Final Screening Result

Two hundred forty-one papers were discovered based on the search results obtained by entering all keywords into the database. However, only 21 definite articles can be discussed based on the final screening results, all relevant to this subject. On the other hand, 220 other pieces are not related to this topic. Furthermore, based on a document analysis of these 21 papers, the researchers discovered several pieces of literature that could be used as reference data for this study. Therefore, for this section, the researchers will discuss 21 related articles from the final screening result.

First and foremost, based on a study by Wan Ismail and Ramlee (2013), the authors have surveyed the concept and scope of the document according to *fiqh* and legal perspectives. This study has shown that digital document is included in the category of *al-kitabah*. *Al-kitabah* is defined as something that can be explained or described through writing or sketches, in traditional forms such as paper, wood, or modern forms such as diskettes, compact discs, and the internet. This definition showed that digital document is included in the category of *al-kitabah* and may be used as a method of proof in court. In addition, Wan Ismail (2016) also discussed the strength and acceptability of digital documents as a means of proof under Malaysian Syariah Courts. In this study, it is recommended that the Syariah court institution refers to civil court law when dealing with this kind

of proofing method regarding the standard operating procedures (SOP) of admissibility of the digital document under civil court that should be followed by Syariah court.

On the other hand, Sa'di et al. (2015) discussed the scope and admissibility of electronic evidence in criminal cases. Indirectly, these studies may be referred to the Syariah Court when using digital files as evidence in the trial proceedings. The evidence in electronic forms such as digital format is permissible in the Syariah court if it is authentic and reliable (Mohamed & Ramlee, 2014). In the study of Rohizan et al. (2017), the researchers have discussed the requirements that must be fulfilled to permit computer-generated documents as evidence. For example, the digital document must be accompanied together with the opinion from experts to strengthen the evidence presented in the court.

The researchers also found a study conducted by Saifuddin et al. (2019) that discusses the similarities and differences between the legal provision from the Syariah Court Evidence (Federal Territories) Act [Act 561] (1997) and the Evidence Act [Act 56] (1950). For instance, the admissibility of a digital document is based on the definition of a document under Section 3 of the Evidence Act [Act 56] (1950). This section also is similar to Section 3 of the Syariah Court Evidence (Federal Territories) Act [Act 561] (1997) that indirectly recognised digital documents as evidence. On the other hand, this study aims to explore the experience of civil law practitioners in dealing with cases

concerning the admissibility of a digital document as a method of proof. As a result, this research will indirectly be used to reference the Syariah courts when this type of proofing method is employed in the future.

Not only that, a study by Wan Ismail et al. (2019) discusses closed-circuit television (CCTV) as one form of a digital document that can be used as evidence in criminal cases by referring to Islamic evidence law. The study shows that CCTV can be accepted as evidence of adultery (*zina*), *qazaf* and other criminal offences. Furthermore, according to Wan Ismail et al. (2019) in another study, the role of evidence through CCTV is also critical in *takzir*, *hudud* and *qisas* criminal cases by referring to Islamic evidence law. According to Saad (2015), expert testimony or *al-ra'yul khabir* must be made when proposing this type of evidence to support the digital files presented in the trial. The use of *ra'yu al-khabir* in the Syariah courts is also significant to strengthen further the document presented in a court (Wan Ismail et al., 2015).

In addition, according to Yusof et al. (2019), forensic evidence as such document analysis is one of the popular forms of *qarinah* that must be filled together with the digital document in a trial proceeding. In general, the principles and modifications of *qarinah*, such as the use of digital files, can be extended by referring to the Evidence Act [Act 56] (1950) (Md Noor, 2008). According to Muhamad et al. (2015), the importance of using this kind of *qarinah* in *qisas* and *hudud* is discussed. The study

also was conducted by Mutalib and Wan Ismail in 2012. The Syariah court should accept the new types of evidence such as deoxyribonucleic acid (DNA) test and fingerprints to convict the person who committed adultery. Furthermore, the discussion of DNA evidence as one form of *al-qarinah* also has been discussed by Shariff et al. (2019). In this study, the authors mention the relevance and admissibility of DNA as a means of proof under the legal provisions of Syariah. It is indirectly similar to the discussion of the digital document in the Syariah court as a type of new evidence method.

In Wan Ismail and Mehmet (2017) study, the authors have highlighted the general challenges faced when using a digital document as evidence, such as falsification. The falsification of a document can be defined as the act of destroying, altering, mutilating, or falsifying any original documents. Besides, Hadi and Paino (2016) study also explained the challenge encountered when allowing digital documents as evidence, which is document falsification. In the article, the author discusses the developments in documents falsification in the civil court of Malaysia, which may be applied to the Syariah court. Furthermore, according to Wan Ismail (2015), the authors also discussed the generic forged documents that usually occur in the Syariah court, such as forgery of an official letter or falsifying a medical report. In addition, according to Mohamed et al. (2014), the authors discussed some of the proposed solutions to solve cyber-fraud cases at the Department of Digital Forensics

of Cybersecurity Malaysia. Therefore, this study will indirectly be referred to legal practitioners to overcome the problems regarding using digital documents, such as fraud or invalidity.

According to Baharuddin et al. (2019), a study related to the level of admissibility of scientific evidence for Syariah law practitioners had been conducted. This study shows that the legal Syariah practitioners lack exposure to new evidence, knowledge and comprehensive training. Hence, digital documents as evidence are court is not being exposed thoroughly to the legal Syariah practitioners. Furthermore, according to Wan Ismail et al. (2018), a study had been conducted on the level of understanding of Syariah law practitioners regarding the extent to which they handle issues related to document forgery. This analysis shows the lack of exposure for the Syariah law practitioners in the case involving forged documents when digital proofs are permissible in comparison to civil court. Not only that, according to Wan Ismail et al. (2015), the authors also argue that legal practitioners need to be seriously familiar with the falsification of documents and their forms so that they can make accurate decisions in a judgment, especially when using a digital document as evidence.

Based on the results of the analysis carried out, it is apparent that there are not many studies conducted that discuss the admissibility of digital documents under Islamic law. Therefore, the author will disclose in detail in this study the position of digital files under Islamic law, the analysis of cases reported in the Syariah court on

the use of the digital document as evidence, and some suggestions when permitting the digital form of evidence in the Syariah court.

The Position of Digital Document under Islamic Syariah Law

In this section, the researchers will discuss the position of a digital document according to Islamic Syariah law. Generally, digital files are a relatively new form of evidence, especially for use in the Syariah courts (Wan Ismail, 2016). Therefore, this method is not explicitly explained in Islamic law. However, the digital document can be considered a method of proof based on Ibnu

Qayyim (2007) and Ibnu Taimiyyah (1995), which said that they accept anything that can explain and reveal the truth as long as it falls within the category of evidence. Table 5 shows the analysis of the position of digital documents according to Islamic Syariah law.

Based on Table 5, there is no specific source regarding the admissibility of the digital document as evidence by legal authorities such as the Holy Quran, al-Hadith, and the Islamic Legal Maxims in general (Qawaid Fiqhiyyah). However, the acceptance of digital documents refers to the public acceptance of documents (*kitabah*) as a means of proof (Wan Ismail et al., 2021).

Table 5
The analysis of the position of a digital document according to Islamic Syariah Law

	Sources	Description
Legal Authorities	The Holy Quran	<ul style="list-style-type: none"> “O ye who believe! When ye deal with each other, in transactions involving future obligations in a fixed period of time, reduce them to writing”. (Al-Baqarah 2: 282) Allah Almighty stresses making a documented text that can be used as evidence during the court proceeding.
	Hadith	<ul style="list-style-type: none"> “It is the duty of a Muslim who has something which is to be given as a bequest not to have it for two nights without having his will written down regarding it.” (Sahih Muslim 13: 3987) Allah's Messenger (may peace be upon him) advised us to write a will from this hadith. If such writing were unimportant and lacking in benefits, the prophet would not have his ummah do it.
	Islamic Legal Maxims (Qawaid Fiqhiyyah)	<ul style="list-style-type: none"> “<i>al-kitabah kalkhitab</i>” It means <i>kitabah</i> is equal to document. This method indirectly means that each text or document is acceptable as a conversation.
The Syariah Courts Evidence (Federal Territories) Act 1997 [Act 561]	Section 3	<ul style="list-style-type: none"> According to Section 3 of the Syariah courts Evidence (Federal Territories) Act [Act 561] (1997), a document can be defined as any matter expressed, described or howsoever represented, upon any substance, material, thing or article, including any matter embodied in a disc, tape, film, soundtrack or other devices whatsoever. Therefore, digital documents are indirectly included in this section.
	Section 33	<ul style="list-style-type: none"> The digital documents are included in the primary description category.
	Section 49	<ul style="list-style-type: none"> Cases involving the use of digital documents in the Syariah courts should be accompanied by expert opinion to maintain the credibility and validity of the evidence.

In addition, section 3 of the Syariah Court Evidence (Federal Territories) Act [Act 561] (1997) also defined the document in detail, and the researcher assumes that the digital file is also included in this clause. Under that provision, the document has a broader meaning and is not bound by handwriting alone (Wan Ismail, 2020).

According to Jamal (2011), the digital document must also be strengthened by expert opinion to solidify the credibility of document descriptions that have been released. Furthermore, according to Section 33 of the Syariah Court Evidence (Federal Territories) Act [Act 561] (1997), the digital document should be supported by other means of proof, such as expert opinion to make sure the credibility of the evidence and also to verify the authenticity of the digital document from the expert.

Although there is no specific provision from the Syariah principles related to the acceptance of digital documents by the

court, the general approval by the legal authorities said that a document is a method of proof. Apart from that, several provisions under Islamic law, which is the Syariah Court Evidence (Federal Territories) Act [Act 561] (1997), indirectly show that digital files can be a form of document that can be used as evidence.

The Admissibility of Digital Document as a Method of Proof in Malaysian Syariah Court

The previous discussion indirectly shows that the Syariah principles recognise the digital document as evidence in the Malaysian Syariah Court. This kind of description helps support the other facts presented in court (Wan Ismail et al., 2020). Based on the findings, the researcher found several cases related to digital documents in the Syariah court (Table 6).

From the above case studies, the researcher found that the Syariah courts have

Table 6
The analysis of reported cases in Malaysian Syariah Court on the use of the digital document as a means of proof

No.	Name of the case	Year	Type of case claim	Type of digital document used as evidence
1.	<i>Mohd Nizam bin Abdul Malik v. Fauziah binti Mohd Isa</i> (2006)	2006	<i>Nusyuz's claim</i>	Picture
2.	<i>Halijah binti Abdul Rahman v. Zambree bin Baharom</i> (2008)	2008	Demand for divorce confirmation	Short message service (SMS)
3.	<i>Ahmad Faozi bin Mansor v. Norhafizah binti Ahmad</i> (2004)	2004	<i>Nusyuz's claim</i>	Phone bills and short message service (SMS)
4.	<i>Zabariah binti Mat Piah v. Syed Abas Ibrahim</i> (2008)	2008	<i>Fasakh</i>	Picture/visual
5.	<i>Ramlee bin Ismail v. Masuah binti Abd Rashid</i> (2007)	2007	<i>Nusyuz's claim</i>	Short message service (SMS)
6.	<i>Ajmawati Atan v. Moriazi Mohamad</i> (2005)	2005	Divorce	Receipt and Cheque

started to use digital documents as evidence in courts since 2004, such as short message service (SMS), receipt, phone bills, pictures, and closed-circuit television (CCTV) and others. For example, in *Halijah binti Abdul Rahman v. Zambree bin Baharom* (2008), the defendant has sent a short message service (SMS) on 12th January 2008 for divorce by using a mobile phone. However, on 13th March 2008, the woman violated the *taklik*. After hearing arguments from both parties, the Port Dickson District Syariah subordinate court convicted both parties of divorce. In this case, it is possible to conclude that SMS is used as proof of divorce even if the husband does not intend to divorce his wife. Based on the court decision, the researcher believes that SMS is also one of the digital documents that can be accepted as proof to strengthen the case's conviction in the Syariah court. This description works to reaffirm other evidence filed in court. However, this situation is very different from the civil court as they have accepted this evidence since the 1950s.

On the other hand, the researchers also believed that additional evidence, such as the opinion from the experts, should be brought together to confirm the authenticity of the digital document if its authenticity is in doubt. For example, in Ajmawati's divorce claim in *Ajmawati Atan v. Moriasi Mohamad* (2005), the understanding of the admissibility of the digital description was unclear. The appellate judge has overlooked or lacked knowledge of the concept and implementation of electronic documents. It is due to the fact that every process of storing, withdrawing and sending money

either online or by check, as in this case, all the data stored in the system, named as electronic documents. As a result, the case was ordered to be heard again with the submission of the supporting witnesses. Therefore, several incidents happened in the Syariah court when this method of proof is allowed.

The Suggestion for Improvement on the use of Digital Document as Evidences in Syariah Court

In this section, the researchers will present some suggestions to improve and digital documents as proof in the Syariah court. First and foremost, there is no denying that civil law practitioners have a better grasp of digital documents than Syariah's law practitioners. However, it does not mean that the Syariah court completely rejects the electronic evidence submitted. This situation occurs because they are rarely exposed to cases related to electronic documents, although their use is prevalent today. On the other hand, the authors identify lacunas and gaps that there is no specific provision in the Syariah court concerning using the digital document as evidence. Instead, it is included in the definition of a document in general. Therefore, the scholars and the legal experts in the field of evidence must discuss together to form a specific description of digital documents according to Islamic law. Their admissibility must be clarified and refined to serve as evidence in the Syariah court. It aims to detail the digital document concept from the perception of Islamic law, and its implementation procedure in court.

Generally, the cases that can be proven through electronic documents are much broader and clearer under civil law than anything stated in Islamic jurisprudence. For example, digital files cover criminal cases, *muamalat* (commercial transaction), sexual harassment and other issues under civil law. Meanwhile, according to Islamic jurisprudence scholars, electronic evidence is only permissible in cases involving *muamalat*. Therefore, they have a different opinion to apply this kind of method of proof in other cases. Nonetheless, there is no significant discrepancy in electronic documents between Islamic rulings that have been provided by legislation, especially provisions under the Evidence Act [Act 56] (1950) applicable in civil courts. With this, the Syariah court can adapt the existing conditions of the Evidence Act [Act 56] (1950) and apply them in Islamic evidence law as long as they do not contrast with *syarak*. Therefore, to further strengthen the implementation of electronic evidence in Syariah courts, Section 90A in the Evidence Act [Act 56] (1950) needs to be added to the Syariah Courts Evidence (Federal Territories) Act [Act 561] (1997), as this section has outlined explicit provisions on digital documents as a method of proof.

Besides, the Syariah law practitioners also need to be given greater exposure to electronic documents by creating specialised sections related to forensic electronics. However, most Syariah law practitioners are still vague about implementing electronic records as one of the methods of proof, as happened in *Ajmawati Atan*

v. Moriasi Mohamad (2005). In this case, the understanding of the admissibility of the digital description was unclear, which resulted in the case being ordered to be heard again with the submission of expert testimony, particularly in the field of digital forensics (Wan Ismail et al., 2020, 2021).

On the other hand, document forgery is one of the challenges faced while using digital documents. Generally, civil courts have left the Syariah courts far behind in handling cases related to using a document as a means of proof, especially in cases of document falsification. Civil courts are more exposed to its claims as they have a specific provision under civil jurisdiction for each case reported. For example, in Section 466 of Penal Code [Act 574] (2006) which is the forgery of a court record or a public register of births, the guilty shall be punished with imprisonment for a term which may extend to seven years and shall also be liable to fine. Besides, according to Section 467, forgery of a valuable security or will, the guilty shall also be punished with imprisonment for a term which may extend to twenty years and shall also be liable to fine.

Meanwhile, in Section 468, forgery for cheating, the guilty shall be punished with imprisonment for a term which may extend to seven years and shall also be liable to a fine. Lastly, in Section 469, forgery to harm the reputation of any person, the guilty shall be punished with imprisonment for a term which may extend to three years and shall also be liable to a fine. In conclusion, civil law has a specific provision for every falsifying of documents, as mentioned above.

This situation is quite different from Islamic jurisprudence, where the punishment for the offence of falsifying documents is under the sentence of *takzir* and the discretion of the judge (Alias et al. 2021; Wan Ismail, 2020). This situation makes the cases related to document forgery challenging to be handled by Syariah law practitioners. Therefore, the researchers opined that the Malaysian Syariah courts need to look at the experience and refer to civil law regarding how civil legal practitioners handle cases related to document forgery and analyse the punishments prescribed thereunder. Thus, it aims to improve the institution of Syariah courts when dealing with cases involving document forgery.

Although the Syariah law practitioners are less exposed to this kind of proof method, the researchers believe that digital documents play a significant role in strengthening the conviction in court, especially in this age of developing technology. Therefore, it is hoped that the stated suggestion may help further support digital documents as one of the forms of evidence in the court.

CONCLUSION

In conclusion, in this paper, the researchers had carried out a systematic analysis with the PRISMA framework on the admissibility of digital documents under Islamic law by analysing the publication from two databases, namely MyJurnal and Scopus from 2000 to 2020. Generally, a digital document is a relatively new form of evidence, especially in the Syariah courts. It is because using this kind of method is not

explicitly described in the source of Islamic law. However, digital documents can be considered a method of proof based on the acceptance of documents in general based on the legal authorities such as the Holy Quran, hadith, Islamic legal maxims, and the Syariah Court Evidence (Federal Territories) Act [Act 561] (1997). The researchers have also analysed the reported cases in the Syariah court on using the digital document as evidence. These case studies show that the Syariah court is starting to accept digital documents as evidence in the trial since 2003 compared to the civil court that agrees with this type of proofing method for a long time since the 1950s. At the end of the study, the researcher also put forward some suggestions for improvement in employing digital documents as evidence in the Syariah court. The researchers strongly believed that this research has adequately gathered the literature and references regarding the admissibility of digital documents as a means of proof under Islamic Syariah law. It aspires, this working paper would assist other researchers in referring to valid and reliable references and literature while conducting their research.

ACKNOWLEDGMENT

The researchers would like to express an acknowledgment to the Ministry of Education (MoE), Malaysia through the Fundamental Research Grant Scheme (FRGS) entitled "*Pembinaan Model iDoc-Forensics (Kombinasi Al-Qarinah dengan Forensik Dokumen Digital) ke Arah Penyelesaian Kes-kes Kehakiman*

di Mahkamah Syariah Malaysia”, (FRGS/1/2019/SSI03/USIM/02/6), (USIM/FRGS/FSU/055002/50319).

REFERENCES

- Ahmad Faozi bin Mansor v. Norhafizah binti Ahmad (14002-058-0001-2004).
- Ahmad, M. H., Baharuddin, A. S., Zakaria, M. A., Nordin, N., Ishak, S. K., & Othman, N. K. (2020). Bukti saintifik dan penerimaannya di Mahkamah Syariah: Analisis perundangan bagi undang-undang keterangan Mahkamah Syariah [Scientific evidence and its admissibility in Syariah Court: Legal analysis of Syariah Court evidence law]. *Kanun: Jurnal Undang-undang Malaysia*, 32(1), 67-92.
- Ajmawati Atan v. Moriazi Mohamad, 1 CLJ (SYA) 54 (2005).
- Alias, M. A. A., Wan Ismail, W. A. F., Baharuddin, A. S., & Mutalib, L. A. (2021, Jun 8). *An overview on the falsification of document according to fiqh and legal perspectives* [Conference session]. Proceeding of the 8th International Conference on Management and Muamalah, Faculty of Management and Muamalah, Kolej Universiti Islam Selangor (KUIS), Malaysia. <http://conference.kuis.edu.my/icomm/8th/e-proceeding/table-of-content#laws>
- Baharuddin, A. S., Ahmad, M. H., Wan Ismail, W. A. F., Mutalib, L. A., & Wan Harun, M. A. (2019). Catalysing global peace through the strengthening of forensic science application in Shari'ah Law. *Al-Shajarah: Journal of the International Institute of Islamic Thought and Civilization*, 77-103.
- Evidence Act [Act 56] s. 3, s. 90A (Malaysia) (1950).
- Hadi, K. A. A., & Paino, H. (2016). Legal perspectives towards forgery, fraud and falsification of documents: Recent development. *Management & Accounting Review*, 15(2), 93-109.
- Halijah binti Abdul Rahman v. Zambree bin Baharom (05001-054-0055-2008).
- Ibnu Qayyim. (2007). *Al-turuq al-hukmiyyah fi al-siyasah al-syar'iyah* [Judicial methods in Islamic law]. Dar 'Am al-Fawa'id.
- Ibnu Taimiyyah. (1995). *Majmu' al-fatawa'* [Group of fatwa]. Majmu al-Malik Fahad Litiba'ah al.
- Jamal, J. (2011). Kebolehterimaan teknologi dalam undang-undang keterangan Islam di Mahkamah Syariah [Admissibility of technology in Islamic evidence law in Syariah Courts]. *Jurnal Hukum*, 33(1), 1-12.
- Liberati, A., Altman, D. G., Tetzlaff, J., Mulrow, C., Gøtzsche, P. C., Ioannidis, J. P., Clarke, M., Devereaux, P. J., Kleijnen, J., & Moher, D. (2009). The PRISMA statement for reporting systematic reviews and meta-analyses of studies that evaluate health care interventions: Explanation and elaboration. *Journal of Clinical Epidemiology*, 62(10), e1-e34. <https://doi.org/10.1016/j.jclinepi.2009.06.006>
- Md Noor, R. (2008). Kedudukan Bayyinah, Syahadah dan Qarinah dalam penggubalan undang-undang keterangan Islam di Malaysia [The position of Bayyinah, Syahadah and Qarinah in the enactment of Islamic evidence law in Malaysia]. *Jurnal Syariah*, 16(2), 1-23.
- Mohamed, D., & Ramlee, Z. (2014). Cases of electronic evidence in Malaysian courts: The civil and Syariah perspective. *ICSSR e-Journal of Social Science Research*, 1(2), 1-10.
- Mohamed, N., Nawawi, A., Ismail, I. S., Ahmad, S. A., Azmi, N. A., & Zakaria, N. B. (2014). Cyber fraud challenges and the analysts competency: Evidence from digital forensic Department of Cyber Security Malaysia. *Recent Trends in Social and Behaviour Sciences* (2nd ed., pp. 581-583). CRC Press.
- Mohd Nizam bin Abdul Malik v. Fauziah binti Mohd Isa (14004-058-0030-2006).

- Muhamad, M. M., Mohd Shariff, A. A., Rajamanickam, R., Abdul Rahman, M., Zahid, A., & Ismail, N. (2015). Qarinah: Admissibility of circumstantial evidence in Hudud and Qisas cases. *Mediterranean Journal of Social Sciences*, 6(2), 141. <https://doi.org/10.5901/mjss.2015.v6n2p141>
- Mutalib, L. A., & Wan Ismail, W. A. F. (2012). Al-Qarinah: Antara kekuatan dan keperluan dalam mensabitkan kesalahan jenayah (Zina) [Al-Qarinah: Among the strengths and needs in convicting criminal offenses (Adultery)]. *International Journal of Islamic Thought*, 2, 38-54.
- Penal Code [Act 574] s. 466, s. 468, s. 469 (Malaysia) (2006).
- PP v. Datuk Hj Sahar Arpan, 1 AMR (2007).
- Ramlee bin Ismail v. Masuah binti Abd Rashid (14005-058-0336-2007).
- Rohizan, N. Q. A., Alkawaz, M. H., Ghazali, S. A., & Bachok, R. (2017). Admissibility of documentary evidence for the law enforcement. *Journal of Management & Science*, 5(1), 10-17.
- Sa'di, M. M., Kamarudin, A. R., Mohamed, D., & Ramlee, Z. (2015). Authentication of electronic evidence in cybercrime cases based on Malaysian laws. *Pertanika Journal of Social Sciences & Humanities*, 23(S), 153-168.
- Saad, Z. R. (2015). Pembuktian dalam kes jenayah Syariah Malaysia: Isu dan penyelesaian [Evidence in Malaysian Syariah criminal cases: Issues and solutions]. *Kanun: Jurnal Undang-undang Malaysia*, 27(1), 122-142.
- Saifuddin, S., Markom, R., & Muhamad, M. M. (2019). Kaedah pembuktian dalam undang-undang keterangan Mahkamah Syariah dan Mahkamah Sivil di Malaysia: Suatu kajian perbandingan [Methods of proof in the evidence law of Syariah Courts and Civil Courts in Malaysia: A comparative study]. *Kanun: Jurnal Undang-undang Malaysia*, 31(1), 1-34.
- Shaffril, H. A. M. M., Samsuddin, S. F., & Samah, A. A. (2020). The ABC of systematic literature review: The basic methodological guidance for beginners. *Quality & Quantity*, 55, 1319-1346. <https://doi.org/10.1007/s11135-020-01059-6>
- Shariff, A. A. M. M., Azhar, A., Rajamanickam, R., Manap, N. A., Hussein, S. M., Said, M. H. M., Ab Halim, A. H., & Markom, R. (2019). Analysis on admissibility of DNA evidence in Malaysian Syariah Courts. *Academic Journal of Interdisciplinary Studies*, 8(4), 159.
- Syariah Court Evidence (Federal Territories) Act [Act 561] s. 3, s. 33, s. 49 (Malaysia) (1997).
- Wan Ismail, W. A. F. (2015). Forms of document falsification in Malaysia's Syariah Courts. *Malaysian Journal of Society and Space*, 11(9), 32-39.
- Wan Ismail, W. A. F. (2016). Penerimaan dan kekuatan dokumen elektronik dalam pembuktian di Mahkamah Syariah di Malaysia [Acceptance and strength of electronic documents as proof in Malaysian Syariah Courts]. *Jurnal Kanun*, 28(2), 338-355.
- Wan Ismail, W. A. F. (2020). *Keterangan dokumentar menurut fiqh dan undang-undang keterangan Islam di Malaysia* [Documentary evidence according to Islamic jurisprudence and evidence law in Malaysia]. Dewan Bahasa dan Pustaka.
- Wan Ismail, W. A. F., & Mehmet, A. (2017). The legal forensic model in determining the genuineness of Islamic banking documents and their application in Shariah Courts. *Global Journal Al-Thaqafah*, 7(2), 115-127.
- Wan Ismail, W. A. F., & Ramlee, Z. (2013). Keterangan melalui Kitābah: Menurut fiqh dan undang-undang semasa di Malaysia [Evidence through the Kitābah: According to current fiqh and law in Malaysia]. *Jurnal Undang-Undang dan Masyarakat*, 17, 1-11.
- Wan Ismail, W. A. F., Abdul Shukor, S., Hashim, H., & Baharuddin, A. S. (2019). Pembuktian

- melalui Televisyen/Kamera Litar Tertutup (CCTV) dalam kes-kes jenayah: Tinjauan umum berdasarkan undang-undang keterangan Islam [Evidence based on CCTV In criminal cases: An overview based on Islamic law of evidence]. *Malaysian Journal of Syariah and Law*, 6(1), 87-103.
- Wan Ismail, W. A. F., Abdullah, Z. H., Abd Murad, A. H., Che Amani, N., Mutalib, L., Hanafi, L. H., & Khir, M. M. (2015). Bentuk-bentuk pemalsuan dokumen menurut fiqh dan perundangan Islam di Malaysia: Satu analisa [Forms of document forgery according to islamic fiqh and law in Malaysia: An analysis]. *The e-Journal of Sultan Alauddin Sulaiman Shah*, 2(1), 1-11.
- Wan Ismail, W. A. F., Baharuddin, A. S., Mutalib, L. A., & Alias, M. A. A. (2021). An appraisal of digital documents as evidence in Islamic Law. *Academic Journal of Interdisciplinary Studies*, 10(3), 198. <https://doi.org/10.36941/ajis-2021-0076>
- Wan Ismail, W. A. F., Baharuddin, A. S., Mutalib, L. A., & Saharudin, N. S. (2019). Understanding of Syariah practitioners in Malaysia on document forgery. *Humanities & Social Sciences Reviews*, 7(6), 349-355.
- Wan Ismail, W. A. F., Baharuddin, A. S., Mutalib, L., & Alias, M. A. A. (2020, October 27). *The admissibility of digital document according to Syariah law: A preliminary analysis* [Conference session]. International on Syariah and Law, Faculty of Syariah and Law, Universiti Sains Islam Malaysia (USIM), Malaysia. <https://insla.usim.edu.my/index.php/eproceeding/article/view/53>
- Wan Ismail, W. A. F., Mutalib, L. A., Abdullah, Z. H., Abd Murad, A. H., Che Amani, N., & Khir, M. M. (2015). Document forensic, the fiqh and the Syariah Courts. *Malaysian Journal of Society and Space*, 11(4), 132-139.
- Wan Ismail, W. A. F., Shukor, S. A., Hashim, H., & Baharuddin, A. S. (2018). Pembuktian melalui Televisyen/Kamera Litar Tertutup (CCTV) dalam kes-kes jenayah: Tinjauan umum berdasarkan undang-undang keterangan Islam [Evidence through Television/Closed Circuit Television (CCTV) cameras in criminal cases: An overview based on Islamic evidence law]. *Malaysian Journal of Syariah and Law*, 474(6194), 1-18. <https://doi.org/10.12816/0051393>
- Wan Ismail, W. A. F., Shukor, S. A., Hashim, H., Mutalib, L. A., & Baharuddin, A. S. (2019). The reality on application and challenges of Closed-Circuit Television (CCTV) images as evidence in Shariah criminal cases in Malaysia. *Humanities & Social Sciences Reviews*, 7(6), 356-361. <https://doi.org/10.18510/hssr.2019.7661>
- Yusof, S. M., Rajamanickam, R., & Ab. Halim, A. H. (2019). Kebolehterimaan keterangan forensik dari perspektif Maqāsid Syariah [Admissibility of forensic evidence from the perspective of Maqāsid Syariah]. *Journal of Southeast Asia Social Sciences and Humanities*, 89(2), 117-127.
- Zabariah binti Mat Piah v. Abas Syed Ibrahim (06100-041-0422-2008).

Understanding COVID-19 Pandemic through Science, Technology and Society (STS) Education: A Textual Analysis of Student Reflection Papers

Jerome V. Cleofas

*Department of Sociology and Behavioral Sciences, College of Liberal Arts, De La Salle University,
2401 Taft Ave, Malate, Manila, 1004 Metro Manila, Philippines*

ABSTRACT

The COVID-19 pandemic calls for educators to deliver learning experiences that are relevant in order to empower students to adapt to these unprecedented times. Science, Technology and Society (STS) is an interdisciplinary social science course included in the undergraduate general education curriculum in the Philippines that can potentially be designed to help students make sense of the coronavirus crisis. This study aims to describe the insights on the COVID-19 pandemic among undergraduate students enrolled in STS classes through the textual analysis of their reflection papers. A total of 74 reflection papers were qualitatively textually analysed using thematic analysis. Four themes emerged from the data: (1) appreciation of the science and medical community; (2) sensitivity to the barriers of scientific progress during the COVID-19 pandemic; (3) gaining social consciousness about the impacts of the pandemic, and; (4) enrichment of critical thinking and social engagement. Educators are encouraged to incorporate STS approaches in their lessons to foster students' critical understanding of current socio-scientific issues.

Keywords: COVID-19, pandemic, reflection papers, STS, STS education, textual analysis

ARTICLE INFO

Article history:

Received: 23 March 2021

Accepted: 06 July 2021

Published: 24 September 2021

DOI: <https://doi.org/10.47836/pjssh.29.3.27>

E-mail address:

jerome.cleofas@dlsu.edu.ph

ISSN: 0128-7702

e-ISSN 2231-8534

INTRODUCTION

Globally, the COVID-19 pandemic has impacted all sectors of life. As of this writing, this disease has caused at least 2.4 million deaths worldwide (World Health Organisation, 2021) and has interrupted social and economic systems. While the world is beginning to see progress in the management and mitigation of the spread

of the virus, the end of the pandemic and the dire consequences that come with it are still out of reach. One of the sectors that this disease has impacted is education. Abruptly, schools have transitioned from traditional classrooms to online set-ups. It has been difficult for teachers, students, administrators and other stakeholders (Cleofas, 2021; Talidong & Toquero, 2020).

However, despite the many challenges that it had brought to learning institutions, this unprecedented public health crisis also brings new opportunities to the way education can be delivered to the students. This situation calls for teachers to enhance their e-learning competencies and innovate their teaching strategies to make their courses relevant. Furthermore, educators are encouraged to design their syllabus to maximise digital classrooms' potentials and empower students to respond to the societal impacts of COVID-19 (Toquero, 2020).

One subject that can provide students with a critical understanding of the pandemic and its consequences is Science, Technology and Society (STS) (Hodson, 2020). In the Philippines, STS has recently been introduced by the Commission on Higher Education (CHED, 2013) in the general education curriculum (GEC) in college after the country's basic educational landscape transitioned to K-12 (CHED, 2013). With less than ten years since its implementation, college-wide STS education is still in its infancy, and professors of this course are continually discovering and improving ways of handling this subject. More research about STS education at the college level in the Philippines is needed.

STS is a branch of social sciences that is interdisciplinary. It aims to develop students' critical understanding of how science and technology as a social institution shapes and is shaped by sociocultural, political and economic contexts (CHED, 2013; Chowdhury, 2016). Because COVID-19 is both a scientific (i.e. nature of the virus, development of treatment and vaccines, disease progression) and social phenomenon (i.e. human behavioural changes, socioeconomic consequences of quarantine, stigma and discrimination), STS education can help undergraduate students make sense of the pandemic as it unfolds in their lives in real-time (Hodson, 2020). In the Philippines, the coronavirus crisis has thrived in a sociopolitical background characterised by increased militarization and police brutality, distrust among public officials, censorship and populism, and digital, gender and economic inequality (Beltran, 2020; Lasco, 2020). STS education can equip young Filipinos with social and scientific consciousness to inspire them to address the earlier issues and contribute to nation-building during these challenging times.

The Relevance of STS Education

Outside the Philippines, there have been review papers and empirical evidence demonstrating the positive outcomes of STS education among students; studies have suggested that STS can increase science literacy and critical thinking (Mulyanti et al., 2020; Yapıcıoğlu & Kaptan, 2017), foster changes in scientific attitudes such

as suspension of belief and challenging authority (Çalik & Karatas, 2019), enhance science motivation (Cigdemoglu, 2020), promote the use of moral judgments on socio-scientific issues (Yapıcıoğlu & Kaptan, 2017), sociopolitical awareness and engagement (Chowdhury et al., 2020) and even develop soft skills such as communication, interpersonal skills, and professionalism (Roswita et al., 2021).

STS contributes to the humanisation and socialisation of science (Chowdhury, 2016), which is running at a fast pace during this unprecedented public health crisis. Scholars have argued the relevance of STS education in the context of the COVID-19 pandemic. Hodson (2020) opined that during and beyond the pandemic is an opportune time to enhance the youth's STS postures towards socio-scientific issues to compel students to action parallel to social movements against different kinds of oppression. Knopes (2019) asserted the significance of using the STS lens in health and medicine for students and practitioners to gain a more critical appreciation of how illness events—such as COVID-19—and medical technologies can impact patients' social lives. Feminist STS scholars suggested the importance of understanding the role of every individual in addressing COVID-19 and its consequences and other coinciding issues such as racism, gender inequality and anti-science movements (Fitsch et al., 2020).

Research Objective

Cognizant of the potentials of STS education in order to illuminate the COVID-19

phenomenon and dearth of literature about STS education, especially among undergraduate students and in the Philippine context, this study aims to describe the insights on the COVID-19 pandemic among undergraduate students enrolled in STS classes through the textual analysis of their reflection papers.

METHODS

This study utilised a qualitative textual analysis research design. Smith (2017) defines this as a research approach that examines messages found in various mediums and analyses them in the social contexts that they are situated. Smith (2017) explains that this design looks at the text to understand and make sense of social reality rather than measure or determine. For this study, the unit of analysis is the text from reflection papers produced by the undergraduate students as a terminal summative output for their STS class.

Sample

The reflection papers that were purposively selected for inclusion in the study were those submitted by undergraduate students who possessed the following criteria: (1) should be 18 years old, and above; (2) should be enrolled in any one of the three STS classes of the researcher who was also the STS instructor, and; (3) should have voluntarily provided their consent to have their paper included in the study. Thus, a total of 74 reflection papers from eligible students (n=74) were included in the study. The majority of the participants were 18-year-old

(38%; $\mu=18.97$), female (63%) and in their first year of college (62%), and belonged to various degree programs in business and liberal arts.

Study Procedure

Description of the STS Class. The STS classes spanned for one term (14 weeks) from July to October 2021. Because of the community quarantine, all university campuses are closed in the Philippines. Therefore, all classes were delivered purely online. The STS course included modular lessons on the following: nature and philosophies of science, the sociocultural, political, economic and historical context of science and technology, interdisciplinarity, futures of science and technology, technological impact assessment, and indigenous sciences.

The researcher/instructor employed a flipped classroom strategy where lectures are pre-recorded as videos and are asynchronously consumed by the students. Collaborative writing and/or creative assignments were consequently provided to students to demonstrate their learning on the topics and served as formative assessment activities. During synchronous classes via the Google Meet® video conferencing platform, the researcher/instructor would engage the students in discussions and debates about current local and global events and related socio-scientific issues, and then present and appraise the module outputs of the students to provide deeper insights and immediate feedback to the class. For example, emerging news about

the COVID-19 pandemic and its response was frequent discussion points during classes. The use of interactive and reflective strategies embedded in current socio-scientific issues in teaching STS, which were used to design this particular STS course, have been promoted by various STS researchers (Bettencourt et al., 2011; Chowdhury et al., 2020; Hodson, 2020; Knopes, 2019; Yapıcıoğlu & Kaptan, 2017).

Reflection Paper as The Research Instrument. The main data source of this study is the text from student reflection papers, which were part of the summative assessment activities for the STS class. Reflection papers fit research that looks at students' social awareness and self-reflexivity (Olukotun et al., 2018). The reflection papers were submitted during the 12th week of the term, where all the didactics of the course had already been delivered. The students were instructed to answer the question, "*how did the Science, Technology and Society class help you understand and cope with the COVID-19 pandemic?*" In the instructions, the students were encouraged to make the sharing more personal. Except for a word count limitation of 1,000 words, no writing structure was prescribed. It is to ensure the writing to be unrestricted. These outputs were submitted as online texts through the university's learning management system (LMS).

Data Collection. Upon submission, the students are presented with the online informed consent form, showing details

on the adherence of the study to Philippine national ethical standards for research and the Data Privacy Act, and asking whether they would like to volunteer their write up to be a part of the research. Upon securing consent, the reflection papers were stored in the qualitative data analysis software. The summary of research methods is found in Figure 1.

Data Analysis

Thematic analysis was used to generate findings that represent patterns in the textual data from the reflection papers. First, the researcher read and reread the text in order to gain familiarisation with the data. After which, codes were generated in order to reduce the data. Codes were further reduced

to categories until themes were identified, reviewed and defined (Terry et al., 2017). This process is demonstrated through a sample excerpt in Table 1. Data analysis was managed using NVivo® qualitative data analysis software.

RESULTS

From the textual analysis of the 74 reflection papers, four major themes emerged: (1) appreciation of the science and medical community; (2) sensitivity to the barriers of scientific progress during the COVID-19 pandemic; (3) gaining social consciousness about the impacts of the pandemic, and; (4) enrichment of critical thinking and social engagement.

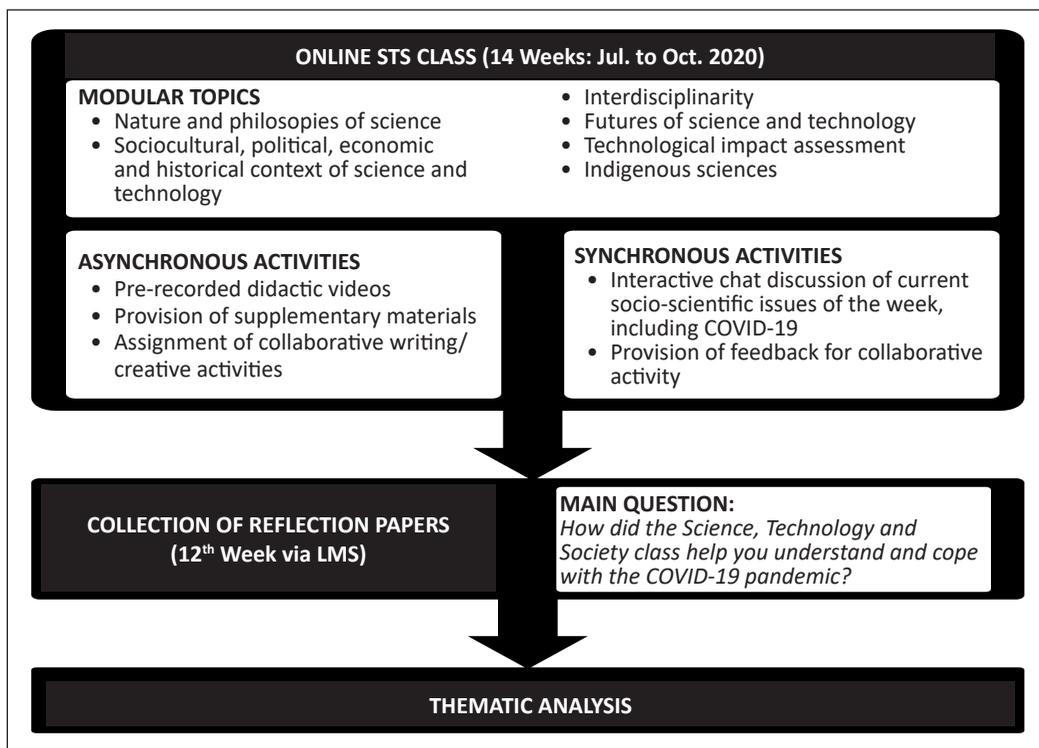


Figure 1. Study procedure

Table 1
Sample data analysis

Sample Excerpt	Sample Codes	Sub-themes	Theme
<i>Amidst a pandemic, the most valuable lesson I can derive from learning STS is to remain vigilant in order to derive the best from the technologies available to me, and to listen to founded and science-based advice to ensure my safety and that of others (A03)</i>	<ul style="list-style-type: none"> • vigilance on emerging technologies • science-based decision making 	Deepening of critical thinking	Enrichment of Critical Thinking and Social Engagement

Theme 1. Appreciation of the Science and Medical Community

Being exposed to STS education has fostered positive attitudes among students towards scientists, researchers and practitioners, especially in health and digital technology. They have gained deeper awareness about the contributions of science and medicine to address the problems brought about by the pandemic. This theme emerged from two subthemes: *appreciation of medical research* and *appreciation of digital technology*.

Subtheme 1.1. Appreciation of Medical Research. The students have reported having greater awareness about the painstaking process of medical research, especially during the critical time of the pandemic. Because of this, they expressed their gratefulness towards the hardworking researchers working towards vaccines, treatments and other technologies related to COVID-19, as written by Participants A24 and C15:

“I began to appreciate the efforts of our scientists and researchers for spending time finding and developing the cure for COVID-19...”. (A24)

“With this course, I was able to formulate an in-depth understanding and expanded array of perspectives about the situation and the responses made by the scientific community... stages of vaccine trials follow certain protocols and measures to ensure safety”. (C15)

Their exposure to STS education can make learners have positive attitudes towards the scientific method and its application in developing solutions during the pandemic. As the students learned about the multifaceted role of scientists in responding to the threat of COVID-19, they also realise that the quarantine and transmission mitigation measures mandated in the country were also policies that came from medical research, as mentioned by Participants B05 and B21:

“Especially today, different researchers, scientists, companies, and laboratories have been collaborating and looking for new discoveries about the COVID-19 virus...”. (B05)

“...Science helps the people in the society be contained in the middle of the pandemic, like how they are expected to behave to help the totality”. (B21)

Subtheme 1.2. Appreciation of Digital Technologies. As the students lived in a restricted world during community quarantine and most of their social and economic interactions are conducted online, STS education gave them a deeper appreciation for the digital technologies that had helped them access their needs despite the physical limitations, as mentioned by Participants A01 and B27:

“COVID-19 has brought about my increased reliance on technology to provide essential services such as the delivery of relevant and accurate news, and allow me to carry out necessary tasks...”. (A01)

“During this pandemic, we have used different technologies to stay connected with our family and friends, this includes apps like Zoom, Messenger, and other more. The emergence of modern technologies can help us maintain our physical, emotional, and mental health during this pandemic”. (B27)

Students have also expressed their gratitude towards the gadgets and online applications that allowed for e-commerce to flourish during the time of the pandemic, which helped people purchase their goods safely and also have income during these trying times, as Participant B24 mentioned:

“The moment I understand the concepts of STS, as a business major, it has made me realise the importance of it not only in the scientific field but also within the business... for instance, adopting the new practice of using social media as a platform in selling and advertising products, conducting market testing”. (B24)

Students have given more positive valuations on innovations in learning and communication as they recount the hardware and applications they use to pursue their degrees. They became appreciative that if it were not for digital and educational technology, they would not have continued their studies. Participant A34 shared:

“Now that we are living in the new normal that has greatly impacted our interactions with people, technology is needed more than ever. It is now the sole medium of communication, learning, and overall survival... Instead of having face-to-face classes that would have risked our health, we conduct online classes”. (A34)

Theme 2. Sensitivity to the Barriers of Scientific Progress during the COVID-19 Pandemic

STS education has made most students critical about the sociopolitical factors that shape how the pandemic is managed in the Philippines and elsewhere. They wrote about the circumstances that hinder the success

of science and medicine that led to the unfavourable COVID-19 outcomes in the country and concerns about possible future problems. Under this theme are subthemes: *frustrations about government management* and *scepticism about the competition in the vaccine and treatment development*.

Subtheme 2.1. Frustrations about Government Management. Many students lament the national government response to the pandemic. As they learn about the political forces of science in STS classes and witness the policies and programs rolled out by the government, they note its lack of attention to and coordination with the scientific community, as described by Participants A15 and C07:

“Philippines has seen little to no improvement in handling the pandemic... because the government is not maximising the scientific resources available for our country. For instance, the country currently has trillions of debt, and yet only two cities have provided mass testing”. (A15)

“...This is very sad because the government is prioritising the restoration of Manila Bay instead of restoring the economy of our country. Hopefully, things would be alright soon and life would get back to normal...”. (C07)

Due to their exposure to STS education, the students have been able to see how the different problems such as lack of public

trust in science, the poor health care system and corruption in the government are intertwined and had been magnified and aggravated by the pandemic. Their ability to find socio-scientific issues that are entwined with current sociopolitical events have been hastened, as demonstrated by Participant A04:

“Transparency cannot be given, prioritisation to our health sectors cannot be seen. Our government is in great debt because they borrowed money for COVID-19, but improvement in our situation cannot be felt. Education is not accessible by everyone, especially nowadays that we have transitioned to online classes. The list goes on, as they are correlated with one another”. (A04)

Subtheme 2.2. Scepticism about the Competition in Vaccine and Treatment Development. Vaccine development programs were still in their early phases when these STS classes were held. Students have learned that competition is a force that drives scientific innovations. Some students are sceptical about how quickly the vaccines are being made and are worried that it could affect the truthfulness of the results and the effectiveness of the final output. Participant A20 wrote:

“Specifically knowing what is really happening in the race for a COVID-19 vaccine. It is alarming and scary at the same time knowing

people can publicise news, papers, and the like just for the sake of being the 'first' even with substandard knowledge or even skipping clinical trials for a vaccine". (A20)

Students consider competition in science as double-edged. They are concerned that the race to the vaccine and other cures may result in suboptimal products and may harm the population. Participant A12 shared the story of how their father, who tested positive for COVID-19, was given experimental drugs and how they felt uncomfortable about it:

"During the latter part of August, my father tested positive for the coronavirus. He was administered with various trial... One of them even failed in its phase 3 trial, and yet it was still given as a treatment... Even though these trials were done with the best intentions, I can't help but feel that my father has become a guinea pig of scientific research... But because of desperation, we had no choice but to agree and accept the risks". (A12)

Exposure STS education had influenced the students' ability to be critical not only to the adherence to the science in the development of vaccines and cures but also the deployment and distribution of these medical technologies. They worry about the equitability of its distribution, as Participant B22 mentioned

"...the pandemic unveiled a line between developing and developed countries. If the vaccine was proved to be successful, who is first in line? The countries with power namely, the superpower." (B22)

Theme 3. Gaining Social Consciousness about the Impacts of the Pandemic

Because of their exposure to STS education, the students gained deeper awareness regarding the societal impacts of the pandemic, both negative and positive. They were able to see the COVID-19 phenomenon's immediate and long term effects on social life. Under this theme are the subthemes: *empathy towards the marginalised and acceptance of the 'new normal.'*

Subtheme 3.1. Empathy towards the Marginalized.

According to the students, the STS class provided them with an avenue to learn and discuss the socioeconomic impacts of the pandemic and develop concern for the most affected sectors of society. For example, Participant A05 mentioned his worry about those who had lost their income opportunities because of COVID-19:

"Right now, we see people struggling with finances as the majority of the labour force do not have a stable job while others are being laid off. Knowing this, makes you wonder whether they are even capable of bringing meals to the table for their families; or if they

can afford a roof over their heads”.
(A05)

Due to STS education, the students have gained more class consciousness. They have a more critical view of the inequalities in society as manifested in the way the pandemic is managed. They have critically observed how the rich and powerful who violate protocols are not as severely sanctioned compared to poorer constituents in society. Participants B29 and A02 explained:

“Every topic learned in STS can be applied and is related in the pandemic today... where upper class abuse their power by getting VIP treatments which is unfair for the lower class especially those who are in need to be treated”. (B29)

“Learning STS ... opened my eyes to more harsh realities such as preferential treatment of others especially in terms of the imposition of penalties regarding quarantine guidelines by the influence of their wealth and stature in society...”.
(A02)

Aside from the loss of income, unemployment, hunger and interrupted access to education, some students also empathise with people experiencing mental health challenges because of the pandemic, as Participant C15 verbalised:

“With my observations to this COVID 19 crisis, people tend to

become paranoid and worried which is not recommendable respond to this type of situation. News and information have great[ly] affected the people in the way they perceived these facts. Some of them have developed over-thinking mindset that have resulted to mental stress and conditions...”. (C15)

Subtheme 3.2. Acceptance of the ‘New Normal’. Because of their exposure to the topic of the future of science, the students have understood that the abrupt changes in society to address needs during quarantine are needed and inevitable. Participant C03 wrote:

“At this time of the pandemic, everyone is obliged to adjust to the new normal. New rules are being implemented for a more effective response to COVID-19, and these are mostly tech-driven... every movement relies on digital technology and the governments are being urged to expand the effective use of it in order to cope with the problem adequately...”. (C03)

Students shared that new ways of living such, as an increased focus on hygiene and digital technologies for education and industry, must be continued even after the pandemic, as their benefits are experienced during this time. Participant C18 mentioned the increasing digital literacy of the population because of the pandemic:

“STS has helped me in understanding and adapting to the changes and challenges brought about by the COVID-19 pandemic because it gave light to technology playing a big role in aiding us as we perform everyday tasks with the ‘new normal’. Technology is the reason we are able to do many things—and even productively, for that matter...”. (C18)

Because of STS education, students have also gained a more critical foresight of a post-COVID world. As a result, they expect to see pandemic-induced practices such as hygiene measures and remote learning become more mainstream. In addition, Participant A05 wrote:

“In the future, it will not be a surprise if we tend to order more take outs than eating inside a restaurant. Some people may believe that they don’t need a gym if they need to work out since they can just do it at home”. (A05)

Theme 4. Enrichment of Critical Thinking and Social Engagement

In many instances in the reflection papers, the students expressed how STS education fostered positive changes in their knowledge and attitudes about their realities. Some claim that the course also helped them adapt better to the pandemic. Under this theme are subthemes: *deepening of critical thinking* and *commitment towards social engagement*.

Subtheme 4.1. Deepening of Critical Thinking. Students reported that STS education has helped enhance their critical thinking, not only about the turnout of events during the pandemic but also about the daily technologies they use and how all they embedded in sociocultural contexts. For example, Participant A16 described how wearing the STS lens would allow them to see the world more critically:

“STS has equipped me with the proper tools to make sensible decisions that contribute to the alleviation of the countless problems the outbreak has generated... STS has surely altered my outlook on life... since most lessons, if not all, were extremely relevant and thought-provoking. It has ignited my curiosity and motivated me to view certain social issues from varying perspectives”. (A16)

The students were also able to appreciate the value of understanding socio-scientific issues and using STS lenses not only as academic exercises but also basic tools that they can use in order to improve their living, as Participant A06 shared:

“...it has motivated me to keep innovating not only in academics but even in my personal life... to input the concept of continuous improvement in order to keep growing and discovering more about ourselves and the world around us...”. (A06)

Aside from demonstrating a critical understanding of the interrelations of science, technology and society, the students also gained better research and information literacy. They report becoming more curious and investigative about learning and sceptical about daily data that they encounter. Participants A05 and C06 explained that the scientific attitude could be a lifestyle:

“...the course taught me how to be more vigilant in reading articles online as there are a lot of fake news and trolls. It is best for us to do our own research and fact check the articles that we are reading...”. (A05)

“...we should always research first and not act hastily... information travels a lot faster though not all information on the internet is correct, it is up to us to analyse which one is trustworthy ... it made me have a deeper connection with science not just as a subject but also as a lifestyle...”. (C06)

Subtheme 4.2. Commitment towards Social Engagement. Being exposed to the successes and problems of science and society, the students have expressed about using their new competencies to contribute in their ways. For example, Participant A04 mentioned their desire to work to address problems in the country:

“Learning about these makes me want to become the change that

the country needs. I had this sense of wanting to work in the future for the Philippines, because if nobody cares, then we will be stuck receiving this improper service forever that the Filipinos do not deserve”. (A04)

Because they understood the scientific and social bases of the lockdown and the measures mandated upon people to control the pandemic, the students have been more inclined to engage in these protective behaviours to help control the spread of COVID-19, as Participant B22 wrote:

“All the practices and technology that we have now like sanitizing, wearing face masks and face shields, mass temperature testing... were made to avoid the transfer of the virus. As we saw their purpose, it became integrated into our everyday lives... it can actually better our lives”. (B22)

Students have also expressed their commitment to using the learnings they obtained from STS to spread awareness and contribute to their respective communities. As C02 narrated:

“Every time I attend class, I am able to pick up new information about current events and I use this knowledge to educate other people as well. I am able to raise awareness and provide a space of learning for others”. (C02)

Ultimately, STS students have earned a more profound sense of their role and responsibilities in nation-building as privileged citizens to have access to a college education. As today's youth, and the future's leaders, they have committed themselves to instil positive change in the world, as Participant C08 mentioned:

"Vision a progressive nation; no matter what waves of challenges may come, we must ride onto it. Accept the fact that we are the future drivers of change. That as we see those issues and conflicts around us, we must take action".
(C08)

DISCUSSION

The present study suggests that due to STS education, the students have developed positive attitudes towards scientific research and technological advances, especially those that addressed the needs of the pandemic. This finding confirms Chowdhury (2016) assertion that STS education promotes a deeper understanding of the role of science in society. Furthermore, the STS approach in teaching has improved scientific attitude in the natural (Akçay & Akçay, 2015; Devi & Aznam, 2019) and health sciences (Knopes, 2019).

The present research also found that exposure to STS concepts has made the undergraduate students more sensitive about the various forces that impede science's success, especially during the pandemic. For example, students have been highly

critical of the government's COVID-19 response and lack of communication with scientific bodies and highly sceptical about the abrupt movement of COVID-19 research on vaccines and other treatments brought about by competition. This finding confirms Çalik and Karatas (2019) that STS education can improve scepticism towards science and socio-scientific issues. Likewise, previous studies have demonstrated how STS can make students learn about the social, cultural and moral forces that affect scientific progress (Khishfe et al., 2017; Yapıcıoğlu & Kaptan, 2017). Through STS and discussion of socio-scientific issues, students have realised that science can be used negatively to the detriment of humans and society (Yapıcıoğlu & Kaptan, 2017).

Students of the present study have also demonstrated heightened social consciousness and empathy towards the marginalized sectors of society disproportionately affected by the pandemic. They have also expressed their increased acceptance of the new normal. This result corroborates Raveendran (2021) that demonstrated how exposure to socio-scientific issues could foster the ability to be more analytical about the social inequalities and cultural contexts that influence scientific advancements. The present study has demonstrated the aspirations of Hodson (2020) in providing STS education that fosters critical awareness among students, making them politically literate.

Finally, the present study suggests that the students exposed to STS education have experienced an enhancement of

critical thinking and scientific stance. Previous studies have demonstrated how STS approaches have improved learners' higher-order thinking (Boonprasert et al., 2018; Ngaewkoodrua & Yuenyong, 2017) and scientific attitudes (Akçay & Akçay, 2015; Alcantara, 2000; Devi & Aznam, 2019) in different topics. Moreover, students participants in this current study have committed to becoming more socially engaged with the issues emerging from the COVID-19 pandemic. This finding supports Chowdhury et al. (2020), which argues that science education embedded in socio-scientific issues can promote the desired citizenry by orienting them in local and global issues and promoting student participation.

CONCLUSION

This present study provides qualitative evidence of the relevance of STS education in deepening the critical understanding and sense-making of the COVID-19 pandemic among undergraduate students. Exposure to the course can develop both appreciation and scepticism on the role and impact of the scientific community and other social forces during the pandemic. Moreover, STS equips students with knowledge and attitudes that can empower them to become socially responsible individuals that can contribute to society's adaptation during the pandemic—and beyond.

Implications

More than a year since the discovery of COVID-19, the virus has continued to

impact everyone's lives negatively. Its impact on society and the economy is expected to extend beyond the pandemic. STS approaches can be used not only in STS courses but also in other subjects in the social sciences, hard sciences, engineering, and mathematics to further assist students in navigating society in these difficult times and future problems. Educators must continue integrating current scientific and sociopolitical events in their lessons to make students' learning experiences more relatable, meaningful and applicable.

Limitations

This study only included three sections of STS classes in one university. Also, the insights of this study are dependent upon the status of COVID-19 and other current events that transpired during the 14 weeks that the classes were conducted. Therefore, it is further recommended that this study be replicated, including more students from different classes and schools, under different professors. Also, follow up studies can be done when the world has entered a post-COVID-19 era.

ACKNOWLEDGMENT

Author wish to thank the university's Science, Technology and Society course coordinator, Dr Dennis Erasga, and his core team of online course developers Dr Crisanto Regadio, Jr., Mr Patrick Cenon and Mr Jessie Varquez, Jr.

Funding

None.

Conflict of Interest

None.

REFERENCES

- Akçay, B., & Akçay H. (2015). Effectiveness of science-technology-society (STS) instruction on student understanding of the nature of science and attitudes toward science. *International Journal of Education in Mathematics, Science and Technology*, 3(1), 37-45. <https://www.ijemst.net/index.php/ijemst/article/view/51>
- Alcantara, A. J. (2000). Assessment of science, technology and society (STS) as a general education course at UP Los Baños. <https://agris.fao.org/agris-search/search.do?recordID=PH2001101343>
- Beltran, M. (2020, May 26). The Philippines' PANDEMIC response: A tragedy of errors. *The Diplomat*. <https://thediplomat.com/2020/05/the-philippines-pandemic-response-a-tragedy-of-errors>.
- Bettencourt, C., Velho, J. L., & Almeida, P. A. (2011). Biology teachers' perceptions about Science-Technology-Society (STS) education. *Procedia-Social and Behavioral Sciences*, 15, 3148-3152. <https://doi.org/10.1016/j.sbspro.2011.04.262>
- Boonprasert, L., Tupsai, J., & Yuenyong, C. (2018). Grade 8 students' capability of analytical thinking and attitude toward science through teaching and learning about soil and its' pollution based on science technology and society (STS) approach. *AIP Conference Proceedings*, 1923(1), 030070. <https://doi.org/10.1063/1.5019561>
- Çalik, M., & Karatas, F. Ö. (2019). Does a "Science, Technology and Social Change" course improve scientific habits of mind and attitudes towards socioscientific issues? *Australian Journal of Teacher Education*, 44(6), 35-52. <http://dx.doi.org/10.14221/ajte.2018v44n6.3>
- Chowdhury, M. A. (2016). The integration of science-technology-society/science-technology-society-environment and socio-scientific-issues for effective science education and science teaching. *Electronic Journal of Science Education*, 20(5), 19-38. <https://eric.ed.gov/?id=EJ1188220>
- Chowdhury, T. B. M., Holbrook, J., & Rannikmäe, M. (2020). Socioscientific issues within science education and their role in promoting the desired Citizenry. *Science Education International*, 31(2), 203-208. <https://doi.org/10.33828/sei.v31.i2.10>
- Cigdemoglu, C. (2020). Flipping the use of science-technology and society issues as triggering students' motivation and chemical literacy. *Science Education International*, 31(1), 74-83. <https://doi.org/10.33828/sei.v31.i1.8>
- Cleofas, J. V. (2021). Life interruptions, learnings and hopes among Filipino college students during COVID-19 pandemic. *Journal of Loss and Trauma*, 26(6), 552-560. <https://doi.org/10.1080/15325024.2020.1846443>
- Commission on Higher Education (2013). *General education curriculum: Holistic understandings, intellectual and civic competencies*. <https://ched.gov.ph/wp-content/uploads/2017/10/CMO-No.20-s2013.pdf>
- Devi, M. G., & Aznam, N. (2019). The effect of science-technology-society (STS) model on scientific literacy and scientific attitude of students on the subject of buffer. *Journal of Physics: Conference Series*, 1156(1), 012027.
- Fitsch, H., Jordan-Young, R., Trujillo, A. K., Kraus, C., Roy, D., & Schmitz, S. (2020). Coalition-making and the practice of feminist STS in the time of COVID-19. *Catalyst: Feminism, Theory, Technoscience*, 6(2), 1-33. <https://doi.org/10.28968/cftt.v6i2.34640>
- Hodson, D. (2020). Going beyond STS education: Building a curriculum for sociopolitical activism. *Canadian Journal of Science, Mathematics and Technology Education*, 20(4), 592-622. <https://doi.org/10.1007/s42330-020-00114-6>

- Khishfe, R., Alshaya, F. S., BouJaoude, S., Mansour, N., & Alrudiyan, K. I. (2017). Students' understandings of nature of science and their arguments in the context of four socio-scientific issues. *International Journal of Science Education, 39*(3), 299-334. <https://doi.org/10.1080/09500693.2017.1280741>
- Knopes, J. (2019). Science, technology, and human health: The value of STS in medical and health humanities pedagogy. *Journal of Medical Humanities, 40*(4), 461-471. <https://doi.org/10.1007/s10912-019-09551-3>
- Lasco, G. (2020). Medical populism and the COVID-19 pandemic. *Global Public Health, 15*(10), 1417-1429. <https://doi.org/10.1080/17441692.2020.1807581>
- Mulyanti, S., Halim, A., Ilyas, S., & Syukri, M. (2020, October 20-22). The impact of the science technology society (STS) approach on critical thinking ability and student learning outcomes. *Journal of Physics: Conference Series, 1882*, 012026.
- Ngaewkoodrua, N., & Yuenyong, C. (2017, June 6-8). Teachers' learning on the workshop of STS approach as a way of enhancing inventive thinking skills. *AIP Conference Proceedings, 1923*(1), 030030. <https://doi.org/10.1063/1.5019521>
- Olukotun, O., Mkandawire-Vahlmu, L., Kreuziger, S. B., Dressel, A., Wesp, L., Sima, C., Scheer, V., Weitzel, J., Washington, R., Hess, A., Kako, P., & Stevens, P. (2018). Preparing culturally safe student nurses: An analysis of undergraduate cultural diversity course reflections. *Journal of Professional Nursing, 34*(4), 245-252. <https://doi.org/10.1016/j.profnurs.2017.11.011>
- Raveendran, A. (2021). Invoking the political in socioscientific issues: A study of Indian students' discussions on commercial surrogacy. *Science Education, 105*(1), 62-98. <https://doi.org/10.1002/sce.21601>
- Roswita, F., Sulastri, S., & Khaldun, I. (2021). Application of the Science Technology Society (STS) model to craft and entrepreneurship materials to develop soft skills of students. *Jurnal Penelitian Pendidikan IPA, 7*(1), 67-73. <https://doi.org/10.29303/jppipa.v7i1.525>
- Smith, J. A. (2017). Textual analysis. *The International Encyclopedia of Communication Research Methods, 1-7*. <https://doi.org/10.1002/9781118901731.iecrm0248>
- Terry, G., Hayfield, N., Clarke, V. & Braun, V. (2017). Thematic analysis. In Willig, C. & Stainton-Rogers (Eds.), *The Sage handbook of qualitative research in psychology* (2nd ed., pp. 17-37). Sage.
- Talidong, K. J. B., & Toquero, C. M. D. (2020). Philippine teachers' practices to deal with anxiety amid COVID-19. *Journal of Loss and Trauma, 25*(6-7), 573-579. <https://doi.org/10.1080/15325024.2020.1759225>
- Toquero, C. M. (2020). Challenges and opportunities for higher education amid the COVID-19 pandemic: The Philippine context. *Pedagogical Research, 5*(4), em0063. <https://doi.org/10.29333/pr/7947>
- World Health Organization. (2021). *Weekly epidemiological update - 16 February 2021*. <https://www.who.int/publications/m/item/weekly-epidemiological-update---16-february-2021>
- Yapıcıoğlu, A. E., & Kaptan, F. (2017). A mixed method research study on the effectiveness of socioscientific issue-based instruction. *Education and Science, 42*(192), 113-137. <https://doi.org/10.15390/EB.2017.6600>

Using Online Platforms for Political Communication in Bahrain Election Campaigns

Mokhtar Elareshi^{1*}, Mohammed Habes², Sana Ali³ and Abdulkrim Ziani⁴

¹Communication and Media Department, Al Ain University, P.O Box: 64141, Al Ain, UAE

²Radio & TV Department, Yarmouk University, Zip Code 21163, Irbid, Jordan

³Allama Iqbal Open University Islamabad, 44000, Islamabad, Pakistan

⁴Mass Communications & Public Relations Department, Ahlia University, P.O Box: 10878, Manama, Bahrain

ABSTRACT

The rise of SNS facilitated politicians with new opportunities to communicate directly with voters. Especially during election campaigns. Twitter provides female politicians with a space to exercise their political tasks beyond traditional media, especially in some Arab countries. Based on the framing theory, this study aims to identify how the female politicians in Bahrain utilised Twitter to present themselves for Parliamentary election campaigns in 2018. The researchers scrutinised the phenomenon using a thematic analysis of $n = 263$ tweets posted by two Bahraini female candidates. Results revealed that although politicians largely preferred Twitter in election campaigns to reinforce support and mobilisation for political engagement, two selected candidates lacked interaction with their supporters. Thus, the researchers concluded that the Bahraini female politicians have a long way to represent themselves in digital media politics as men widely benefit from personalisation more than females.

Keywords: Election campaigns, female political candidates, political communication, political interaction, Twitter

ARTICLE INFO

Article history:

Received: 26 March 2021

Accepted: 25 June 2021

Published: 21 September 2021

DOI: <https://doi.org/10.47836/pjssh.29.3.28>

E-mail addresses:

mokhtar.elareshi@au.ac.ae (Mokhtar Elareshi)

mohammad.habes@yu.edu.jo (Mohammed Habes)

sana_jeo1990@hotmail.com (Sana Ali)

aziani@ahlia.edu.bh (Abdulkrim Ziani)

*Corresponding author

INTRODUCTION

Politics and digital media are largely inseparable. By offering a direct and free flow of communication between the political parties, policymakers, and the public, digital networks improve political activities (Fountaine, 2017; Kruikemeier, 2014) as digital media has advanced how politicians communicate and integrate with their

supporters/voters. Earlier, the connectivity was somehow indirect, managed by several media filters, which still play a vital role in elections. Nevertheless now, the flow of information is continuous and direct, without less barriers (Coelho et al., 2017). This change affected political communication, benefitted social networking sites (SNS) at every level because political parties embraced SNS as an important platform to share and receive political messages and awareness (Ahmed et al., 2016; Kruikemeier, 2014).

Digital media strengthened the presence and visibility of political tycoons worldwide (Methi, 2014). Political parties largely prefer social media to meet their political goals, as in large democratic states, political groups feel communicating with the public is a fundamental part of their political proceedings (Fountaine, 2017; Kruikemeier, 2014). Politicians and their parties tend to highlight the political discourse on traditional media platforms. However, today this process is more disciplined, organised, improved, and capable of meeting certain political objectives (Stieglitz & Dang-Xuan, 2013). SNS give new dimensions to communication, and politicians took full advantage (Coelho et al., 2017; Fountaine, 2017). SNS are used for political purposes, enhancing online and real-life political participation, especially during the election. Citizens who have access to political parties and political information tend to be a part of their activities thus, ensuring active participation, particularly in election campaigns (Fountain, 2017).

Thus, this study attempts to understand how and to what extent female politicians in Bahrain portrayed themselves during election campaigns in 2018 through Twitter. The first section involves a brief comprehensive review of the online media in political communication and its increased usage during electoral campaigning. The second section cited relevant literature highlighting the framing theory and social media usage in politics. Then, the third section involves the methodological techniques applied for the data gathering and analysis process. Finally, the fourth section contains a discussion on results, practical implications, and study limitations.

LITERATURE REVIEW

Framing Theory

The framing theory supports the basic proposition of this study as it describes the framing process in terms of “temporary and spatial bonding of the interactive messages” that regulates the communication (Bateson, 1972) and the selection of “some aspects of a perceived reality” and emphasis such content (Entman, 1993). Media framing indicates perceiving and interpreting the media content, specifically news, in terms of the familiar context. The media framing theory describes how Media delivers content with narrowed and pre-planned contextualisation (Arowolo, 2017). Ardèvol-Abreu (2015) describes it as a tenuous bridge between media agenda-setting and the framing of the message. The media content is created under certain textual and visual structures that ensure decoding inside

an axis of “thought” (Entman, 1993). The power of media messages to influence the audience’s perception by creating certain frames that further shape up opinion, e.g., during the elections (Rempoutzakos, 2017).

Scheufele (1999) considered media framing as a social construction and fabrication of social realities. One of the supportive notions can be derived from McQuial’s classification of media research in terms of its effects into four stages. Stage 1 continued from the early 1920s to the late 1920s, when media content was highly framed with the strategic framing of political propaganda during World War I. Stage 2 ended in the 1960s when researchers revised the existing media effects on political perceptions. Stage 3 was initiated in the 1970s to search for new strong media effects. Finally, stage 4 was shifted from merely attitudinal changes to the cognitive effects and changes. Consequently, we feel that framing needs to be further examined based on social constructivism in every region.

Today, the framing of media content is a widespread phenomenon, especially during elections. The coverage content is mainly based on conflicts and self-representation rather than the policy debate (O’Malley et al., 2012). Research has focused on media framing with the three central questions: (1) How does the news content frame the political process (elections) that alter the public opinion, (2) How do advocacy groups, politicians, and political parties active dominate media to polish their image and frame the relevant matters in a particular manner, and (3) How do audience actively

acquire that information, and further shape their perceptions accordingly (Pan & Koskcki, 1993).

Particularly through SNS, political content is especially mediated to meet certain political goals. Such platforms provide a digital architecture enabling the users to generate, frame, and share the content to fulfil their objectives. For example, political candidates/actors intend to use their social media accounts during elections and follow the strategic communication process (Fountain, 2017; Strömbäck & van Aelst, 2010). Online interaction between politicians and the public is another major strategy to run political campaigns where politicians and their thoughts, opinions and often demonise their competitors as digital media has become the cornerstones for a transparent and strong democratic process (Zhang & Song, 2018).

During elections campaigns, mainstream media platforms particularly, social media, perform their duty to persuade the audience and influence their perceptions (Arowolo, 2017; Scheufele, 1999; Ziani et al., 2014). Youssef (2020) indicted that SNS are commonplace to share and disseminate political information directly from the government or political entities. As a result, political communication and framing are comparatively more easy and efficient benefits for the political parties as political parties, and other organisations frame their message to gain personal political interest. Mass media play a fundamental role to connect political parties with the public by using strategic media policies (Fountaine,

2017). Based on several political themes, media frames determine the effectiveness of the campaigns and campaign messages (Muñiz et al., 2018). Besides traditional media, SNS also enable political parties to regulate their campaigns on their own. They allow them to strategically interact with the supporters to generate effective political debates (Sahly et al., 2019). The impacts of political messages are subtle (Jiménez, 2017), and these impacts are the desired outcomes that politicians aim to gain by using SNS as an interactive platform for political campaigning (Lin, 2016).

Social Media and Politics

SNS facilitate the self-expression and dissemination of personal claims. Politicians get opportunities to interact with the public and improve their political communication. Different politicians and their groups are interlinked, openly representing their personalities and opinion (Calderaro, 2018). Turnšek and Jankowski (2012) examined the use of social media for political purposes and found that YouTube was among one of the most preferred SNS by politicians. However, CNN broadcasted the greatest number of political news and special bulletin news regarding politicians revealing SNS use for political interaction among all the channels. Stieglitz and Dang-Xuan (2013) also analysed SNS for political display in the U.S and found that most political parties preferred SNS for political communication purposes, with Twitter being comparatively more preferred than Facebook.

As SNS have transformed the way people communicate, the interaction between political parties and the public have also reached another level (Kruikemeier, 2014). Yunus (2013) validated this in Turkey to raise political awareness and meet the desired political goals and found that different socio-political movements determined SNS use for political purposes. Data revealed that locals are highly interested in staying connected to political leaders and sharing political information. This usage is also facilitated by the ease of access which helps the political tycoons frequently reach the public. Methi (2014) investigated the use of SNS for political purposes in India and found that most Indian politicians prefer SNS, especially during the elections.

Similarly, Hečková (2016) scrutinised the elements of SNS messages by politicians during the elections worldwide. They revealed that the political messages contain mainly three elements: Persuasion, ideology, and propaganda. Finally, Bossetta (2018) analysed SNS use during the 2016 U.S presidential elections for campaigning purposes. Based on selected Facebook, Twitter, Instagram, and Snapchat posts and interviewed three prominent digital consultants who worked during the elections, the politicians mainly used Twitter and Facebook for political campaigning aspirations.

Furthermore, Shami and Ashfaq (2018) examined Twitter and Facebook for political purposes helping to sustain a friendly relationship between the politicians and the public. They concluded that the role of SNS

are strategic to meet the political ambitions by maintaining the political communication as these platforms are interactive and offer two-way communication facility enabling direct communication as public relations in a political process have an explicit

significance. Moreover, the exchange of symbols and messages through digital media has greatly benefitted the political parties that bring important outcomes for the political system.

Table 1

A brief overview of studies concerning SNS, politics, and self-representations of female politicians

Author & Date	Research Design/ Methodology	Description
Turnšek and Jankowski (2012)	A quantitative study, content analysis	YouTube was preferred by political parties to share the elections-related videos. News channels, i.e., CNN also focused primarily on the political content.
Yunus (2013)	Cross-sectional study, field interviews, and surveys	Opposition parties largely prefer SNS to reinforce political activities. Many socio-political movements took place in Turkey due to direct and framed content transmission between political parties and the public.
Shami and Ashfaq (2018)	Review of relevant theoretical concepts	The use of social media is strategic to meet political goals. Political Public Relations are an important determinant of political success.
Stier et al. (2018)	Cross-sectional study, survey method	Social media-based political campaigns are effective, based on debates about salient social issues. This two-way communication process helps the political parties to meet their agendas during the electoral process.
Winfrey and Schnoebelen (2019)	Quantitative, qualitative, and rhetorical methods	Women took an active role in the political campaigning process. Although the media also disseminated stereotypes about female candidates, still their role remained prominent and beneficial.
Bostanci (2019)	Cross-sectional study, survey method	Unionist women used social media to disseminate details about political protest and their personal opinion. This usage determined the effectiveness of their political activism.

Women Activism, Digital Media, and Self-Presentation

The political reformation and development programs in a state depend on the contributions made by men and women. The close attention to fair participation is based on the idea that no society can progress without equal socioeconomic and political rights to both genders (Winfrey & Schnoebelen, 2019). If rights are fairly distributed, more opportunities for progress are inevitable (Salih et al., 2013). OpCit Research (2013) examined the self-regulation of media campaigns by female politicians, the potential barriers, and the capability of SNS to remove these barriers. Findings revealed that almost all women politicians preferred traditional and new media; still, the campaigning through SNS platforms was significant. Moreover, female politicians also revealed growing interest in using SNS to run their political campaigns for availing better opportunities to increase political support and engagement (Evans & Clark, 2016; Winfrey & Schnoebelen, 2019).

Sreberny (2015) discussed the importance of SNS as an important source to advance women's political activism by providing them opportunities to know their rights and raise their voices. As a result, individual voices are amplified, and women being political activists, gain explicit attention (AlSalem, 2016). For instance, famous tweets by Mona Seif and Gigi Ibrahim to condemn military trail against the public, Lina Ben Mhenni's Facebook page to discuss the Tunisian war,

and Olfa Riahi's remained some prominent examples of women's political interest and activism in the region. In addition, Suiter (2015) investigated the use of SNS for political campaigning during the 2013 elections by the Irish female politicians, and results revealed that the majority of the politicians preferred to use both SNS due to ease of access and communication as well as to reinforce support and mobilisation for political engagement.

Furthermore, Stier et al. (2018) analysed SNS use by candidates during the German 2013 elections and found that the candidates primarily shaped political communication by using such platforms as communication mediators. Also, the textual analysis model indicated that the majority of the posts contained discussions between politicians and the public about salient social issues. Finally, Bostanci (2019) analysed the women's political activism through SNS during Gezi Park protests in Turkey and revealed that unionist women frequently used their SNS accounts to disseminate personal protest opinions about the political scenarios.

Likewise, Winfrey and Schnoebelen (2019) examined the role of women in political campaigns and reinforcing gender stereotypes through them via analysing $n=133$ relevant studies and found that despite gender stereotypes, women took active participation in the online campaigning process. Thus, the role of female politicians was highly acknowledged regarding their gender stereotypes to bring equality in the overall political process. Therefore,

SNS are seen to facilitate both men and women politicians to practice freedom of expression and politics. Furthermore, the SNS play a vital role in mediating the political communication between the politicians and the public, particularly for women politicians. Thus, SNS can somehow equalise their role's political representation and self-regulation (Carroll & Fox, 2014).

Bahrain General Elections 2018

The general elections were held in Bahrain from November-December 2018 to elect the 40 members of representatives. The electoral process consisted of two rounds: The first round took place on November 24th, 2018, and the second was on December 1st, 2018. The elections were based on "sham" as they included refraining the dissolved opposition members from running.

Moreover, record Bahraini women took part and elected as a member of the Parliament. During the first round, Fawzia Zainal and Fatimah Abbas won their seats. However, during the second round, Sawsan Kamal, Masuma Abdulrahim, Zainab Abdulameer, and Kaltham Abdulkareem won the seats in the national assembly. Thus, we assume that women in Arab, particularly Bahrain's political decision process, are newcomers. It could result from the Arab political 2011 uprisings, which led to a large representation of women in legislation and political systems (Shalaby, 2018). For instance, during uprisings in Egypt, Libya, Tunisia, and Yemen, Arab women actively participated and remained prominent. Their contribution was also motivated by

a long-term absence of women in Arab political scenarios and certain socio-political inequalities (AlSalem, 2016; Elareshi & Ziani, 2019). They took part in protests along with men to raise voices against discrimination, despotism, and absolutism. They wanted to establish a new, improved society with several socioeconomic and political improvements (Salih et al., 2013).

Following the other Arab countries, Bahraini women have increased socioeconomic improvement due to their collective efforts besides men. Moreover, Bahrain is an Islamic state rapidly moving towards modernism to balance gender roles and contribution regarding the State's progress (Aljishi, 2018). Consequently, this study examines how Bahraini political women self-presenting themselves in 2018 election campaigns. The research question is, therefore, concerned with exploring political women in Bahrain express themselves as to how do Bahraini women politicians self-frame themselves on Twitter in terms of (a) Twitter presence/tweet type, (b) the tone, (c) self-presentation, (d) susceptibility, and (f) the preoccupations of the local candidate?

METHOD

During the 2018 parliamentary elections, to identify the patterns of female political campaign's self-representation on Twitter, the study analysed the official tweets of two candidates. The selection of these candidates was based on the highest number of followers on their Twitter accounts. These selected candidates had prior experience in electoral marketing, as they were previously

nominated in the Bahrain Parliament elections in 2014. The first candidate appears as a young-*liberal* woman named Roua Al-Hayki (@Rouaahayki), who won the 2014 elections for the 6th constituency in the Northern governance with 61.30 per cent votes. Roua Al-Hayki was a former deputy in the Bahraini Parliament. Her background is more related to development strategies and the business consultation sector. Roua joined Twitter in September 2009 and has 2,529 followers and following 775 (4,494 tweets).

The second candidate appears as a mid-aged-*conservative* woman named Fawzia Zainal (@fawziainal5), who had previously been campaigned for the election in 2006 and 2014 but did not win. In 2018, Fawzia re-joined the 2018 parliamentary elections (as an independent candidate for the fifth constituency in the southern governance) with the Royal Court and the Supreme Council for Women. She won the election (53.47 per cent votes) and became the first woman to lead her constituency in Bahrain. However, her background is more linked with conventional and new media experience as she also worked in national television and radio. Based on the Twitter account, Fawzia joined Twitter in October

2014 and has 1,097 followers and 160 (650 tweets).

Unite of Analysis

We conducted a thematic content analysis of the gathered data that helps to represent the data descriptively. As compared to a formal content analysis, Thematic content analysis is limited only to textural data. Therefore, we conducted a qualitative analysis of all the two candidates' official tweets tweeted/retweeted from October 20th to November 23rd, 2018. We manually captured all the tweets (including retweets, Twitter-based replies, and tweets linked to other social media platforms, e.g., YouTube or Instagram) of both candidates' Twitter, which was later analysed. Table 2 summarises the selected unit of analysis in the current study:

A total number of $n=263$ tweets were gathered and further analysed using thematic analysis highlighted by Braun and Clarke (2006) and followed the designated five phases of thematic analysis outlined by Fountaine (2017) (Table 2). Furthermore, we used the qualitative analysis for analysing tweets through the MAXQDA program specialised for qualitative data analysis (Saillard, 2011).

Table 2
Unite of analysis

Theme	Unite
1	Type of tweet

Table 2 (Continued)

Theme	Unite
2	The Tone The language/dialect used
3	Self-presentation
4	Susceptibility Empathy Flattery Family & friendship Low levels of conflict and negativity
5	The preoccupations of the local candidate Election campaign period Social, political, and economic concerns

RESULTS

Regarding how both candidates framed themselves on Twitter during the election campaigns, we found:

Theme 1

Roua had a great involvement in Twitter activities compared to Fawzia. Roua. Notably, Roua had more than doubled tweets than Fawzia ($n=191$ vs $n=65$ respectively), while the number of retweets remained close between the two candidates (9 vs 7 respectively). These results also indicated how political candidates remain active on SNS platforms, especially Twitter, highlighting the importance of online platforms in election campaigns (Fountaine, 2017; Kruikemeier, 2014).

Type of Tweet. The overwhelming majority of the tweets were text-type style (including many hashtags), aimed primarily at posting information about campaigning activities. During their campaigns, it is noticed that

they did not tweet any clips or videos directly on Twitter; instead, they linked them to other SNS platforms such as YouTube and Instagram. For example, Roua included around $n=53$ links to video clips on other SNS (e.g., $n=41$ clips on YouTube and $n=12$ clips on Instagram). In contrast, Fawzia included around $n=41$ links to videos/clips directed to her Instagram profile. Within the videos/clips, Fawzia mainly focused on presenting her electoral program and commenting on the election campaigning events ($n=29$ clips). Besides, Fawzia also framed herself using the photographs of her meetings with her voters/supporters. Whereas Roua focused on the videos that she published on marketing the practical and field aspects. Here practical and field aspects mainly involved the interventions she made during the previous parliament sessions as she had already succeeded in the previous elections - 24 clips. Also, she much tweeted her interviews and press releases/statements about her achievements.

Although the number of published pictures of Roua ($n=63$) was less than those published by Fawzia ($n=73$), it was clear that Roua invested her online activity in highlighting her role as a former deputy of the Bahraini Parliament. Roua's activities included publishing pictures of her presence in the parliament sessions, discussing and questioning government members, and taking pictures with deputies and political leadership during the gatherings. The remaining pictures, published by Roua, were explicitly based on marketing tactics involving the media interviews published by the local newspapers and electoral banners.

Whereas Fawzia resorted to her photos ($n=21$ photos) representing a fusion of modern and traditional dresses, she intensified her pictures' publication with her constituents. Additionally, Fawzia also retweeted the election campaign banners and reminding the public about the election dates and her campaign. Thus, the findings supported Golbeck et al. (2010) assumption that politicians use Twitter as a vehicle for self-promotion frames and depict them as busy and committed representatives.

Theme 2: The tone

Most of the candidates' tweets came in a "moderate" or "confident" tone. However, it appears that Roua used more of a political tone with her pitch related to more political nature than Fawzia. Notably, Fawzia was softer in her pitch and kept a delicate tone to communicate with her voters/supporters.

The Language/Dialect Used. Both candidates used a more "standard language" in their tweets. However, on one occasion, the two candidates used slang or dialect language in their tweets. It is an advantage in campaigns when candidates use colloquial or informal language that is attractive to voters and supporters. Using dialect language enables them to get closer and more accessible to the voter's mind and sentiments.

While most of the other tweets appeared in informal language, which is the main language used in Parliament, it seems that the two candidates were keen on using formal and informal language in their election campaigns to show they are competent and can perform their duties by possessing the necessary language tools for Parliamentary work. Unsurprisingly, this is seen as SNS are more about informal platform between the communicators to achieve interactivity, outreach, and campaigning.

Fawzia (Figure 1), compared to Roua, took advantage of using a single retweet in the English language. This tweet was for a journalist who presented her as participating in the elections for the third time and was very close to success in the previous elections against her male opponent. The English language is a smart technique to increase information circulation and news opportunities to reach wider online users who are not Arabic-speaking supporters (Sahly et al., 2019).

Overall, the tone and language used in both tweets were positive and not aggressive;



Figure 1. Fawzia used the English language

the competition between the two candidates was in harmony with the general sphere. It is also worthwhile to mention that the elections in Bahrain are characterised as “calmness” and “respect” between the competing parties (Aljishi, 2018). However, Roua was *daring* in her tweets, and the political experience can explain this she gained during her previous period as a deputy member of the Parliament. Hence, the relevant attitude is a good technique to get voters’ attention and interact with them.

Theme 3: Self-Presentation

The two candidates sought to employ tweets in self-representation. Roua published twice as much as Fawzia (10 vs 5, respectively). In such a matter, while Fawzia was more *accurate* and *clearer* on the issue of self-presentation. Fawzia explained through

tweets the message or reason for her candidacy and the goals she aspired to regarding candidacy and expressing her confidence in succeeding. Fawzia presented herself within the framework of “a good citizen, who supports the pillars of the democratic march of the country and calls for fraternity”.

Within the self-presentation matter, Roua used some famous statements (e.g., Arthur Ashe) to represent herself within the framework of “the strength of the will, determination, and the ability to succeed”. She also represented herself within the framework of “success”, as expressed from the investigation of “two-thirds of the electoral program in the previous Parliamentary period”.

Although she appeared with some uncovered hair (not preferred by the

religious community) and looked like a more liberal woman, she referred to the religious phrase in an attempt to be in the same culture as her voters and supporters. In political communication, success in election campaigns depends on how candidates use their skills and abilities to master political communication, including political public relations with their voters and supporters using both new and old media platforms. However, such exercise might be not fully found in many Arab countries as in the western world, although social media is highly preferred in the Arab region (Elareshi & Ziani, 2019). It could be due to the lack of Arab professional campaign skills in using digital media (Ahmed et al., 2016; Calderaro, 2018; Karlsen & Enjolras, 2016), and how to apply such platform in online political communication that is also emphasised by McGregor and Mourao (2016).

Theme 4: Susceptibility (Empathy, Family, and Friendship) Empathy

It was clear that the two candidates employed some techniques during the campaign to appear within the “sympathy for others” framework (Karolak, 2013). This framework symbolises the humane value of the candidates in supporting their campaigns. For example, Fawzia chose to be more sympathised with the daughter’s illness of one of her direct competitors to show and highlight her human value. While Roua chose to interact emotionally with the victory of the Representative of Somali origin, Ilhan Omar (@IlhanMN),

in the American parliamentary elections as the U.S. Representative for Minnesota’s 5th congressional district (Golden, 2018). Roua told her constituents that “whatever the difficulties, success, and victory are possible” through this sympathy.

Family and Friendship. The two candidates also sought to employ the family and friends’ component to interact with their supporters within the framework of “family stability and surrounding friends”. In her humorous message tweets, Roua’s tendency to link and adopt the framework for surrounding friends and associations by thanking them several times. For example, she sent one tweet and acknowledged the administrative team of a magazine during the campaign. In contrast, Fawzia mentioned the close family relationship (husband, son), extended relatives, and constituency for their support during the campaign, including her voters and supporters.

Flattery. Both candidates also reinforced the likability frame using flattery. At the same time, Roua appeared more experienced than Fawzia in marketing a positive image of herself through the adoption of “compliment” in her speech addressed to the leadership and the local media or journalists and her campaign assistants. In addition, both conveyed their tweets acknowledging the help, contributions, and support of their campaign team, remindful of a good relationship. While as mentioned above, Fawzia praised her husband and son’s contributions to her campaign.

Low Levels of Conflict and Negativity. Under the likability framing, we found almost non-conflict and negativity between the two candidates. It seems that the two candidates' tweets are mainly characterised by a low level of conflict and negativity. The content of their speeches witnessed only acceptable and limited criticism of the performance of some ministers. Fawzia was satisfied with denouncing the acts of sabotage, which her photos were traced in the election campaign. Roua posted just one tweet containing a personalised aspect of negativity as she criticised the Finance Minister. Giving the common competitive races in the election, they neither attacked each other nor used negativity in general. Therefore, the fair competition between the two candidates was nicely captured.

Theme 5: The Preoccupations of the Local Candidate

Election Campaign Period. During the campaign, it appears that it did not have a

significant presence in the two candidates' tweets. Instead, it only included simple tweets about the announcement of the candidacy or some interviews with their voters. In contrast, these important virtual spaces could express programs, projects, ideas, and details about daily meetings and reactions throughout the campaign period.

Social, Political, and Economic Concerns.

Within her social concerns, Fawzia focused primarily on the issue of women and their role in society. Additionally, she also expressed her intention to take care of people with special needs, providing services, and initiating new projects to facilitate them at maximum them. On the other hand, Roua focused more on developing more nurseries and improving the education system in general (Figure 2).

Among the political concerns, Fawzia spoke in general about her involvement in supporting the democratic process in Bahrain. In comparison, Roua appeared in



Figure 2. Roua's retweet

more detail in her speech, such as the role of parliamentary oversight work in supporting democracy and the balance strategies. Such concern reflects the accumulation of Roua's political experience and understanding of Parliament's oversight technique in political work.

Regarding the economic concerns, Fawzia made concrete proposals that included developing the local market for her candidacy to serve merchants and shoppers. Besides, she also called for maintaining economic growth and increasing competitiveness. Fawzia further suggested developing legislation that promotes investments. At the same time, Roua focused more on supporting the financial balance, legislations, and the Parliament's supervisory role for spending the budget. These results also highlight the role of social media (Twitter) in political campaigning.

DISCUSSION AND CONCLUSION

According to Hemphill et al. (2013), SNS provide a strong opportunity for politicians to share and exhibit their stance directly and alter supporters' perceptions through framing. These political frames work as communication tools that identify, evaluate, and prescribe the concerns to make sense of only what we watch or read. Additionally, although the issues are related to a certain region or country, geopolitical proximity is another major component that makes social media, particularly Twitter, a distinguished political communication and framing (Ahmed et al., 2019). Hence, we also found

self-representation frames widely used by the Bahraini female candidates to represent themselves on Twitter.

The analysis revealed a greater attendance of Roua over Fawzia in terms of tweets. Saraswati (2018) states that with the rise of SNS, political communication is remarkably increased. Especially during the elections, politicians pay special consideration to SNS usage for communicating and keeping themselves connected with their supporters. Using clips and video links also indicated that Fawzia preferred to use Instagram too. At the same time, Roua divided her online activity between Instagram and YouTube, which provided her with a more active role on the SNS. These results are consistent with prior research (e.g., Filimonov et al., 2016).

Both candidates used multiple frameworks to frame themselves (e.g., "the good citizen, who supports the pillars of the democratic march for the country and calls for brotherhood", "the strength of will, determination and ability to succeed"). They both also used common methods to attract the voters and appeared within the framework of "sympathetic", "stable surrounded by family and friends", and "loving their leadership to lead their families and assistants", with less tension or negative conflict between the two candidates during the election campaign. Notably, politicians access online media to post their messages directly to the public and increase their online interactivity (Meeks, 2016).

However, the analysis did not clearly show the two candidates' social, economic, and political concerns. Most of their tweets

appeared as general ideas that focused on the role of women in society, meaning that the two candidates did not show a good exercise of SNS. Herrnson et al. (2003) found female candidates focusing on issues other than the public issues, demanding more consideration.

Moreover, Roua relied on her speech and framed herself on her previous parliamentary experience stocks. She adopted her knowledge of using parliamentary oversight tools in political work, as she chose to link her experience with her programs and proposals in her election campaign. In contrast, Fawzia adopted the appearance, as part of her tweets, within the framework of the confident woman who can change and support the path of democracy in her country. It supports what Hečková (2016) assumed that SNS are used in politics for persuasion, ideology, and propaganda.

Although both candidates were effective campaigners, they failed to communicate with their audiences due to a lack of interaction from their followers (e.g., retweets, likes, messages). Politicians resort to digital platforms for a narrowcasting model, where delicately crafted political messages are spread among the discrete groups of audiences. Our results did not support Kruikemeier's (2014) assumption that using Twitter positively affects political candidates by framing themselves as likeable, busy, and capable politicians.

Furthermore, candidates' communication took a one-way direction, even though they used different hashtags. A national newspaper picked up one of

Fawzia's tweets in her press conference but received inadequate responses. We do not have a clear explanation of this inadequate response that needs further investigation. One could say that Bahraini female politicians have a long way to represent themselves in such a sphere (SNS) as male candidates still benefit more than female candidates (Meeks, 2016).

LIMITATIONS AND FUTURE RESEARCH

Our study is significant due to its novel topic and methodological approach, although its primary limitations. First, we selected only Twitter and Twitter accounts of only two female candidates, which limits its scope. Second, the study was conducted in Bahrain, which further narrows its generalisability. Finally, the study's qualitative method could be questioned the validity of the issue between quantitative and qualitative research. In closing, other research areas can explore SNS use in political communication campaigns by considering not only Bahraini women but also other female candidates from the Arab world who share a similar political system, e.g., Saudi Arabia, as we need to continue to understand the impact of these platforms on political communication in the Arab world.

ACKNOWLEDGMENT

We want to thank Dr. Alsridi, the University of Bahrain, who helped analyse the initial data using the MAXQDA program and his constructive feedback.

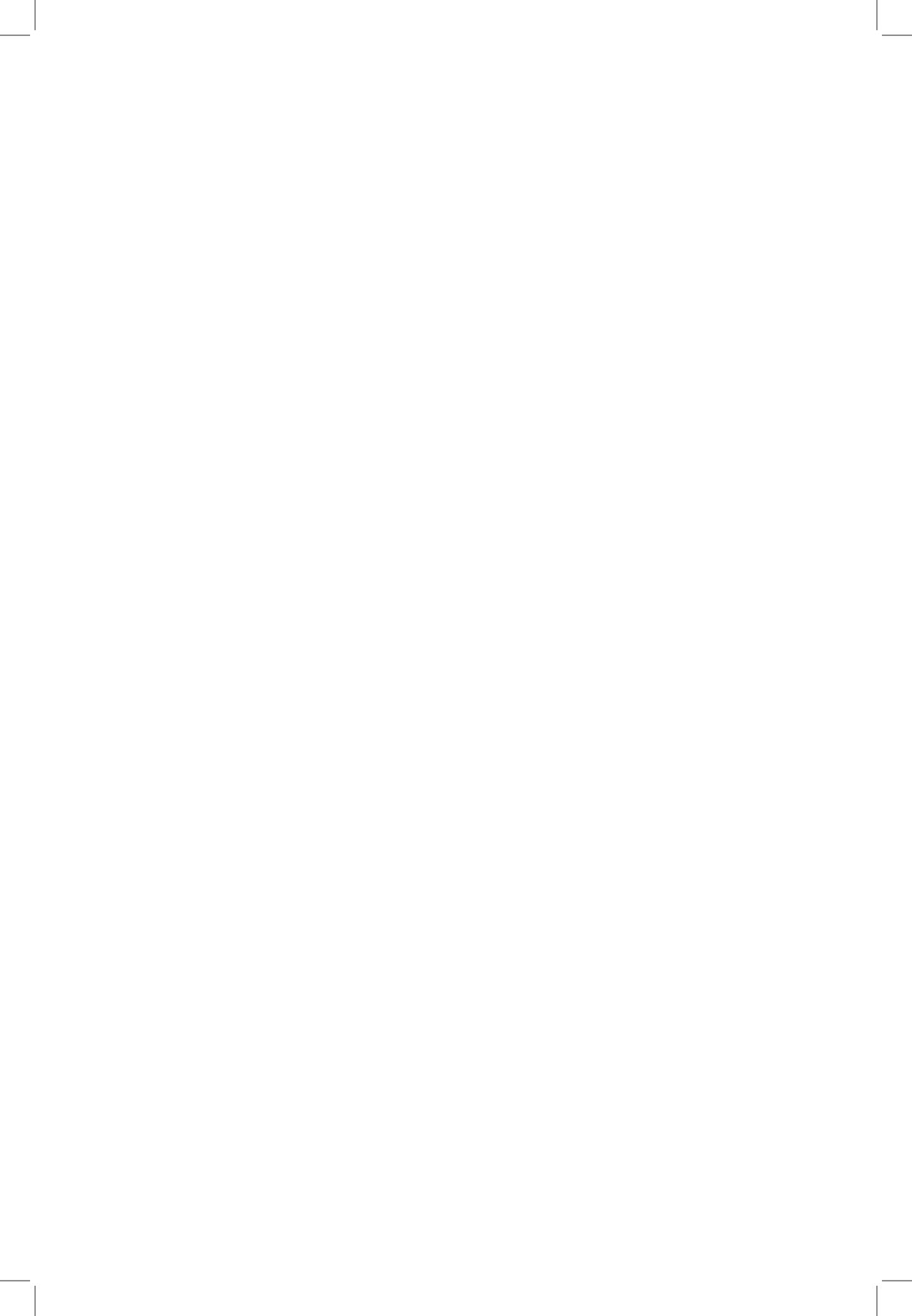
REFERENCES

- Ahmed, S., Cho, J., & Jaidka, K. (2019). Framing social conflicts in news coverage and social media: A multicountry comparative study. *International Communication Gazette*, 81(4), 346-371. <https://doi.org/10.1177/1748048518775000>
- Ahmed, S., Jaidka, K., & Cho, J. (2016). The 2014 Indian elections on Twitter: A comparison of campaign strategies of political parties. *Telematics and Informatics*, 33(4), 1071-1087. <https://doi.org/10.1016/j.tele.2016.03.002>
- Aljishi, B. J. (2018). Reforms and political participation of women in the kingdom of Bahrain. *Turkish Policy Quarterly*, 11(4), 55-67.
- AlSalem, F. (2016). Women and online political participation in Kuwait. In B. Gunter, M. Elareshi, & K. Al-Jaber (Eds.), *Social media in the Arab world: Communication and public opinion in the Gulf States* (pp. 135-155). I. B. Tauris.
- Ardèvol-Abreu, A. (2015). Framing theory in communication research: Origins, development and current situation in Spain. *Revista Latina de Comunicación Social*, 70, 423-450. <https://doi.org/10.4185/RLCS-2015-1053en>
- Arowolo, S. O. (2017). Understanding framing theory. *Mass Communication Theory*, 3(6), 4. <https://doi.org/10.13140/RG.2.2.25800.52482>
- Bateson, G. (1972). A theory of play and fantasy. In I. Caro & C. Read (Eds.), *General semantics in psychotherapy* (pp. 267-289). Institute of General Semantics.
- Bossetta, M. (2018). The digital architectures of social media: Comparing political campaigning on Facebook, Twitter, Instagram, and Snapchat in the 2016 US election. *Journalism & Mass Communication Quarterly*, 95(2), 471-496.
- Bostanci, M. (2019). DİJİTAAktivizm: Sendikacı kadınların sosyal medya kullanimi [DİJİTAAktivizm: Social media usage of syndicate women]. *Turkish Studies-Social Sciences*, 14(5), 2085-2096. <https://doi.org/10.29228/turkishstudies.32686>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101. <https://doi.org/10.1191/1478088706qp063oa>
- Calderaro, A. (2018). Social media and politics. In W. Outhwaite & S. Turner (Eds.), *The SAGE handbook of political sociology* (pp. 781-795). Sage Publications, Inc.
- Carroll, S., & Fox, R. (2014). Introduction. In S. Carroll & R. Fox (Eds.), *Gender and elections: Shaping the future of American politics* (3rd ed., pp. 1-15). Cambridge University Press.
- Coelho, P. M. F., Correia, P. A. P., & Medina, I. G. (2017). Social media: A new way of public and political communication in digital media. *International Journal of Interactive Mobile Technologies*, 11(6), 150-157. <https://doi.org/10.3991/ijim.v11i6.6876>
- Elareshi, M., & Ziani, A. (2019). Digital and interactive social media among Middle East women: Empirical TAM study. *Media Watch*, 10(2), 235-250. <https://doi.org/10.15655/mw/2019/v10i2/49642>
- Entman, R. (1993). Framing: Towards clarification of a fractured paradigm. *Journal of Communication*, 43(4), 51-58.
- Evans, H. K., & Clark, J. H. (2016). "You tweet like a girl!": How female candidates campaign on Twitter. *American Politics Research*, 44(2), 326-352. <https://doi.org/10.1177/1532673X15597747>
- Filimonov, K., Russmann, U., & Svensson, J. (2016). Picturing the party: Instagram and party campaigning in the 2014 Swedish elections. *Social Media and Society*, 2(3), 1-11. <https://doi.org/10.1177/2056305116662179>
- Fountain, M. (2017). *Social media and its effects in politics: The factors that influence social media*

- use for political news and social media use influencing political participation* [Unpublished doctoral thesis]. The Ohio State University.
- Fontaine, S. (2017). What's not to like?: A qualitative study of young women politicians' self-framing on Twitter. *Journal of Public Relations Research*, 29(5), 219-237. <https://doi.org/10.1080/1062726X.2017.1388239>
- Golbeck, J., Grimes, J. M., & Rogers, A. (2010). Twitter use by the US congress. *Journal of the American Society for Information Science and Technology*, 61(8), 1612-1621. <https://doi.org/10.1002/asi.21344>
- Golden, E. (2018, November 7). Ilhan Omar makes history, becoming first Somali-American elected to U.S. House. *Star Tribune*. <http://www.startribune.com/ilhan-omar-becomes-first-somali-american-elected-u-s-house/499708271/>
- Hečková, A. C. (2016). Media negativism as a tool of political communication. *European Journal of Science and Theology*, 12(1), 147-154.
- Hemphill, L., Culotta, A., & Heston, M. (2013). *Framing in social media: How the US congress uses Twitter hashtags to frame political issues*. SSRN. <https://ssrn.com/abstract=2317335>
- Herrnson, P. S., Lay, J. C., Stokes, A. K., Herrnson, P. S., & Lay, J. C. (2003). Women running "as women": Campaign issues, and voter-targeting strategies. *The Journal of Politics*, 65(1), 244-255.
- Jiménez, O. F. D. (2017). Election campaigns, the media and their impact on civic engagement of Mexicans in the 2012 Presidential Election. *Comunicación y Sociedad*, (29), 139-164. <https://doi.org/10.32870/cys.v0i29.6302>
- Karlsen, R., & Enjolras, B. (2016). Styles of social media campaigning and influence in a hybrid political communication system: Linking candidate survey data with Twitter data. *The International Journal of Press/Politics*, 21(3), 338-357. <https://doi.org/10.1177/1940161216645335>
- Karolak, M. (2013). Social media and the Arab Spring: Searching for emerging identities in the Arab Gulf. *St Antony's International Review*, 9(1), 168-184.
- Kruikemeier, S. (2014). How political candidates use Twitter and the impact on votes. *Computer in Human Behavior*, 34, 131-139. <https://doi.org/10.1016/j.chb.2014.01.025>
- Lin, L. C.-S. (2016). Convergence in election campaigns. *Convergence: The International Journal of Research into New Media Technologies*, 22(2), 199-214. <https://doi.org/10.1177/1354856514545706>
- McGregor, S., & Mourao, R. (2016). Talking politics on Twitter: Gender, elections, and social networks. *Social Media + Society*, 2(3), 1-14. <https://doi.org/10.1177/2056305116664218>
- Meeks, L. (2016). Gendered styles, gendered differences: Candidates' use of personalization and interactivity on Twitter. *Journal of Information Technology & Politics*, 13(4), 295-310. <https://doi.org/10.1080/19331681.2016.1160268>
- Methi, V. (2014). Political communication in digital age – Social media analysis. *Social Networking Media: Boon or Ban*, 33-36.
- Muñiz, C., Saldierna, A. R., & De Jesús Marañón, F. (2018). Framing of electoral processes: The stages of the campaign as a moderator of the presence of political frames in the news. *Palabra Clave*, 21(3), 740-771. <https://doi.org/10.5294/pacla.2018.21.3.5>
- O'Malley, E., Brandenburg, H., Flynn, R., McMenamin, I., & Rafter, K. (2012, December). *Explaining media framing of election coverage: Bringing in the political context*. Available at SSRN. <https://ssrn.com/abstract=2189468>
- OpCit Research. (2013). *Women in decision-making: The role of the new media for increased political participation*. Policy Department C. <https://>

- www.europarl.europa.eu/RegData/etudes/etudes/join/2013/493010/IPOL-FEMM_ET(2013)493010_EN.pdf
- Pan, Z., & Kosckci, G. M. (1993). Framing analysis: An approach to news discourse. *Political Communication, 10*(1), 55-75.
- Rempoutzakos, F. (2017). Framing theory in newspaper coverage of the 2015 Greek referendum. *Elon Journal of Undergraduate Research in Communications, 8*(2), 6-15.
- Sahly, A., Shao, C., & Kwon, K. H. (2019). Social media for political campaigns: An examination of Trump's and Clinton's frame building and its effect on audience engagement. *Social Media + Society, 5*(2), 1-13. <https://doi.org/10.1177/2056305119855141>
- Saillard, E. K. (2011). View of systematic versus interpretive analysis with two CAQDAS packages: NVivo and MAXQDA. In *Forum Qualitative Sozialforschung / Forum: Qualitative Social Research, 12*(1), 34. <https://doi.org/10.17169/fqs-12.1.1518>
- Salih, M., Al Sammaraie, H., & Sharifah, S. (2013). Woman political representation and participation in Arab Spring: Motivations, aspirations and concerns. *Journal of Administrative Science, 10*(2), 41-52.
- Saraswati, M. S. (2018). Social media and the political campaign industry in Indonesia. *Jurnal Komunikasi Ikatan Sarjana Komunikasi Indonesia, 3*(1), 51-65. <https://doi.org/10.25008/jkiski.v3i1.124>
- Scheufele, D. A. (1999). Framing as a theory of media effects. *Journal of Communication, 49*(1), 103-122. <https://doi.org/10.1111/j.1460-2466.1999.tb02784.x>
- Shalaby, M. M. (2018). *Women's representation in the Middle East and North Africa: A conceptual framework*. Oxford Bibliographies. <https://doi.org/10.1093/OBO/9780199756223-0252>
- Shami, S., & Ashfaq, A. (2018). Strategic political communication, public relations, reputation management & relationship cultivation through social media. *Journal of the Research Society of Pakistan, 2*(55), 139-154.
- Sreberny, A. (2015). Women's digital activism in a changing Middle East. *International Journal of Middle East Studies, 47*(2), 357-361. <https://doi.org/10.1017/S0020743815000112>
- Stieglitz, S., & Dang-Xuan, L. (2013). Social media and political communication: A social media analytics framework. *Social Network Analysis and Mining, 3*(4), 1277-1291. <https://doi.org/10.1007/s13278-012-0079-3>
- Stier, S., Bleier, A., Lietz, H., & Strohmaier, M. (2018). Election campaigning on social media: Politicians, audiences, and the mediation of political communication on Facebook and Twitter. *Political Communication, 35*(1), 50-74. <https://doi.org/10.1080/10584609.2017.1334728>
- Strömbäck, J., & van Aelst, P. (2010). Exploring some antecedents of the media's framing of election news: A comparison of Swedish and Belgian election news. *International Journal of Press/Politics, 15*(1), 41-59. <https://doi.org/10.1177/1940161209351004>
- Suiter, J. (2015). Political campaigns and social media: A study of #mhe13 in Ireland. *Irish Political Studies, 30*(2), 299-309. <https://doi.org/10.1080/07907184.2015.1018899>
- Turnšek, M., & Jankowski, N. W. (2012). *Social media and politics: Theoretical and methodological considerations in designing a study of political engagement*. SSRN. <https://ssrn.com/abstract=1629098>
- Winfrey, K. L., & Schnoebelen, J. M. (2019). Running as a woman (or man): A review of research on political communicators and gender stereotypes. *Review of Communication Research, 7*, 109-138. <https://doi.org/10.12840/ISSN.2255-4165.020>

- Youssef, E. (2020). Role of social service institutions on social empowerment of women at the United Arab Emirates: A field analysis study. *Multicultural Education*, 6(4), 99-111. <https://doi.org/10.5281/zenodo.4252122>
- Yunus, E. (2013). *The role of social media in creating political awareness and mobilizing political protests: A focus on Turkey* [Unpublished Master's dissertation]. Royal Institute of Technology.
- Zhang, N. Y., & Song, C. Y. (2018). The role of social media in political campaigns: A sentiment and engagement analysis of political news feeds and Facebook comments in three political events in Hong Kong. *The Internet, Policy & Politics Conference*, 1-16.
- Ziani, A. K., Fahmy, S., Al-Jaber, K., & Elareshi, M. (2014). Young adults' perceptions of satellite TV news services in Bahrain. *Journal of Arab & Muslim Media Research*, 7(1), 3-20. https://doi.org/10.1386/jammr.7.1.3_1



Review Article

Exploring the Impact of Pandemic on Global Economy: Perspective from Literature Review

Van Ky Long Nguyen*, Thi My Hanh Le, Thi Minh Chau Tran, Thi Thu Hien Le, Thi Ngoc Mai Duong, Thi Hien Le, Tien Son Nguyen and Nhu Hoa Vo

Faculty of Business, FPT University, Da Nang City, 550000, Vietnam

ABSTRACT

The pandemic has caused several health issues and deaths and numerous severe devastations to the global economy. Due to the extreme impacts of the epidemics, it is crucial to investigate the pandemics and their pessimistically hidden influences to devise proper strategies. However, although this topic gains enormous recognition from scholars and researchers, there is still an inadequacy of a comprehensive literature review on the issues, and in-depth research on individual aspects of the world economy. Accordingly, the objective of this paper is to contribute a literature review that synthesises and evaluates prior research, to examine the current state of the pandemic impacts on the global economy, as well as become the requisite foundation for the practitioners to perceive how to respond to a pandemic in the future. A literature review is conducted, with 254 most relevant articles are analysed and classified based on the proposed framework. Thus, the findings of this study contribute diverse theoretical and practical insights concerning pandemics and the global economy.

The results of this paper indicate the current status of the literature review and discover future research directions. Additionally, this paper proposes an integrated framework of the most influenced industries, followed by some emerging solutions to the most suffering sectors. Future research directions are further suggested based on the identified research gaps and the analysis results.

Keywords: COVID-19, economics, global economy, literature review, pandemic

ARTICLE INFO

Article history:

Received: 26 March 2021

Accepted: 28 July 2021

Published: 21 September 2021

DOI: <https://doi.org/10.47836/pjssh.29.3.29>

E-mail addresses:

longnvk@fe.edu.vn (Van Ky Long Nguyen)

hanhltm13@fe.edu.vn (Thi My Hanh Le)

chauttmds150045@fpt.edu.vn (Thi Minh Chau Tran)

hienlttds130033@fpt.edu.vn (Thi Thu Hien Le)

maidtmds140138@fpt.edu.vn (Thi Ngoc Mai Duong)

hienlttds140168@fpt.edu.vn (Thi Hien Le)

sonntds140053@fpt.edu.vn (Tien Son Nguyen)

hoavnds140019@fpt.edu.vn (Nhu Hoa Vo)

*Corresponding author

INTRODUCTION

What is the global pandemic? A global pandemic can be defined as the widespread of a new disease in a community or worldwide (Shorey & Valerie, 2020). The likelihood of a pandemic has gone up during the past century because of the rise in integration, global travel and urbanisation, the shift in land use, and the greater extraction of the natural environment (Jones et al., 2008; Morse, 2001). Infectious diseases are some of the very few phenomena that comprehensively shape our history, societies, and cultures, along with the very basis of modern principles (Huremović, 2019). However, it has long been regarded as a potential threat and also a societal challenge. From the beginning of the twenty-first century, humanity has continuously witnessed and faced a series of threatening infectious diseases caused by viruses. It is the leading cause of death globally, accounting for a quarter to a third of total mortality (Verikios, 2020). Moreover, it has caused many severe impacts on human life and strode the evolution of the global economy, making it a recession. The most destructive of the five flu pandemics in more than 100 years was the 1918 pandemic, which killed 50 million to 100 million people in a global population with less than 2 billion. Nowadays, epidemics and pandemics are classified as emerging risks (Nguyen et al., 2021). The COVID-19 outbreak has also destroyed the world's economic giants, with a predicted loss of \$1 trillion in the year 2020 (Kabir et al., 2020).

Because of the rising likelihood of a pandemic occurring over the years (Gössling et al., 2020; Madhav et al., 2017) and the terrible effects of the epidemic on the global economy (Qiu et al., 2017; Shrestha et al., 2020), it is exceptionally imperative to keep studying on this topic to prepare practical strategies, along with helping scholars to determine which industries needed consideration to sustain the global economy. However, although there various studies about the pandemic, those papers concentrate only on the consequences of the pandemic on human life rather than the aspect of the global economy. Furthermore, there is a lack of a comprehensive literature review on the issues to better discern the turmoil impact on the global economy, along with a little in-depth literature about the effects of the pandemic on individual aspects of the world economy to provide timely solutions.

Therefore, the primary purpose of this literature review is to provide trustworthy sources of reference for experts, and become the quintessential foundation for practitioners to perceive how to respond to a pandemic in the future. The paper then provides an excellent overview of the literature review of the impacts of the pandemic on the global economy by summarising its influences on separate parts of the international economy, concentrating on three economic sectors: primary sectors, secondary sectors and tertiary sectors. Specifically, primary sectors are industries consisting of the exploitation of raw materials from natural sources, such as the agricultural industry and petroleum

& oil industry; secondary sectors include raw material treatment, all manufacturing, all types of construction, and supply of gas, water, and power, so it is referred as the manufacturing industry; and tertiary sectors involve in producing all services, as opposed to a tangible commodity, that meets immediate satisfaction to the customer such as the education industry; finance industry; healthcare and pharmaceutical industry; hospitality, tourism, and aviation; real estate and housing sector; sports industry; information technology, media, and R&D; food sector (Fisher, 1939; Nicola et al., 2020). Finally, the results of this paper indicate the status of the literature review and discover future research directions based on the identified research gaps and the analysis results. Furthermore, based on the study results, the research synthesises and suggests various potential solutions for the most emerging industry groups following the research trend.

The remaining structure of the paper continues with methodology, theoretical background and the proposed framework. Then the results of the literature review are presented, followed by an in-depth discussion of results and observations. Based on the discussion, implications of further research are suggested. The last section of the paper is the conclusion with a summary and relevant contributions.

METHODOLOGY, THEORETICAL BACKGROUND AND PROPOSED FRAMEWORK

Methodology

This study examines the current state and

research direction of the pandemic, focusing on studies over the past decades. The research methodology starts with the search process and the systematic review process (shown in Figure 1).

As the nature of research on the pandemic and the global economy in various databases, this paper builds the literature review from reliable academic sources, such as Science Direct, Emerald, Google Scholars. Different keywords such as “pandemic”, “coronavirus”, “COVID-19”, “global economy”, “economic factor”, and “literature review” are applied to search for articles from these reliable databases. Accordingly, the authors identify approximately 950 potentially relevant articles. Then, these articles are screened to select the relevant ones. This screening step, which helps to learn the general ideas about the parts of the paper and the paper itself (Keshav, 2007), is based on the title, abstracts, structure and a glance through the entire paper. However, the selection of articles for inclusion in the study was not based on the paper’s methodology because the main purpose of the authors was to provide a more comprehensive literature review on the issues to better discern the turmoil impact on the global economy by summarising its effects on particular parts of the global economy. Hence, selecting articles to be included in the study based on title, summary, structure, and overview will solve a large number of articles approved but still appropriate for the research objectives.

To avoid selection biases, all the authors of this paper terminate this screening and selection process independently and find the

consensus at the end. Finally, 254 articles are selected and analysed in detail.

In the systematic review process, selected articles would be analysed, classified and categorised into categories based on the integrated framework. Similar to the selection process, in case of deviation in classification and categorisation of the particular article, this article would be

discussed until a consensus is reached. After analysing, classifying and categorising the selected articles, the current state of literature is revealed. The research gaps are further identified for future research direction. In addition, the study also synthesises and suggests several potential solutions for the most emerging industry groups following research trends.

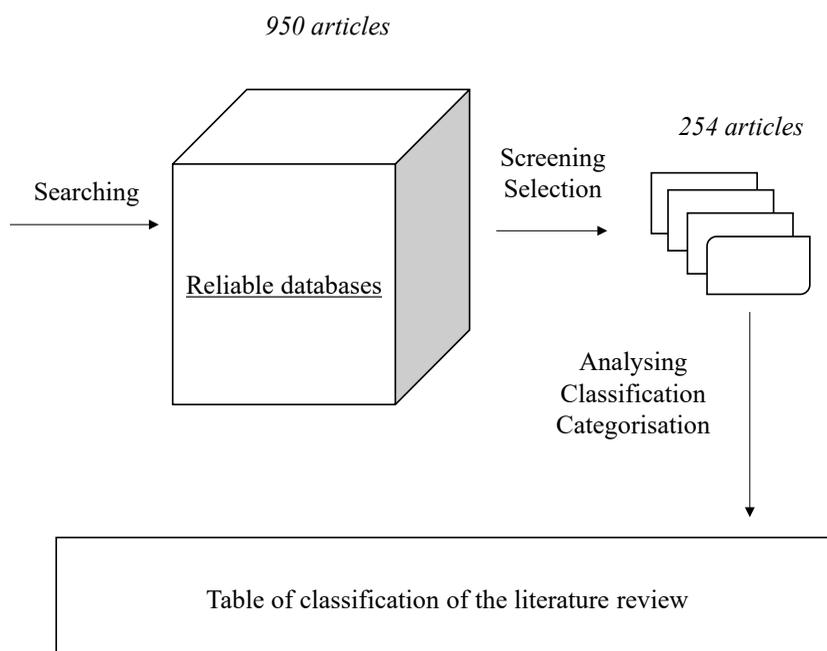


Figure 1. Literature search and systematic review process

Theoretical Background

In the attempt to explain the turmoil effect of a pandemic on the global economy, the foundation of this study relies on the “three-sector theory”, which divided the economy into three group sectors (Copertari, 2016; Haleem et al., 2020; Marjanović, 2010). The primary sector deals with the extraction

of raw materials, the secondary sector deals with manufacturing, and the tertiary sector deals with services. This theory is formulated by the conception of three economic sectors by Fisher (1939), later developed by Clark (1940) and Fourastié (1949) (Kwiatkowska, 2015; Schafran et al., 2018), which has caught the attention

of many scholars in studying the global economy. Furthermore, to apply the theory with the circumstance of the pandemic, one recent study by Nicola et al. (2020), which many researchers well adopt in explaining the key influences of coronavirus pandemic on the world economy, is integrated into the three-sector theory to build proposed integrated framework.

Proposed Framework

To guide further research, from the perspective of the three-sector theory and the study of Nicola et al. (2020), the authors introduce an integrated framework of the pandemic effects for surveying the literature.

This integrated framework will demonstrate the impacts of the pandemic on three sectors of the global economy with specific industries. The primary sector includes the agriculture industry and petroleum & oil industry. The secondary sector deals with the manufacturing industry. Finally, the tertiary sector comprises the education industry; finance industry; healthcare and pharmaceutical industry; hospitality, tourism and aviation; real estate and housing sector; sports industry; information technology, media and R&D; food sector. This proposed integrated framework is used to classify and categorize selected articles (shown in Figure 2).

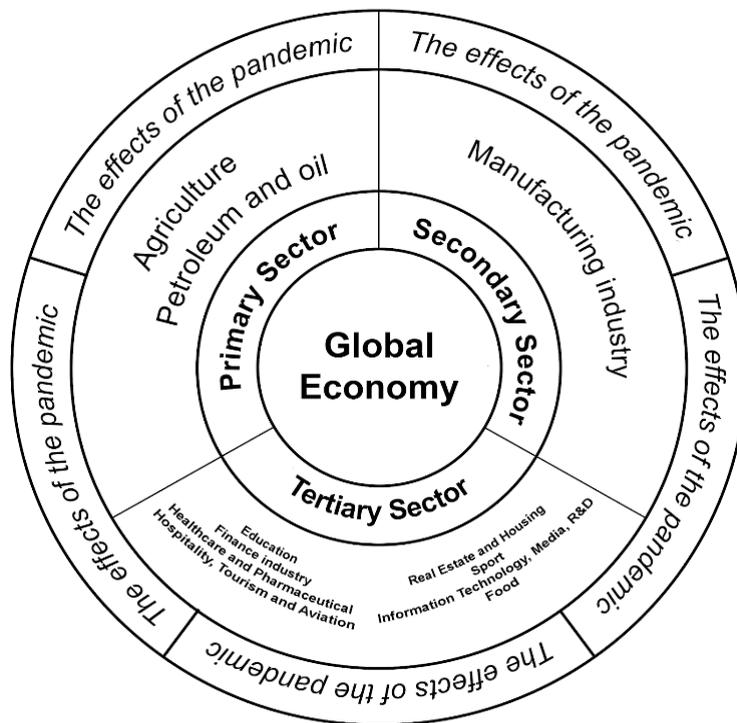


Figure 2. Integrated framework for the effects of the pandemic

RESULTS

All reviewed articles are categorised based on the proposed framework for research. A notation with three levels is applied to classify the articles to each sub-category: highly covered (X), moderately covered (o) and slightly covered (l). Highly covered (X) indicates that a paper mainly deals with a specific topic; moderately covered (o) is used in certain sections or paragraphs are about it; slightly covered (l) indicates that the paper only slightly mentions a topic. Using this notation can easily justify the degree of intensity among articles (Dam et al., 2019; Rickenberg et al., 2012). Table 1 shows the classification of this research.

The total and weighted total of the results are demonstrated in Figure 3. Based on the classification of the research, we had the following industry coverage data:

There are six industries with the highest weighted total: the healthcare and pharmaceutical sectors (278), principally focused on research as a central issue during a pandemic outbreak, followed by the finance industry (193). Hospitality, tourism and aviation industries (175) are the service industries, which account for the majority of economic value, the necessity of meeting the needs and the mobility of people. Otherwise, the manufacturing sector (141) is affected by import, export and distribution in the market. Additionally, education (107) and food (121) are the last sectors in the group of industries with high-covered, which cause several disruptions and difficulty for the citizens. Meanwhile, the remaining five

industries in the low-weighted entire section are considered to be less affected and not adequately studied: firstly, information technology, media and R&D (53), followed by agriculture (32), petroleum & oil (25), sports industry (17) and finally real estate and housing (14).

DISCUSSION

According to Figure 3, the study will focus on discussing the emerging industries group of six high-weighted total based on the analysis result. This paper then discusses the effects and solutions faced by these industries, and the urgency of these tremendous impacts on the global economy.

The primary sector includes agriculture and the petroleum & oil industry. In the meantime, according to Figure 3, the industries that received the least attention from researchers is such as agriculture industry (32) and petroleum & oil industry (25), real estate and housing (14), sports industry (17), and information technology, media and R&D (53), based on the rating scale. The above five sectors have the lowest-weighted at the time of doing the research. Hence, the study prioritises discussing the urgency of the tremendous impacts of the highest-weighted industries. Furthermore, there are not so many articles that are not thoroughly investigated related to the primary sector. Because of this, none of the industries belonging to the primary sectors is discovered.

As a result, the study indicates the state of the literature review and later identifies

Table 1
Classification of the literature review

Author	Year	Title	Agriculture	Petroleum & oil	Manufacturing industry	Education industry	Finance industry	Healthcare and the pharmaceutical industry	Hospitality, tourism and aviation	Real estate and housing sector	Sport industry	Information technology, media and R&D	Food sector
Abi Younes, G., Ayoubi, C., Ballester, O., Cristelli, G., de Rassenfosse, G., Foray, D., Gaulé, P., Pellegrino, G., van den Heuvel, M., and Webster, E.	2020	COVID-19: Insights from innovation economists			o	X	X						
Abodunrin, O., Oloye, G., and Adesola, B.	2020	Coronavirus pandemic and its implication on global economy		X	o		X		o				X

Table 1 (Continued)

Abu-Rayash, A., and Dincer, I.	2020	Analysis of mobility trends during the COVID-19 Coronavirus Pandemic: Exploring the impacts on global aviation and travel in selected cities	X						X	
Açikgöz, Ö., and Günay, A.	2020	The early impact of the Covid-19 pandemic on the global and Turkish economy		X	X	o	o			X
Acs, G., and Karpman, M.	2020	Employment, Income, and Unemployment Insurance during the COVID-19 Pandemic		X						
Akbar, Y. H., and Kisilowski, M.	2020	To bargain or not to bargain: Airlines, legitimacy and nonmarket strategy in a COVID-19 world							X	
Akseer, N., Kandru, G., Keats, E. C., and Bhutta, Z. A.	2020	COVID-19 pandemic and mitigation strategies: implications for maternal and child health and nutrition								X
Albulescu, C. T.	2021	COVID-19 and the United States financial markets' volatility					o	o		o
Alcántara-Ayala, I., Burton, I., Lavell, A., Mansilla, E., Maskrey, A., Oliver-Smith, A., and Ramírez-Gómez, F.	2021	Root causes and policy dilemmas of the COVID-19 pandemic global disaster								
Ali, M., Alam, N., and Rizvi, S. A. R.	2020	Coronavirus (COVID-19)–An epidemic or pandemic for financial markets						X		
Allam, Z.	2020	The Forceful Reevaluation of Cash-Based Transactions by COVID-19 and Its Opportunities to Transition to Cashless Systems in Digital Urban Networks						X		

Table 1 (Continued)

Almeida, B., Cohen, M. A., Stone, R. I., and Weller, C. E.	2020	The Demographics and Economics of Direct Care Staff Highlight Their Vulnerabilities Amidst the COVID-19 Pandemic						X	X	
Alon, T. M., Doepke, M., Olmstead-Rumsey, J., and Tertilt, M.	2020	The impact of COVID-19 on gender equality		o						
Alsafi, Z., Abbas, A.-R., Hassan, A., and Ali, M. A.	2020	The Coronavirus Pandemic: Adaptations in Medical Education			X					
Al-Samarrai, S., Gangwar, M., and Gala, P.	2020	The Impact of the COVID-19 Pandemic on Education Financing			X					
Altig, D., Baker, S. R., Barrero, J. M., Bloom, N., Bunn, P., Chen, S., Davis, S. J., Leather, J., Meyer, B. H., and Mihaylov, E.	2020	Economic Uncertainty before and during the COVID-19 Pandemic						X		
Altuntas, F., and Gok, M. S.	2021	The effect of COVID-19 pandemic on domestic tourism: A DEMATEL method analysis on quarantine decisions							X	
Amponsah, R., and Frimpong, I. A.	2020	Ghana in the Face of COVID-19: Economic Impact of Coronavirus (2019-NCOV) Outbreak on Ghana						X		

Table 1 (Continued)

Baker, B. D., and Di Carlo, M.	2020	The Coronavirus Pandemic and K-12 Education Funding							X				
Baker, S. R., Bloom, N., Davis, S. J., Kost, K., Sammon, M., and Viratyosin, T.	2020	The unprecedented stock market reaction to COVID-19											
Baker, S. R., Farrokhnia, R. A., Meyer, S., Pagel, M., and Yannelis, C.	2020	How does household spending respond to an epidemic? consumption during the 2020 covid-19 pandemic								X			
Baldwin, R.	2020	The Greater Trade Collapse of 2020: Learnings from the 2008-09 Great Trade Collapse						X					
Baldwin, R., and Mauro, B. W. d.	2020	Economics in the Time of COVID-19							X	X			
Barichello, R.	2020	The COVID-19 pandemic: Anticipating its effects on Canada's agricultural trade					X						X
Barker, M., and Russell, J.	2020	Feeding the food insecure in Britain: learning from the 2020 COVID-19 crisis											X
Barrero, J. M., Bloom, N., and Davis, S. J.	2020	Covid-19 is also a reallocation shock							o				
Barro, R. J., Ursúa, J. F., and Weng, J.	2020	The coronavirus and the great influenza pandemic: Lessons from the "spanish flu" for the coronavirus's potential effects on mortality and economic activity											X

Table 1 (Continued)

Bartik, A. W., Bertrand, M., Cullen, Z., Glaeser, E. L., Luca, M., and Stanton, C.	2020	The impact of COVID-19 on small business outcomes and expectations	X							
Bartik, A. W., Bertrand, M., Cullen, Z. B., Glaeser, E. L., Luca, M., and Stanton, C. T.	2020	How are small businesses adjusting to covid-19? early evidence from a survey	X							
Bashir, M. F., Benjiang, M., and Shahzad, L.	2020	A brief review of socio-economic and environmental impact of Covid-19			o		o			
Baum, T., and Hai, N. T. T.	2020	Hospitality, tourism, human rights and the impact of COVID-19						X		
Béland, L.-P., Brodeur, A., and Wright, T.	2020	The short-term economic consequences of Covid-19: exposure to disease, remote work and government response	X							
Bentall, R., Lloyd, A., McKay, R., Mason, L., Murphy, J., McBride, O., Hartman, T. K., Miller, J. G., Levita, L., and Martinez, A. P.	2020	Pandemic buying: Testing a psychological model of over-purchasing and panic buying using data from the United Kingdom and the Republic of Ireland during the early phase of the COVID-19 pandemic								X

Table 1 (Continued)

Berchin, I. I., and de Andrade, J. B. S. O.	2020	GAlA 3.0: Effects of the Coronavirus Disease 2019 (COVID-19) outbreak on sustainable development and future perspectives	o									X
Bilecen, B.	2020	Commentary: COVID-19 Pandemic and Higher Education: International Mobility and Students' Social Protection			X							
Bonaccorsi, G., Pierri, F., Cinelli, M., Flori, A., Galeazzi, A., Porcelli, F., Schmidt, A. L., Valensise, C. M., Scala, A., and Quattrociochi, W.	2020	Economic and social consequences of human mobility restrictions under COVID-19										
Bonadio, B., Huo, Z., Lechenko, A. A., and Pandalai-Nayar, N.	2020	Global supply chains in the pandemic					X					
Bong, C.-L., Brasher, C., Chikumba, E., McDougall, R., Mellin-Olsen, J., and Enright, A.	2020	The COVID-19 Pandemic: Effects on Low-and Middle-Income Countries						X	o			
Brammer, S., and Clark, T.	2020	COVID-19 and Management Education: Reflections on Challenges, Opportunities, and Potential Futures			X							

Table 1 (Continued)

Conlon, T., Corbet, S., and McGee, R. J.	2020	Are Cryptocurrencies a Safe Haven for Equity Markets? An International Perspective from the COVID-19 Pandemic						X			
Contractor, F. J.	2021	The world economy will need even more globalisation in the post-pandemic 2021 decade				X					o
Corbet, S., Hou, Y., G., Hu, Y., Oxley, L., and Xu, D.	2021	Pandemic-related financial market volatility spillovers: Evidence from the Chinese COVID-19 epicentre						X			o
Corbet, S., Larkin, C., and Lucey, B.	2020	The contagion effects of the covid-19 pandemic: Evidence from gold and cryptocurrencies						X			
Costa Dias, M., Joyce, R., Postel-Vinay, F., and Xu, X.	2020	The challenges for labour market policy during the Covid-19 pandemic				X					
Dasgupta, P., and De, O.	2020	Sustainable recovery with Jobs and more: this is a pandemic, not a war				X					
De Georgeo, M. R., De Georgeo, J. M., Egan, T. M., Klee, K. P., Schwemm, M. S., Bye-Kollbaum, H., and Kinser, A. J.	2020	Containing SARS-CoV-2 in hospitals facing finite PPE, limited testing, and physical space variability: Navigating resource constrained enhanced traffic control bundling									X
de Joode, K., Dumoulin, D., Engelen, V., Bloemendal, H., Verheij, M., van Laarhoven, H., Dingemans, I., Dingemans, A., and van der Veldt, A.	2020	Impact of the COVID-19 pandemic on cancer treatment: the patients' perspective									X

Table 1 (Continued)

Guan, D., Wang, D., Hallegatte, S., Davis, S. J., Huo, J., Li, S., Bai, Y., Lei, T., Xue, Q., and Coffman, D. M.	2020	Global supply-chain effects of COVID-19 control measures	X										
Guerrieri, V., Lorenzoni, G., Straub, L., and Werning, I.	2020	Macroeconomic Implications of COVID-19: Can Negative Supply Shocks Cause Demand Shortages?	X										
Gupta, M., Abdelmaksoud, A., Jafferany, M., Lotti, T., Sadoughifar, R., and Goldust, M.	2020	COVID-19 and economy											
Gursoy, D., and Chi, C. G.	2020	Effects of COVID-19 pandemic on hospitality industry: review of the current situations and a research agenda											X
Haleem, A., Javaid, M., and Vaishya, R.	2020	Effects of COVID 19 pandemic in daily life											
Hall, C. M., Scott, D., and Gössling, S.	2020	Pandemics, transformations and tourism: be careful what you wish for											X
He, H., and Harris, L.	2020	The Impact of Covid-19 Pandemic on Corporate Social Responsibility and Marketing Philosophy											X
Hevia, C., and Neumeyer, A.	2020	A conceptual framework for analysing the economic impact of covid-19 and its policy implications	X										X

Table 1 (Continued)

Hill, A., Wang, J., Levi, J., Heath, K., and Fortunak, J.	2020	Minimum costs to manufacture new treatments for COVID-19					X				
Hiscott, J., Alexandridi, M., Muscolini, M., Tassone, E., Palermo, E., Soultioti, M., and Zevini, A.	2020	The Global Impact of the Coronavirus Pandemic					X				
Hobbs, J. E.	2020	Food supply chains during the COVID-19 pandemic									X
Hofmann, B., Shim, I., and Shin, H. S.	2020	Emerging market economy exchange rates and local currency bond markets amid the Covid-19 pandemic					X				
Hollander, J. E., and Carr, B. G.	2020	Virtually perfect? Telemedicine for COVID-19					X				X
Hossain, M.	2021	The effect of the Covid-19 on sharing economy activities								X	
Hua, X., Gu, M., Zeng, F., Hu, H., Zhou, T., Zhang, Y., and Shi, C.	2020	Pharmacy administration and pharmaceutical care practice in a module hospital during the COVID-19 epidemic					X				
Huynh, T. L. D., Nasir, M. A., Vo, V. X., and Nguyen, T. T.	2020	“Small things matter most”: The Spillover effects in the cryptocurrency market and Gold as a silver bullet					X				

Table 1 (Continued)

Nafisah, S. B., Alameery, A. H., Al Nafesa, A., Aleid, B. and Brazanji, N. A.	2018	School closure during novel influenza: a systematic review								X
Narayan, P. K., Gong, Q. and aliahmed, H. J.	2021	Is there a pattern in how COVID-19 has affected Australia's stock returns?			X					
Nguyen, T. P. and Dao, T. B.	2020	Internal Rating System for Corporate Customers of Commercial Banks in Vietnam: Corona Pandemic Impact Adjusted			X					
Nichol, K. L., Margolis, K., Wuorenma, J. and Von Sternberg, T.	1994	The efficacy and cost effectiveness of vaccination against influenza among elderly persons living in the community						X		
Niewiadomski, P. J. T. G.	2020	COVID-19: from temporary de-globalisation to a re-discovery of tourism?						X		
Norouzi, N., de Rubens, G. Z., Choubanpishhezafar, S. and Enevoldsen, P.	2020	When pandemics impact economies and climate change: Exploring the impacts of COVID-19 on oil and electricity demand in China				X				
O'Connor, C. M., Anoushiravani, A. A., DiCaprio, M. R., Healy, W. L. and Iorio, R.	2020	Economic recovery after the COVID-19 pandemic: resuming elective orthopedic surgery and total joint arthroplasty							X	

Table 1 (Continued)

Oldekop, J. A., Horner, R., Hulme, D., Adhikari, R., Agarwal, B., Alford, M., Bakewell, O., Banks, N., Barrientos, S. and Bastia, T.	2020	COVID-19 and the case for global development			o	o				
Osterholm, M. T.	2005	Preparing for the next pandemic			X					
Paital, B., Das, K. and Parida, S. K. J. S. o. T. T. E.	2020	Inter nation social lockdown versus medical care against COVID-19, a mild environmental insight with special reference to India				o				
Pantano, E., Pizzi, G., Scarpì, D. and Dennis, C.	2020	Competing during a pandemic? Retailers' ups and downs during the COVID-19 outbreak				X	X			X
Pappas, N.	2021	COVID19: Holiday intentions during a pandemic					X			
Parnell, D., Widdop, P., Bond, A. and Wilson, R.	2020	COVID-19, networks and sport								o
Paul, S. K. and Chowdhury, P.	2020	A production recovery plan in manufacturing supply chains for a high-demand item during COVID-19					X			
Peckham, R.	2013	Economies of contagion: financial crisis and pandemic						X		

Table 1 (Continued)

Propper, C., Stoye, G. and Zaranko, B.	2020	The wider impacts of the coronavirus pandemic on the NHS				X			
Qiu, W., Rutherford, S., Mao, A. and Chu, C.	2017	The pandemic and its impacts		o		X	o	o	
Qiu, Y., Chen, X. and Shi, W.	2020	Impacts of social and economic factors on the transmission of coronavirus disease 2019 (COVID-19) in China				X			
Rajkumar, R. P.	2020	COVID-19 and mental health: A review of the existing literature				X			
Rashid, H., Ridda, I., King, C., Begun, M., Tekin, H., Wood, J. G. and Booy, R.	2015	Evidence compendium and advice on social distancing and other related measures for response to an influenza pandemic							X
Razzoli, M., Pearson, C., Crow, S. and Bartolomucci, A.	2017	Stress, overeating, and obesity: Insights from human studies and preclinical models							X
Rekatsina, M., Paladini, A., Moka, E., Yeam, C. T., Urits, I., Viswanath, O., Kaye, A. D., Morgan, J. A. and Varrassi, G.	2020	Healthcare at the time of COVID-19: A review of the current situation with emphasis on anesthesia providers				X			
Rizou, M., Galanakis, I. M., Aldawoud, T. M. and Galanakis, C. M.	2020	Safety of foods, food supply chain and environment within the COVID-19 pandemic							X

Table 1 (Continued)

Wei, X. and Han, L.	2021	The impact of COVID-19 pandemic on transmission of monetary policy to financial markets							X						
Wenham, C., Smith, J. and Morgan, R.	2020	COVID-19: the gendered impacts of the outbreak													
Wosik, J., Fudim, M., Cameron, B., Gellad, Z. F., Cho, A., Phinney, D., Curtis, S., Roman, M., Poon, E. G. and Ferranti, J.	2020	Telehealth Transformation: COVID-19 and the rise of Virtual Care											X		
Xiong, J., Lipsitz, O., Nasri, F., Lui, L. M., Gill, H., Phan, L., Chen-Li, D., Iacobucci, M., Ho, R. and Majeed, A.	2020	Impact of COVID-19 Pandemic on Mental Health in the General Population: A Systematic Review												X	
Ying, W., Qian, Y. and Kun, Z.	2020	Drugs supply and pharmaceutical care management practices at a designated hospital during the COVID-19 epidemic												X	
Yoosefi Lebni, J., Abbas, J., Moradi, F., Salahshoor, M. R., Chaboksavar, F., Irandoost, S. F., Nezhaddadgar, N. and Ziapour, A.	2020	How the COVID-19 pandemic effected economic, social, political, and cultural factors: A lesson from Iran												o	X

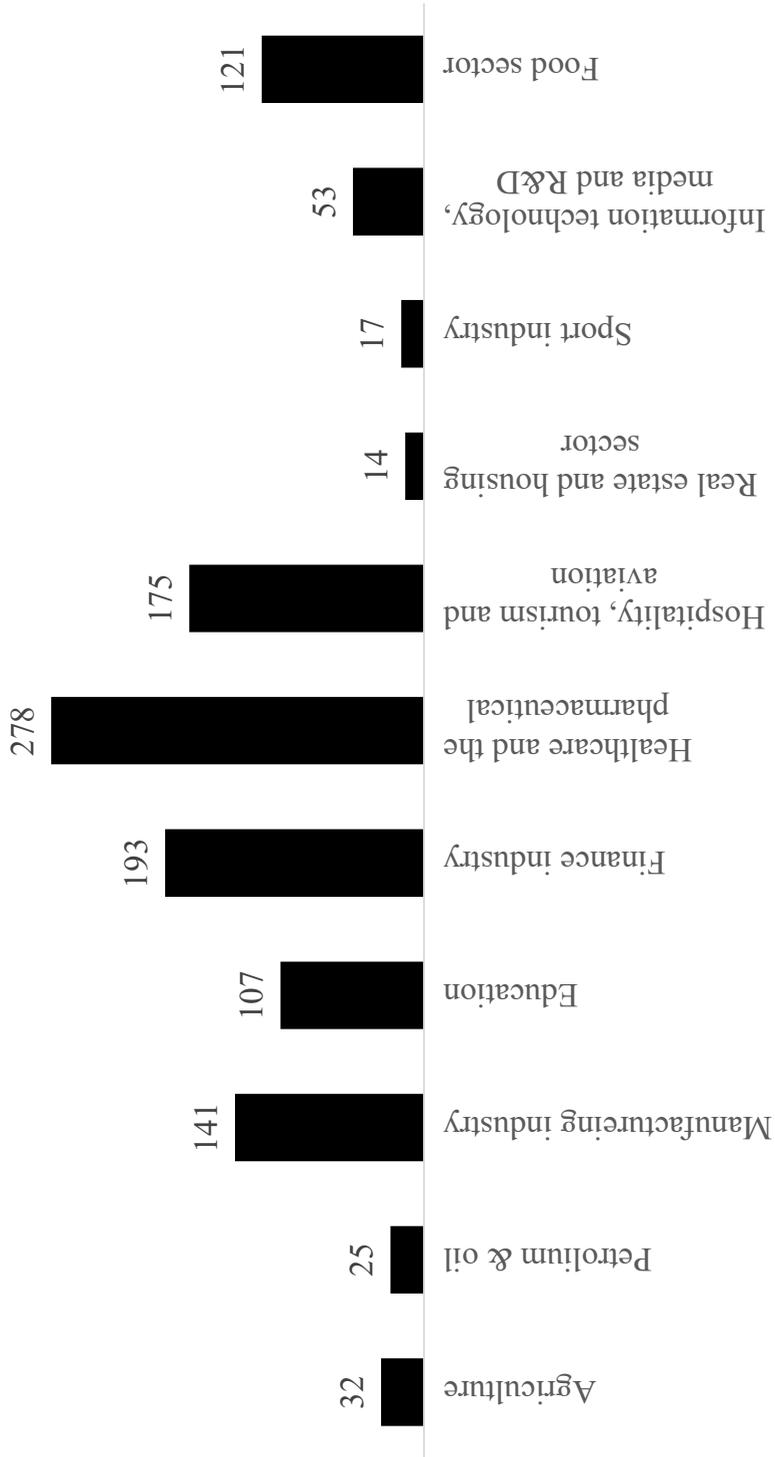


Figure 3. Total (weighted) in each category

future research directions discussed in the next section. According to Figure 3, there are six industries with the highest weighted total, which can be the research trend of scholars. Therefore, it can be interpreted that these industries might be the most affected industries by pandemics. Furthermore, the research also synthesises several emerging issues and suggests several potential solutions for these industries based on analysis results.

In the below, the paper will, later on, give a definite summary of the literature review about each industry with the highest weighted total, along with the prominent concerns and resolutions.

Manufacturing Industry

According to Sulistiyani (2020), manufacturing enterprises are the backbones of a country's industrial development. However, according to Baldwin and Di Mauro (2020), Bartik et al. (2020), Karmaker et al. (202), and Paul and Chowdhury (2020), it is remarkable that the manufacturing industry business is vigorously affected by the pandemic, yet two core effects are noticeable.

Firstly, the temporary shutdown of various firms, amplified by simultaneous supply chain disruptions, has affected the volume of raw materials supplied (Gupta et al., 2020). Accordingly, it will cause sharp declines in production and make the price of unprocessed supplies unstable (Gupta et al., 2020), leading to an urgent decline in the profits of various manufacturers and a slump in the countries' economies (Barham et al.,

1994). Furthermore, since the lockdown losses can be propagated through supply-chain networks, it can cause substantial effects directly on the country's importation issues (Baldwin & Mauro, 2020), which lead to enormous losses in the GDP of numerous regions. Therefore, finding redundant dual sourcing from multiple countries is decisive to alleviate excess dependence (Baldwin & Mauro, 2020), while collaborating with supply chain partners can increase the raw material supply (Paul & Chowdhury, 2020). However, although this approach can help stabilise the economy's growth (Paul & Chowdhury, 2020), it might raise a problem related to cooperation among countries. One other feasible solution is AI-enabled technologies, such as smart factories and driverless trucks. The maintenance of AI technologies can help to increase the reactivity and resilience of complex global digital supply networks (Kumar et al., 2020). Nevertheless, it might require the modern technological infrastructure, which can be a burden in the firms' finance since the advance of technology demands homogeneity.

Lastly, an economic contraction triggered can provoke thousands of manufacturing firms to bankruptcy for not having enough funds, leading to numerous employees being laid off (Sulistiyani, 2020) and demolishing income streams for millions of families. Unemployment leads to a sharp reduction in household spending, losses in the revenues of production firms, and a surge in national expenditure (Chetty et al., 2020). Therefore, wage support must be

accompanied to preserve low-wage workers and small firms to halt the damage (Acs & Karpman, 2020). One potential solution can be remote working or reallocate some workers by simplifying transitions to sectors (Stock, 2020). However, although these solutions can improve the unemployment rate and stabilise the workforce, there are issues related to the concern of effectiveness and concentration (Stock, 2020).

Education Industry

In the COVID-19 pandemic many countries have announced school closures, which disrupts the learning of at least 290.5 million students worldwide (UNESCO, 2020). In addition, these closures have had a widespread economic impact on the educational sector.

Firstly, the outbreak of the pandemic has shut down educational institutions across the globe. Due to the disruption, the schools have to switch from face-to-face to online classes (Gewin, 2020), which leaves them to face a budgetary crisis due to the requirements of technology infrastructure for teachers and students and the abandonment of existing assets as physical facilities (Baker et al., 2020). Furthermore, the epidemic has also caused severe losses in revenue since international students quit their studies or are prevented from studying abroad. UK universities estimate that they will lose £790 million in revenues in 2019 to 2020 and potentially £6.9 billion in 2020 to 2021 if international students, who are the vital factors for the sector, fail to enrol (Ahlburg, 2020). Therefore, financial responses

from government policies are needed for educational institutions

Secondly, the financial burden affects not only educational institutions but also households with limited incomes. In the pandemic, a decline in household incomes can cause a lack of funding for schools, which is challenging for families to spend on their children's education investments (Al-Samarrai et al., 2020). These problems further influence productivity and provoke losses in the countries' GDP due to a large number of future unskilled workers (Dorn et al., 2020). In other words, long-term consequences for education sector funds and expenditures are surfacing, which require total solutions in pandemic outbreaks. The government can reduce the financial burden on households by providing additional funding for the children. Additionally, educational institutions can reallocate resources from other budget parts, such as postponing expansion plans, reducing other planned capital investments, reducing training and supervision budgets, or temporarily shifting resources from unnecessary services (Al-Samarrai et al., 2020).

Thirdly, each country's education tends to depend predominantly on government funds. In low and middle-income countries, the pandemic causes a reduction in spending on educational institutions (International-Monetary-Fund, 2019). In addition, the impact of the pandemic draws attention to many other areas that reduce education spending (International-Monetary-Fund, 2020). These issues are needed to be

handled by revising the spending portfolio of pandemic funding, especially from government policies. For the countries with the financial space to tackle pandemics, it is crucial to allocate expenditure that includes funds to cover education in the pandemic (Baker & Di Carlo, 2020). For countries where governments cannot protect their overall spending levels, new methods to reallocate pandemic resources and overall budgets to provide priority sectors funding is needed, including education (Al-Samarrai et al., 2020). Developing countries' governments should also consider several actions that supplement resources from non-traditional sources to support investment in the education sector (Al-Samarrai et al., 2020). Overall, these solutions are timely and rapidly stabilising education in almost all countries, including budget deficit countries. However, it is vital to get globalisation from international partners to call for development cooperation between countries for a long-term, profitable investment in education.

Finance Industry

It is noticeable that many economic aspects are concerned when the pandemics happen, and the finance industry is one of the industries that roughly suffer the pessimistic forces of the outbreak. After researching and observing the fluctuations of global economies, economic experts identify three main problems in the finance industry: the depression of the finance market, the banking system, and the safety of cryptocurrencies.

In the first place, the pandemic shock can influence the stock markets via two substantial channels. Firstly, the value of common stocks, theoretically, equals the present value of expected cash-flows. However, due to the spreading patterns of pandemics and the mortality rate, the future economic and policy outcomes are highly uncertain, which has made the future cash flow of corporations highly unpredictable. Secondly, the heightened uncertainty affects investors' required rate of return and thus the current market value of stocks. Some industries have halted (e.g. transportation, hotels and restaurants) while others still operate to meet basic needs (e.g. communication, healthcare and pharmaceutical). As a result, there is a sudden shift in investment and consumption patterns. Some of the losses are due to the rational assessment of investors that firms' profits might decline because of the consequences of the pandemic (Azimli, 2020; Shehzad et al., 2020). Many research informs that the stock markets have had negative average returns during the COVID-19 era, and the chances of losses are in height (Ali et al., 2020).

In the second place, the pandemic may have a wide-ranging impact on the financial sector, including banking, since market volatility spiked and borrowing costs surged on expectations of widespread defaults (Gong et al., 2020). The elevated systemic risk of the banking system is due to three reasons. First, the liquidity risk that arises from economic downturns, financial forbearance, and limited access to

capital markets in the event of a possible credit rating downgrade (Mohammad et al., 2020). Second is the loss of middle income caused by regulatory and policy responses including loan payment reprieves and the availability of government-guaranteed loans at ultra-low interest rates. Although these measures help restrain immediate default risk, a notable rise in nonperforming loans is unavoidable (Altavilla et al., 2018). Finally, a severe decline in intermediation business can pessimistically influence the ability to finance operations and funding costs of financial institutions.

In the third place, cryptocurrencies have emerged as a new financial instrument both in terms of time and their nature, accordingly makes it vague about their final status (Ashraf, 2020). For example, during the COVID-19 pandemic period, the level of stability in cryptocurrency markets has significantly diminished, while the irregularity level significantly augments and the cryptocurrencies become volatile. Thus, from an informational efficiency perspective, investing in digital assets during big crises, such as the COVID-19 pandemic, can be considered riskier than equities (Lahmiri & Bekiros, 2020).

Accordingly, the policy measures introduced by policymakers around the world to cope with the global recession should consist of monetary, fiscal and investing measures, along with public health and human control measures (Ashraf, 2020; Funke & Tsang, 2020; Gong et al., 2020; Shehzad et al., 2020).

Healthcare and Pharmaceutical

Pandemic outbreaks have caused disruptions in various supply chains, especially in the healthcare supply chain (Govindan et al., 2020). Healthcare systems are universally being handled at the highest capacity, while healthcare workers face tremendous pressures. Therefore, it leads to a decline in availability and increased in stress (Rekatsina et al., 2020). Based on the literature review, there are two main emerging effects, namely the public health systems and the financial pressure of hospitals.

Firstly, the world is facing unprecedented challenges in the public health system from COVID-19. The potential consequences of the pandemic on local, national and global health systems are noticeable. Many times and resources have been contributed to examine public health aspects, such as emergency preparedness, pandemic planning committees and scientific research that worked for vaccine development (Ly et al., 2009). Vaccines are considered to be one of the most cost-effective public health interventions. However, in some countries, providing vaccines for citizens might require considerable minimum investments for using existing infrastructure (Preaud et al., 2014). Besides, innovating new vaccines (and drugs) is subject to a time consistency obstacle to meet the enormous demand in patients, along with the high fixed costs for research. In short, the effectiveness of vaccines can be a reduction in the number of public healthcare costs and cost-saving production for nations in a pandemic. Finally, the vaccination for COVID-19 is

released into the market with significant vaccine efficiency from the feedback of people in Brazil, South Africa, and the UK (Voysey et al., 2021).

Secondly, pandemic outbreaks have caused hospitals and healthcare workers to face severe financial implications (Farooq & Ali, 2020). Almost all hospitals will experience financial difficulties, as numerous institutions cannot have sufficient cash on hand to cover the costs of uncompensated care and bed shortages (Matheny et al., 2007). Therefore, healthcare systems require immediate injections of public funds to purchase equipment, pay extra staff, and build temporary hospitals to overcome the difficulties. One standout solution is mobilising additional public funds for health. However, although this solution can support the hospitals to overcome the pandemic temporarily, there are distinct barriers in government rules for funding in every separate nation. Accordingly, these funds should be considered carefully before performing in reality.

Aviation, Tourism and Hospitality

Aviation. In the pandemic outbreak, most countries have put restrictions to control the disease and narrow the spread of the virus. However, it also causes international air travel to become more challenging because of a sudden increase in flight cancellations and a significant drop in demand. For example, April 2020 indicates that the number of flights went down by almost 80% globally and more than 90% in Europe compared to 2019 (Akbar & Kisilowski,

2020). As a result, by May 2020, some commercial airlines have gone bankrupt (Akbar & Kisilowski, 2020).

Since transportation and mobility are some of the fundamentally necessary services of any city, there must be timely solutions to recover the airline industry. Firstly, one possible solution is calling for a bailout from the government to have enough capital for keeping enterprises from the shutdown. However, it tends to be a temporary measure rather than a long-term solution. Secondly, to create a trust for customers in the airline service, it is vital to invest in medical equipment for aviation, such as installing the In-flight Temperature Tracking system on the CrewTablet. This measure implies that new health control measures will be imposed to detect infected people as soon as possible to create a sense of security for customers. However, one of its limitations is that the airline industry requires investing additional capital in installing equipment, which leads to high prices for customers (Suau-Sanchez et al., 2020). Lastly, to rehabilitate the economy of aviation and finalise growth, expanding the fleet after the pandemic is essential, regarded as a lucrative opportunity and increasing profits. Again, however, it is a requirement to call for massive capital investment for implementation.

Tourism. In the context of the pandemic, stay-at-home orders and global travel restrictions result in the most severe interruptions of the global economy in general and the tourism industry in particular.

This tendency has caused a significant drop in tourist arrivals, with the percentage of international travellers going down by 57% in March and tending to drop 78% in the future (Baum & Hai, 2020). Accordingly, this tendency forecasts a severe effect on the income stream when facing a loss of 850 million to 1.1 billion international arrivals and loss of US\$ 910 billion to US\$ 1.2 trillion in export revenues of tourism in 2020 (World-Tourism-Organization, 2020).

Therefore, to handle this damage, a technological revolution is one of the core resolutions against the COVID-19, along with reopening tourism and the economy. With the method of travel from home to restrict movement, it is critical to transforming into the e-tourism model by virtual reality experiences (Gretzel et al., 2020). Due to this measure, citizens can restrict gatherings, which manages to avoid spreading the virus. Nevertheless, e-tourism does not maximise traveling efficiency since it is unreal and does not give travellers the feeling of reality. In terms of direct travel in tourist sites, technological innovations such as movement tracking apps, touchless service delivery by robotised AI, humanoid robots, disinfection service in public places, measuring body temperature (Sigala, 2020). This approach can help reduce human communication and increase productivity for enterprises. However, it can bring higher costs for the travel agency and their clients and potential job losses when robots can replace low-skilled workers. Besides, we can refer to the European resolution, which includes temporary state assistance to tourism from national governments, and

fast and straightforward access to short and medium-term loans to overcome the lack of liquidity (Nicola et al., 2020).

Hospitality. Generally, the hospitality industry is facing a severe crisis by the pandemic. With most hotels being closed or experiencing enormously lower tourism numbers because of booking cancellations and reducing demand, small and medium-sized enterprises have been most greatly hit. According to STR, in the first week of May 2020, the average occupancy rates of many countries remained lower than 30% (OECD, 2020). In 2020, US hotel revenues for each available room were estimated to decline by 50.6% (Gössling et al., 2020). By 30 March, bars and restaurants had closed in most EU Member States except Sweden (Niestadt, 2020).

Therefore, the hospitality industry should take certain steps to be able to restart. The use of several technologies in service delivery to minimise human-to-human contact can limit the spread of the virus, such as service robots, contactless payment such as payment by bank transfer, digital menus that can be ordered on individual mobile devices through QR code (Gursoy & Chi, 2020), automatic check-in/out kiosks in hotels, attractions, and transport terminals (OECD, 2020). However, it requires enterprises an enormous amount of capital. Meanwhile, automation does not self-handle problems beyond its control. Furthermore, seeking a bailout from the government to maintain companies is a vital action.

Food Sector

The food sector is an essential industry that meets the nutritional needs of people, including the distribution and retail of food. However, during a pandemic outbreak, the food sector is under tension due to the panic of buying and the pill-up storage of food, along with food insecurity (Loopstra, 2020).

Firstly, the consequences of the pandemic on the food industry have critical impacts on people's spending also fluctuate the total GDP of each country. In addition, food supply chains have been disrupted because of closures and social dislocations (Zuber & Brüssow, 2020). By facing these concerns, many governments have increased costs to provide certain groups of people with unemployment benefits to compensate for declining income and improve the demand for food. However, since government support is insufficient due to budget limitations, in the short term, companies and firms must self-adjust the quantities and the stable supply of the original cost, therefore providing consumers with an efficient source of food without economic impact.

Secondly, the purchasing panic has increased the value of food. Behavioural responses have affected the prices and availability of food. There is price competition between food companies and businesses, or even local retailers (Ménard & Valceschini, 2005). Therefore, governments of many countries have proposed policies to stabilise prices in the market to eliminate price competition (Swinburn et al., 2011). Although this measure can help stabilise the

food market, it requires strict supervision on a large scale, from retailers to supermarkets, to ensure product pricing. Additionally, there are concerns about food depletion and residents' inability to pay for meals with their income. Therefore, several governments have also increased expenses to provide certain people with free food packages and meals to take home (Barker & Russell, 2020).

Thirdly, trade-offs have emerged between the need to contain the virus and the urge to avoid disastrous economic and food security crises, which hurt the poor and hungry people most. Food markets are facing disruptions because of labour shortages created by restrictions on people's movements and shifts in food demand. In addition, export restrictions imposed by some countries have disrupted trade flows for staple foods such as wheat and rice (Laborde et al., 2020). Accordingly, one of the most crucial aspects of the food industry is to ensure that food can reach consumers safely and ensure quality during any process. Supervising employees is a strict and mandatory process at food retail and distribution points (Food and Drug Administration, 2020). Additionally, expanding the form of online stores to allow buying and door-to-door delivery, which limits community exposure levels, is decisive. This tendency can advance the online delivery sector and the prioritisation of "local" food supply chains (Hobbs, 2020). However, a large budget is required for this kind of readiness and the technology development in each country to be effective.

IMPLICATIONS FOR FUTURE RESEARCH DIRECTION

The proposed framework is developed based on “three-sector theory” and the study of Nicola et al. (2020), which examines the impacts of the COVID-19 pandemic to three sectors of the global economy, including the primary, second and tertiary sectors. Respectively, it may overlook certain industries that do not include in this study, such as the mining, construction, and event service industry, despite being additionally influenced by the pandemic. By doing a literature review from 254 articles, six industries are heavily affected by the pandemic, along with being mentioned the most by scientists, namely manufacturing industry, education, finance industry, healthcare and pharmaceutical, hospitality, tourism and aviation, and food. Other industries with a lower research rate are excluded in this paper: agriculture, petroleum and oil, real estate and housing, sports and information technology, media, research and development.

In terms of petroleum and oil, to preclude the spread of the virus, global governments impose several policies such as lockdown and travel prohibition, which has halted economic activity and led to a reduction in the oil demand, recording the disadvantageous prices for the first time in history (Devpura & Narayan, 2020). In the macroeconomics literature, the crude oil price volatility has been shown to influence global industrial production adversely, therefore understanding the evolution of oil price, particularly at its lowest point

in history, is imperative. Additionally, agriculture tends not to endure numerous severe consequences in the short run. However, in the long run, the pandemic can harmfully affect international trade and supply chain disruptions, which then cause a drop in the price of agricultural commodities (Nicola et al., 2020). In the future, to conduct further research, from the perspective of the three-sector theory and the study of Nicola et al. (2020), scientists should research these industries more profoundly, as they may suffer a rough crisis but not being reported recently. Accordingly, nations can hold a comprehensive insight into how pandemics transform economies.

Besides, since the pandemic has invariably occurred at separate phases, their impacts on the global economy are distinctive. However, history has shown that pandemics occur in cycles, albeit unpredictable ones (Saunders-Hastings & Krewski, 2016). Therefore, to appropriately adapt and take immediate response measures for future pandemics, researchers can analyse the responses of each industry and the effects of each level of the pandemic on them. This method will help governments, organisations and individuals identify which approaches can respond appropriately and effectively to future epidemics.

CONCLUSION

The research has investigated in detail 254 articles with the proposed research framework for the effects of the pandemic on the global economy, which can summarise into a variety of dominant influences.

The research also reveals the status of the literature review of the pandemic and discovers future research directions based on the identified research gaps. Besides, following the analysis result, the degree of influences on the global economy emphasises mainly on six industries that are highly appreciated in the total weight, namely manufacturing, education, finance, healthcare & pharmaceutical, aviation, tourism & hospitality, and food. Furthermore, we highlight the emerging issues and proposed urgent mediums for each industry to re-balance and revitalise the economy after the recession. Therefore, the research gives the government a precise overview of the economic situation, and they yet can implement the appropriate policies to respond timely to the circumstances. However, it is also prudent that governments, financial institutions, researchers, and scholars continuously analyse and evaluate the state of the pandemic in the future. Accordingly, we determine uncovered gaps in pre-existing studies, then formulate and expand the theoretical basis for the impacts of the pandemic on the global economy. So, we formulate the theoretical framework synthesised that can help navigate the following research directions by practitioners, fill the crucial gaps in the research and regularly develop the limited shortcomings in the research.

However, since it is inevitable to avoid shortages in research, there are several undeniable limitations in this research. Firstly, since the keywords appear not to be systematised logically, this shortcoming

can lead to the lack of some articles in the research process. Furthermore, although there is a statistical benchmark, it is unachievable to avoid subjectivity in evaluating the scores of the journals. Thus, the upcoming research will be codified by associating these keywords and systematising the articles more effectively. Secondly, the research is mainly based on the foundation of the “three-sector theory” that is integrated into the analysis result of Nicola et al. (2020), which is applied by many researchers in explaining the major effects of the coronavirus pandemic on the world economy, to build the proposed integration framework. However, this article might not cover all the sectors affecting the global economy, which can cause the deficiency of numerous notable sectors. Lastly, our research has consulted 950 articles, which cannot contain enough resources. Accordingly, future studies should consider expanding the research scale with larger input sources and a more logical combination of keywords.

ACKNOWLEDGEMENT

We appreciate our colleagues’ contributions of knowledge and expertise, which significantly assisted the research paper. We confirm that there has been no funding received for the research.

REFERENCES

- Acs, G., & Karpman, M. (2020). *Employment, income, and unemployment insurance during the COVID-19 pandemic*. Urban Institute. <https://www.urban.org/research/publication/>

- employment-income-and-unemployment-insurance-during-covid-19-pandemic
- Ahlburg, D. A. (2020). Covid-19 and UK universities. *The Political Quarterly*, 91(3), 649-654. <https://doi.org/10.1111/1467-923X.12867>
- Akbar, Y. H., & Kisilowski, M. (2020). To bargain or not to bargain: Airlines, legitimacy and nonmarket strategy in a COVID-19 world. *Journal of Air Transport Management*, 88, 101867. <https://doi.org/10.1016/j.jairtraman.2020.101867>
- Al-Samarrai, S., Gangwar, M., & Gala, P. (2020). *The impact of the COVID-19 pandemic on education financing*. World Bank. <https://openknowledge.worldbank.org/handle/10986/33739>
- Ali, M., Alam, N., & Rizvi, S. A. R. (2020). Coronavirus (COVID-19) – An epidemic or pandemic for financial markets. *Journal of Behavioral Experimental Finance*, 27, 100341. <https://doi.org/10.1016/j.jbef.2020.100341>
- Altavilla, C., Boucinha, M., & Peydró, J.-L. (2018). Monetary policy and bank profitability in a low interest rate environment. *Economic Policy*, 33(96), 531-586. <https://doi.org/10.1093/epolic/eiy013>
- Ashraf, B. N. (2020). Economic impact of government interventions during the COVID-19 pandemic: International evidence from financial markets. *Journal of Behavioral Experimental Finance*, 27, 100371. <https://doi.org/10.1016/j.jbef.2020.100371>
- Azimli, A. (2020). The impact of COVID-19 on the degree of dependence and structure of risk-return relationship: A quantile regression approach. *Finance Research Letters*, 36, 101648. <https://doi.org/10.1016/j.frl.2020.101648>
- Baker, B. D., & Di Carlo, M. (2020). *The coronavirus pandemic and K-12 education funding*. Albert Shanker Institute.
- Baker, B. D., Weber, M., & Atchison, D. (2020). Weathering the storm: School funding in the COVID-19 era. *Phi Delta Kappan*, 102(1), 8-13. <https://doi.org/10.1177/0031721720956839>
- Baldwin, R., & Mauro, B. W. d. (2020). *Economics in the Time of COVID-19*. CEPR Press.
- Barham, B., Bunker, S. G., & O'Hearn, D. (1994). *States, firms, and raw materials: The world economy and ecology of aluminum*. Univ of Wisconsin Press.
- Barker, M., & Russell, J. (2020). Feeding the food insecure in Britain: Learning from the 2020 COVID-19 crisis. *Food Security*, 12(4), 865-870. <https://doi.org/10.1007/s12571-020-01080-5>
- Bartik, A. W., Bertrand, M., Cullen, Z. B., Glaeser, E. L., Luca, M., & Stanton, C. T. (2020). *How are small businesses adjusting to covid-19? Early evidence from a survey* (No. w26989). National Bureau of Economic Research. <http://doi.org/10.3386/w26989>
- Baum, T., & Hai, N. T. T. (2020). Hospitality, tourism, human rights and the impact of COVID-19. *International Journal of Contemporary Hospitality Management*, 32(7), 2397-2407. <https://doi.org/10.1108/IJCHM-03-2020-0242>
- Bråthen, S., & Hoff, K. L. (2020). Economic impact assessment of regulatory changes: A case study of a proposed new ICAO standard for contaminated runways. *Sustainability*, 12(15), 5897. <https://doi.org/10.3390/su12155897>
- Chetty, R., Friedman, J. N., Hendren, N., & Stepner, M. (2020). *How did covid-19 and stabilization policies affect spending and employment? A new real-time economic tracker based on private sector data*. National Bureau of Economic Research.
- Copertari, L. F. (2016). Economy sectors participation index. *International Review of Social Sciences*, 4(2), 38-43.
- Dam, N. A. K., Le Dinh, T., & Menvielle, W. (2019). A systematic literature review of big data adoption in internationalization. *Journal of Marketing*

- Analytics*, 7(3), 182-195. <https://doi.org/10.1057/s41270-019-00054-7>
- Devpura, N., & Narayan, P. K. (2020). Hourly oil price volatility: The role of COVID-19. *Energy Research Letters*, 1(2), 13683. <https://doi.org/10.46557/001c.13683>
- Dorn, E., Hancock, B., Sarakatsannis, J., & Viruleg, E. (2020). *COVID-19 and student learning in the United States: The hurt could last a lifetime*. McKinsey Company. <https://www.mckinsey.com/industries/public-and-social-sector/our-insights/covid-19-and-student-learning-in-the-united-states-the-hurt-could-last-a-lifetime#>
- Farooq, I., & Ali, S. (2020). COVID-19 outbreak and its monetary implications for dental practices, hospitals and healthcare workers. *Postgraduate Medical Journal*, 96(1142), 791-792. <https://doi.org/10.1136/postgradmedj-2020-137781>
- Fisher, A. G. (1939). Production, primary, secondary and tertiary. *Economic Record*, 15(1), 24-38. <https://doi.org/10.1111/j.1475-4932.1939.tb01015.x>
- Food and Drug Administration (2020). *Best practices for retail food stores, restaurants, and food pick-up/delivery services during the COVID-19 pandemic*. <https://www.fda.gov/food/food-safety-during-emergencies/best-practices-retail-food-stores-restaurants-and-food-pick-up-delivery-services-during-covid-19>
- Funke, M., & Tsang, A. (2020). The People's Bank of China's response to the coronavirus pandemic-A quantitative assessment. *Economic Modelling*, 93, 465-473. <https://doi.org/10.1016/j.econmod.2020.08.018>
- Gewin, V. (2020). Five tips for moving teaching online as COVID-19 takes hold. *Nature*, 580(7802), 295-296.
- Gong, D., Jiang, T., & Lu, L. (2020). Pandemic and bank lending: Evidence from the 2009 H1N1 Pandemic. *Finance Research Letters*, 39, 101627. <https://doi.org/10.1016/j.frl.2020.101627>
- Gössling, S., Scott, D., & Hall, C. M. (2020). Pandemics, tourism and global change: A rapid assessment of COVID-19. *Journal of Sustainable Tourism*, 29(1), 1-20. <https://doi.org/10.1080/09669582.2020.1758708>
- Govindan, K., Mina, H., & Alavi, B. (2020). A decision support system for demand management in healthcare supply chains considering the epidemic outbreaks: A case study of coronavirus disease 2019 (COVID-19). *Transportation Research Part E: Logistics Transportation Review*, 138, 101967. <https://doi.org/10.1016/j.tre.2020.101967>
- Gretzel, U., Fuchs, M., Baggio, R., Hoepken, W., Law, R., Neidhardt, J., Pesonen, J., Zanker, M., & Xiang, Z. (2020). E-tourism beyond COVID-19: A call for transformative research. *Information Technology & Tourism*, 22, 187-203. <https://doi.org/10.1007/s40558-020-00181-3>
- Gupta, M., Abdelmaksoud, A., Jafferany, M., Lotti, T., Sadoughifar, R., & Goldust, M. (2020). COVID-19 and economy. *Dermatologic Therapy*, 33(4), e13329. <https://doi.org/10.1111/dth.13329>
- Gursoy, D., & Chi, C. G. (2020). Effects of COVID-19 pandemic on hospitality industry: Review of the current situations and a research agenda. *Journal of Hospitality Marketing & Management*, 29(5), 527-529. <https://doi.org/10.1080/19368623.2020.1788231>
- Haleem, A., Javaid, M., & Vaishya, R. (2020). Effects of COVID 19 pandemic in daily life. *Current Medicine Research Practice*, 10(2), 78. <https://doi.org/10.1016/j.cmrp.2020.03.011>
- Hobbs, J. E. (2020). Food supply chains during the COVID-19 pandemic. *Canadian Journal of Agricultural Economics*, 68(2), 171-176. <https://doi.org/10.1111/cjag.12237>

- Huremović, D. (2019). Brief history of pandemics (pandemics throughout history). In *Psychiatry of pandemics* (pp. 7-35). Springer. https://doi.org/10.1007/978-3-030-15346-5_2
- International-Monetary-Fund. (2019). *Fiscal monitor: How to mitigate climate change*. <https://www.imf.org/en/Publications/FM/Issues/2019/09/12/fiscal-monitor-october-2019>
- International-Monetary-Fund. (2020). *Fiscal monitor: Policies to support people during the COVID-19 pandemic*. <https://www.imf.org/-/media/Files/Publications/fiscal-monitor/2020/April/English/ch1.ashx>
- Jones, K. E., Patel, N. G., Levy, M. A., Storeygard, A., Balk, D., Gittleman, J. L., & Daszak, P. (2008). Global trends in emerging infectious diseases. *Nature*, *451*(7181), 990-993. <https://doi.org/10.1038/nature06536>
- Kabir, M., Saqib, M. A. N., Zaid, M., Ahmed, H., & Afzal, M. S. (2020). COVID-19, economic impact and child mortality: A global concern. *Clinical Nutrition*, *39*(7), 2322-2323. <https://doi.org/10.1016/j.clnu.2020.05.027>
- Keshav, S. (2007). How to read a paper. *ACM SIGCOMM Computer Communication Review*, *37*(3), 83-84. <https://doi.org/10.1145/1273445.1273458>
- Kumar, M. S., Raut, R. D., Narwane, V. S., & Narkhede, B. E. (2020). Applications of industry 4.0 to overcome the COVID-19 operational challenges. *Diabetes Metabolic Syndrome: Clinical Research Reviews*, *14*(5), 1283-1289. <https://doi.org/10.1016/j.dsx.2020.07.010>
- Kwiatkowska, W. (2015). The service sector in the economy in Poland and European Union countries. *Olsztyn Economic Journal*, *10*(3), 191-207.
- Laborde, D., Martin, W., Swinnen, J., & Vos, R. (2020). COVID-19 risks to global food security. *Science*, *369*(6503), 500-502. <https://doi.org/10.1126/science.abc4765>
- Lahmiri, S., & Bekiros, S. (2020). The impact of COVID-19 pandemic upon stability and sequential irregularity of equity and cryptocurrency markets. *Chaos, Solitons Fractals*, *138*, 109936. <https://doi.org/10.1016/j.chaos.2020.109936>
- Loopstra, R. (2020). *Vulnerability to food insecurity since the COVID-19 lockdown*. The Food Foundation.
- Ly, T., Selgelid, M., & Kerridge, I. (2007). Pandemic and public health controls: Toward an equitable compensation system. *Journal of Law and Medicine*, *15*, 296-307.
- Madhav, N., Oppenheim, B., Gallivan, M., Mulembakani, P., Rubin, E., & Wolfe, N. (2018). Pandemics: Risks, impacts, and mitigation. In *Disease control priorities, third edition (Volume 9): Improving health and reducing poverty* (pp. 315-345). The World Bank. https://doi.org/10.1596/978-1-4648-0527-1_ch17
- Marjanović, V. (2010). Significance and influence of economic structure on economic development. *Economic Themes*, 369-382.
- Matheny, J., Toner, E., & Waldhorn, R. (2007). Financial effects of an influenza pandemic on US hospitals. *Journal of Health Care Finance*, *34*(1), 58-63.
- Ménard, C., & Valceschini, E. (2005). New institutions for governing the agri-food industry. *European Review of Agricultural Economics*, *32*(3), 421-440. <https://doi.org/10.1093/eurrag/jbi013>
- Mohammad, S., Asutay, M., Dixon, R., & Platonova, E. (2020). Liquidity risk exposure and its determinants in the banking sector: A comparative analysis between Islamic, conventional and hybrid banks. *Journal of International Financial Markets, Institutions Money*, *66*, 101196. <https://doi.org/10.1016/j.intfin.2020.101196>

- Morse, S. S. (2001). Factors in the emergence of infectious diseases. In *Plagues and politics* (pp. 8-26). Springer. https://doi.org/10.1057/9780230524248_2
- Nguyen, D. T., Phan, D. H. B., Ming, T. C., & Nguyen, V. K. L. (2021). An assessment of how COVID-19 changed the global equity market. *Economic Analysis and Policy*, 69, 480-491. <https://doi.org/10.1016/j.eap.2021.01.003>
- Nicola, M., Alsafi, Z., Sohrabi, C., Kerwan, A., Al-Jabir, A., Iosifidis, C., Agha, M., & Agha, R. (2020). The socio-economic implications of the coronavirus pandemic (COVID-19): A review. *International Journal of Surgery*, 78, 185-193. <https://doi.org/10.1016/j.ijisu.2020.04.018>
- Niestadt, M. (2020). *COVID-19 and the tourism sector*. European Parliamentary Research Service. [https://www.europarl.europa.eu/RegData/etudes/ATAG/2020/649368/EPRS_ATA\(2020\)649368_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/ATAG/2020/649368/EPRS_ATA(2020)649368_EN.pdf)
- OECD. (2020). Tourism policy responses to the coronavirus (COVID-19). *OECD Policy Responses to Coronavirus (COVID-19)*. OECD Publishing. <https://doi.org/10.1787/6466aa20-en>
- Paul, S. K., & Chowdhury, P. (2020). A production recovery plan in manufacturing supply chains for a high-demand item during COVID-19. *International Journal of Physical Distribution Logistics Management*, 51(2), 104-125. <https://doi.org/10.1108/IJPDLM-04-2020-0127>
- Pitman, R., Nagy, L., & Sculpher, M. (2013). Cost-effectiveness of childhood influenza vaccination in England and Wales: Results from a dynamic transmission model. *Vaccine*, 31(6), 927-942. <https://doi.org/10.1016/j.vaccine.2012.12.010>
- Preaud, E., Durand, L., Macabeo, B., Farkas, N., Sloesen, B., Palache, A., Shupo, F., & Samson, S. I. (2014). Annual public health and economic benefits of seasonal influenza vaccination: A European estimate. *BMC Public Health*, 14(1), 813. <https://doi.org/10.1186/1471-2458-14-813>
- Qiu, W., Rutherford, S., Mao, A., & Chu, C. (2017). The pandemic and its impacts. *Health, Culture Society*, 9, 1-11. <https://doi.org/10.5195/hcs.2017.221>
- Rekatsina, M., Paladini, A., Moka, E., Yeam, C. T., Urits, I., Viswanath, O., Kaye, A. D., Morgan, J. A., & Varrassi, G. (2020). Healthcare at the time of COVID-19: A review of the current situation with emphasis on anesthesia providers. *Best Practice Research Clinical Anaesthesiology*, 34(3), 539-551. <https://doi.org/10.1016/j.bpa.2020.07.002>
- Rickenberg, T. A., Neumann, M., Hohler, B., & Breitner, M. (2012, August 9-12). Enterprise content management-A literature review. *Proceedings of the Eighteenth Americas Conference on Information Systems*. <https://aisel.aisnet.org/amcis2012/proceedings/DataInfoQuality/10>
- Saunders-Hastings, P. R., & Krewski, D. (2016). Reviewing the history of pandemic influenza: Understanding patterns of emergence and transmission. *Pathogens*, 5(4), 66. <https://doi.org/10.3390/pathogens5040066>
- Schafran, A., McDonald, C., Lopez Morales, E., Akyelken, N., & Acuto, M. (2018). Replacing the services sector and three-sector theory: Urbanization and control as economic sectors. *Regional Studies*, 52(12), 1708-1719. <https://doi.org/10.1080/00343404.2018.1464136>
- Shehzad, K., Xiaoxing, L., & Kazouz, H. (2020). COVID-19's disasters are perilous than global financial crisis: A rumor or fact? *Finance Research Letters*, 36, 101669. <https://doi.org/10.1016/j.frl.2020.101669>
- Shorey, S., & Valerie, C. (2020). Lessons from past epidemics and pandemics and a way forward for pregnant women, midwives and nurses during COVID-19 and beyond: A meta-synthesis. *Midwifery*, 90, 102821. <https://doi.org/10.1016/j.midw.2020.102821>

- Shrestha, N., Shad, M. Y., Ulvi, O., Khan, M. H., Karamehic-Muratovic, A., Nguyen, U.-S. D., Baghbanzadeh, M., Wardrup, R., Aghamohammadi, N., & Cervantes, D. (2020). The impact of COVID-19 on globalization. *One Health, 11*, 100180. <https://doi.org/10.1016/j.onehlt.2020.100180>
- Sigala, M. (2020). Tourism and COVID-19: Impacts and implications for advancing and resetting industry and research. *Journal of Business Research, 117*, 312-321. <https://doi.org/10.1016/j.jbusres.2020.06.015>
- Stock, J. H. (2020, May 12). *Reopening the coronavirus-closed economy*. Brookings. <https://www.brookings.edu/research/reopening-the-coronavirus-closed-economy/>
- Suau-Sanchez, P., Voltes-Dorta, A., & Cugueró-Escofet, N. (2020). An early assessment of the impact of COVID-19 on air transport: Just another crisis or the end of aviation as we know it? *Journal of Transport Geography, 86*, 102749. <https://doi.org/10.1016/j.jtrangeo.2020.102749>
- Sulistiyani, S. R. (2020). The impact of the Covid-19 pandemic on the manufacturing industry. *International Journal of Research and Innovation in Social Science, 4*(6), 172-175. <https://www.rsisinternational.org/journals/ijriss/Digital-Library/volume-4-issue-6/172-175.pdf>
- Swinburn, B. A., Sacks, G., Hall, K. D., McPherson, K., Finegood, D. T., Moodie, M. L., & Gortmaker, S. L. (2011). The global obesity pandemic: Shaped by global drivers and local environments. *The Lancet, 378*(9793), 804-814. [https://doi.org/10.1016/S0140-6736\(11\)60813-1](https://doi.org/10.1016/S0140-6736(11)60813-1)
- Tanriverdi, G., Bakir, M., & Merkert, R. (2020). What can we learn from the JATM literature for the future of aviation post Covid-19? A bibliometric and visualization analysis. *Journal of Air Transport Management, 89*, 101916. <https://doi.org/10.1016/j.jairtraman.2020.101916>
- UNESCO. (2020). *290 Million students out of school due to COVID-19: UNESCO releases first global numbers and mobilizes response*. <https://en.unesco.org/news/290-million-students-out-school-due-covid-19-unesco-releases-first-global-numbers-and-mobilizes>
- Verikios, G. (2020). The dynamic effects of infectious disease outbreaks: The case of pandemic influenza and human coronavirus. *Socio-Economic Planning Sciences, 71*, 100898. <https://doi.org/10.1016/j.seps.2020.100898>
- Voysey, M., Clemens, S. A. C., Madhi, S. A., Weckx, L. Y., Folegatti, P. M., Aley, P. K., Angus, B., Baillie, V. L., Barnabas, S. L., & Bhorat, Q. E. (2021). Safety and efficacy of the ChAdOx1 nCoV-19 vaccine (AZD1222) against SARS-CoV-2: An interim analysis of four randomised controlled trials in Brazil, South Africa, and the UK. *The Lancet, 397*(10269), 99-111. [https://doi.org/10.1016/S0140-6736\(20\)32661-1](https://doi.org/10.1016/S0140-6736(20)32661-1)
- World-Tourism-Organization. (2020). *100% of global destinations now have covid-19 travel restriction*. <https://www.unwto.org/news/covid-19-travel-restrictions>
- Zhong, R., Xu, X., & Wang, L. (2017). Food supply chain management: Systems, implementations, and future research. *Industrial Management Data Systems, 117*(9), 2085-2114.
- Zuber, S., & Brüssow, H. (2020). COVID 19: Challenges for virologists in the food industry. *Microbial Biotechnology, 13*(6), 1689-1701. <https://doi.org/10.1111/1751-7915.13638>



Exploring Ideologies of Function Words in George Orwell's *Animal Farm*

Ayman Farid Khafaga^{1,2}

¹*Department of English Language, College of Science & Humanities, Prince Sattam bin Abdulaziz University, Al-Aflaj 11912, Saudi Arabia*

²*Department of English, Faculty of Arts and Humanities, Suez Canal University, Ismailia, Egypt*

ABSTRACT

The main objective of this paper is to explore the extent to which function words, such as pronouns and modals go beyond their semantic functionality towards particular ideological meanings. To this end, the paper attempts to present a computer-aided critical discourse analysis to decipher the ideological weight of both pronouns and modality as carriers of persuasion and/ or manipulation in the discourse of George Orwell's *Animal Farm*. Analytically, the focus is on two types of pronouns: the first person singular *I* and the first person plural *we*. Also two types of modals are discussed in this article: the truth modal *will* and the obligation modals *must* and *should*. In doing so, this paper draws upon two analytical frameworks: critical discourse analysis (CDA) and the computer-aided text analysis manifested in a frequency distribution analysis via concordance. Two main findings are reported in this study: first, pronouns and modality in the discourse of the selected novel go beyond their grammatical functions towards further pragmatic functions constituting persuasion and/or manipulation; second, the frequency analysis shows that despite the high frequency of the pronouns and modals investigated in the discourse of the selected novel, only few occurrences are indicative in generating both a persuasive and/or manipulative discourse. This, in turn, accentuates the relevance of employing a computer-aided critical

discourse analysis to decipher specific interpretative meanings of the linguistic units in corpus and text linguistics in general and literary texts in particular.

Keywords: *Animal Farm*, frequency analysis, manipulation, modality, persuasion, pronouns

ARTICLE INFO

Article history:

Received: 28 April 2021

Accepted: 5 August 2021

Published: 21 September 2021

DOI: <https://doi.org/10.47836/pjssh.29.3.30>

E-mail address:

dr_ayman76@yahoo.com

INTRODUCTION

Any literary genre, specifically the narrative, as is the case for the one at hand (i.e., *Animal Farm*), contains a huge number of pronouns, such as *I*, *we*, *you*, as well as an enormous number of modals, such as *will*, *shall*, *should* and *must*. These, for Quirk et al. (1985), are categorized within language as function words; that is, they are linguistically employed to communicate a grammatical function. As such, a pronoun grammatically serves as, for example, a subject of a verb (e.g., *we* enjoy reading English), an object of a verb (e.g., Thomas gave *her* the money), a subject complement of a verb (e.g., it was *you* who wrote the report), an object of a preposition (e.g., I bought a new dress for *her*), and as apposition of a noun (e.g., the books, *those* which are on the table, have been sold). In the same vein, modals, according to Palmer (1986, 1990), are function words in language that are used to express various grammatical functions, such as obligation (e.g., *must*), prohibition (e.g., *mustn't*), permission, ability and possibility, either in the present time (e.g., *can*) or the past time (e.g., *could*), probability (e.g., *may*), and certitude (e.g., *will*). However, pronouns and modals can go beyond their surface grammatical functions towards specific pragmatic and ideological purposes. For example, within particular discourse situations and in the hands of particular speakers, pronouns can communicate the discourse functions of competency (e.g., the pronoun *I*), solidarity (e.g., the inclusive pronoun *we*), power and domination (e.g., the pronoun *you*), distance

(e.g., the exclusive pronoun *we*). Likewise, modals can be discursively employed to express commitment of a future act (as is the case for the modal *will*).

This article, therefore, attempts to explore the extent to which pronouns and modals are employed in Orwell's *Animal Farm* to communicate specific ideologies rather than what they convey by their ordinary grammatical use. To this end, the paper draws on critical discourse analysis (CDA) to show how these devices are used by language users to practice power and domination, either persuasively or manipulatively. The reason why CDA is particularly chosen for the analysis of the selected data is due to the fact that this model of analysis is concerned with exposing hidden relations of power and domination in discourse as well as the ideological use of language (see e.g., Fairclough, 1989, 1995; Fowler, 1981; van Dijk, 1995, 1997a, 1997b; Wodak & Meyer, 2001; Wood, 2004). This is analytically accompanied by a frequency analysis to the selected pronouns (*I*, *we*) and modals (*will*, *should*, *must*) that serves to extract the concordance lines of the indicated pronouns and modals in the novel under investigation. The frequency analysis is analytically enabled by the program of concordance, which helps delineate credible and concise results to each entry of the function words at hand.

Statement of the Problem

One of the characteristics of literary genres, particularly the narrative, is their rich nature of lexis. Function words, such as

pronouns and modality, are among the lexis abundantly employed in narrative texts. These words usually communicate their assigned semantic and grammatical functions; however, they, sometimes, go beyond their semantic functionality towards further pragmatic and ideological purposes in discourse. The identification of such ideological and pragmatic weight necessitates a close linguistic investigation through which one can differentiate between the function words used to convey their semantically-based functions and those utilized as carriers of specific ideologies. Such linguistic investigation of the ideological significance of function words in narrative genres, represented here by Orwell's *Animal Farm*, is anticipated to facilitate the understanding of not only the thematic message of the novel, but also the intended ideologies beyond the surface semantic proposition. This study, therefore, attempts to use a critical discourse analysis aided by a frequency analysis to explore the extent to which function words are not only grammar indicators, but also ideology carriers.

Significance of the Study

The significance of the current study is twofold. First, it tries to offer a linguistic analysis of Orwell's *Animal Farm*, by investigating the way pronouns and modality are used to communicate ideologies in the discourse of the novel. This, in turn, serves not only to facilitate intelligible perception of the literary thematization of the novel under investigation, but also

to provide a linguistic awareness of the way language is used and/or abused in the production of power and dominance in discourse. Second, the study highlights the analytical integration between critical discourse analysis as a model of analysis targeting the exposition of relations of power, dominance and ideology in discourse and the application of concordance as a computational tool that helps arrive at the indicative occurrences of the function words under investigation. This is conducted by highlighting the contextual environment in which each searched word occurs, which is realized by one of the options available by concordance (Key Word in Context KWIC), and then the analytical role of CDA in revealing the way the contextualization of function words in specific conversational situation can be interpreted to underpin the hidden ideologies in discourse.

Four research questions are addressed in this article: first, what are the different ideologies the selected pronouns/modals communicate in *Animal Farm*? Second, are these pronouns/modals employed to influence a persuasive discourse or a manipulative one? Third, to what extent is a frequency analysis relevant to highlight the indicative occurrences that thematically reflect the intended discourse functions of the selected entries? Fourth, to what extent can CDA and the frequency analysis be incorporated analytically to expose hidden relations of power in discourse? The answer of these research questions mirrors the main objective this paper tries to achieve: to explore the extent to which

specific pronouns and modals exceed their grammatical functions to communicate further ideological functions in the discourse of *Animal Farm*.

The remainder of this study is divided into five sections. Section 2 presents the literature review of the study by reviewing the previous studies relevant to the topic under investigation. Section 3 offers the methodology of the paper, in which a brief account of the collection and description of data, the rationale of the study, and the analytical procedures adopted in the paper is provided. Section 4 is confined to the analysis of the selected data, wherein some conversational turns are extracted from the novel to undergo the analytical process. Section 5 is dedicated to discussing the findings of the study, whereas Section 6 concludes the study and offers some recommendations for future research.

THEORETICAL PRELIMINARIES AND LITERATURE

Critical Discourse Analysis

Critical Discourse Analysis (CDA) is discussed and approached by many linguists as a multidisciplinary approach of analyzing and exposing the hidden ideologies and the different power relations in language (e.g., Fairclough, 1989, 1995; Fairclough & Wodak, 1997; van Dijk, 1993, 1996, 2000, 2001a, 2001b; Weiss & Wodak 2003; Wodak & Meyer, 2001; Partington, 2003; Widdowson, 2007, among others). It constitutes textual analysis that draws on the different features of texts. For Widdowson

(2007), CDA is a socio-political approach of analyzing texts and talks in order to reveal the hidden ideologies pertaining to these texts. CDA, van Dijk (2001a) argues, is an analytical approach of language research that tends to highlight the manner through which power relations are manifested in text and talk within different political and social contexts. Along with its interest in the analysis of language critically, CDA is also concerned with the relationship between discourse and power, language and ideology, and language and social relations in society (Edelman, 2001).

CDA is concerned with social problems and political issues because it deals with discourse as a social practice (Fairclough & Wodak, 1997). For van Dijk (2001a), within CDA's analytical and ideological framework, discourse structures are enacted, confirmed, legitimized and reproduced to uncover the different power relations practiced and represented by various linguistic devices in texts and talk. Van Dijk (2001a) maintains that there are different types pertaining to CDA, and each type has its analytical characteristics. For example, he differentiates between the CDA of a conversational genre and that of a news report. Each type constitutes its principles, and is dealt with from different perspectives. However, all of them are linguistically analyzed in light of CDA's theoretical and analytical framework to demonstrate the way particular discourse structures are employed to produce and reproduce relations of power, dominance and hegemony.

Van Dijk (1993) maintains that CDA focuses on “the structures of text and talk” (p. 259). This approach serves to clarify the way different relations of power are linguistically represented in discourse. This, in turn, functions to reveal the hidden ideologies beyond the surface semantic expressions of discourse. Significantly, the ability to expose hidden meanings in discourse contributes to the understanding of the intended message and the global meanings of discourse (Wood, 2004). To clarify the significance of CDA in exposing the hidden discursive structures of power, van Dijk (1993) argues that discourse analysts need to trace three analytical strands. First, they should highlight the way speakers encode ideological assumptions in discourse; second, they should know the purposes these ideological meanings are employed to achieve in discourse; and, third, they should shed light on the structures of discourse involved in this ideological process.

According to Fairclough (1989, 1995), pronouns and modality belong to function words that have been assigned specific grammatical functions, such as agency and obligation. In order to approach these function words by means of a critical discourse analysis, Fairclough (1989) proposes sets of questions that should be thoroughly examined while analyzing a text. They are as follows:

- i. What experiential values do grammatical features have? In this question, the focus of CDA is on the analysis of agency,

nominalization, passivization and negation;

- ii. what relational values do grammatical features have? The focus here is on the modes through which discourse is delivered (i.e., declarative, interrogative, imperatives), the relational features of modality, that is, their linguistic activity in communicating interpersonal relationships in discourse, and the use of pronouns in the different contexts of discourse; and
- iii. what expressive values do grammatical features have? The focus in this question is on the expressive features of modality (i.e., obligation, truth, and possibility).

Significantly, Fairclough's sets of questions are employed within the general interpretative and analytical framework of CDA. That is, they are linguistically investigated through the three main stages of analysis in CDA: description, in which the analytical focus is on formal properties of the text; interpretation, wherein the focus is on the relationship between text and interaction, by perceiving the text as the product of a process of production, and as a resource in the process of interpretation; and explanation, which focuses on the relationship between interpretation and social context, with an emphasis on the social determination of the processes of production and interpretation, and social effects (Fairclough, 1989). In other words, for Fairclough (1989), conducting a CDA for any text requires text analysis (description), process analysis (interpretation), and social

analysis (explanation). A CDA of any text, therefore, requires the study of the interrelatedness of texts, interaction and contexts.

Computer-Aided Text Analysis

In tracing the different computational software packages, it becomes obvious that the program of concordance is the most appropriate tool for the analysis of the corpus in this paper. This is because concordance can collect, access, and check the relevance of a large amount of data that can be indicatively used in corpus linguistic analysis. For Wiechmann and Fuhs (2006), concordance can load a corpus from different files, offers some changes on the files of any corpora, and provides various types of analysis, varying from simple text searches to the search of specific expressions, words, or phrases. According to Peachey (2005), concordance serves to access a large amount of data for specific analytical purposes. This has previously been accentuated by Flowerdew (1993), who argues that concordance is employed to access data to discover how a given word as well as its contextual environment occurs in a corpus. The application of this software, thus, facilitates the browsing of a corpus in order to obtain results concerning the number of occurrences of particular words or phrases, as well as offers useful insights into the use of language in particular contexts.

According to Yavuz (2014), concordance has extensively been utilized in the analysis of literary texts with the aim to count the

frequency and function of a particular word/phrase in a given text. Its main concern is to offer a better understanding of the searched word/phrase within its contextual use in text. Obviously, revealing the frequency of any word is indicative in clarifying various research purposes beyond any corpora. The application of concordance can contribute to thematic analysis, collocations, contextualization, and even technicalities of texts (Flowerdew, 1993).

The frequency analysis is one option among other uses and applications of concordance. This program also provides other analytical options that are relevant to the study of particular topics in literary texts such as the theme of ideological manipulation and/or persuasion approached in the current study. Among these options is the Key Word in Context (KWIC) verifiable input, through which words are shown in combination with their neighboring lexical items. This, in turn, valorizes the reason why concordance is relevant to the linguistic and ideological investigation of texts (Hockey, 1980; Kennedy, 1998).

According to Khafaga and Shaalan (2020), the use of concordance in general and the frequency distribution analysis in particular in the investigation of literary texts has many advantages. One of these advantages is the ability to achieve authenticity, credibility and transparency in corpus linguistic analysis. This is clearly evident when concordance targets literary texts; because such type of texts abounds in words that would be difficult to be verifiably studied manually. Another advantage of

applying concordance to the analysis of large data texts, for Krieger (2003), is that it helps analysts to find out not only the various patterns of language use, but also the contextual environment in which these linguistic patterns are employed in texts.

Related Literature

Pronouns and modality have been approached within the scope of critical discourse studies (e.g., Khafaga, 2019; Khafaga & Aldawsari, 2021; Pinto, 2004; Widdowson, 2007; Wood & Kroger, 2000; Fairclough, 1989; van Dijk, 2001b, among others). Fairclough (1989), in his attempt to theorize for a framework of CDA at the description, explanation and interpretation levels, has specified one separate level for the grammatical devices in discourse. This includes linguistic criteria that should be followed in the analysis of discourse. Pronouns and modality are among these aspects. Fairclough (1989) maintains that a discourse analyst should investigate the experiential, relational and expressive values that grammatical aspects carry in discourse. So, he clarifies that notions, such as agency, passivization and nominalization should be dexterously analyzed in terms of their linguistic weight to communicate the various values listed above (i.e., experiential, expressive and relational). Pronouns, in Fairclough's model, are linguistic indicators of expressing agency in discourse that are employed to communicate particular ideologies. The choice among the different pronouns as well as their position in a sentence may represent textually a particular

action, event, or maintain a specific type of relationship among discourse participants. He also clarifies that the choice among these grammatical types serves to highlight agency, which, in turn, may be "ideological or they may be conscious hedging or deception" (Fairclough, 1989, p. 122).

Widdowson (2007) also argues that pronouns exhibit an ideological weight in expressing agency in discourse. This, for him, is related to the linguistic characteristics of pronouns in the communication of relations of power in discourse; the use of the first person singular *I*, the first person plural *we*, or the second person pronoun *you* is sometimes used for ideological reasons, particularly when they are utilized within the framework of politics. Widdowson's viewpoint has previously been accentuated by Wood and Kroger's (2000) contention that the use of pronouns is ideological in nature; that is, the use of the first person singular pronoun *I*, for example, is to reflect the speaker's responsibility, his/her competency, as well as authority over his/her recipients. Further, the same ideological viewpoint of using pronouns in discourse has been emphasized by Fairclough (1989), who differentiates between the inclusive *we*, which includes both speaker and hearers; and the exclusive *we*, which excludes all members outside the speaker's group. Widdowson's (2007) and Fairclough's (1989) arguments go in conformity with Pinto's (2004) claim that the use of the exclusive *we* indicates that the speaker has power over his/her recipients, whereas the employment of the inclusive

we communicates the feeling that the rights, goals, attitudes and beliefs of the individual are inferior to those related to the group. Crucially, this in-group and out-group discourse is also discussed by van Dijk (2001b), who highlights the indicative role pronouns play to demarcate polarization in 'We' and 'Them' discourse.

Modality, for Fairclough (1989), is another way of communicating ideology in discourse. He differentiates between relational modality and expressive modality, where the former refers to the authority practiced by one discourse participant over another, and the latter constitutes such authority which is concerned with the truth or probability of a representation of reality. Modality, according to Fairclough (1989), is linguistically manifested in modal auxiliary verbs, adverbs or tense. He maintains that there is, sometimes, some sort of grammatical overlap between expressive modality and relational modality. So, some modals appear to carry more than one grammatical function. For example, *must* can indicate both obligation and certainty; *should* can communicate probability and obligation; and *may* can be associated with the meaning of permission and possibilities.

Wood and Kroger (2000) also argue that modality is employed to maintain discursive agency. They clarify that the use of the obligation modal *must* in, for example, *Thomas must leave now*, indicates that Thomas has no freedom to choose or to decide. This agency that is discursively practiced in discourse often carries ideology, that is, it reflects the indented meaning of

its users, which is always shaped by the cognitive background of the language user. Indicatively, the combination of both modals and pronouns, Pinto (2004) argues, indicates a high level of obligation internalization. Halliday (1985) further differentiates between modalization and modulation; the former indicates probability and usuality, whereas the latter constitutes obligation and inclination. Halliday's account of modality focuses on both functionality and pragmaticization of the concept. In light of this paper, pronouns and modality are discussed in terms of not only their functional perspective, but also their pragmatic one. This means that an analytical and linguistic link is established to relate linguistic structures to social structures (the functional dimension); and to allow more effective role for the reader in the process of discourse interpretation (the pragmatic dimension).

Within the scope of fiction, Pariña and de Leon (2014) investigated the linguistic role of modality in communicating the writer's point of view in *Ian Rosales's Things You Don't Know*. This study attempts to decode the stylistic and linguistic features of modality in the selected prose work to allow readers better understand the different dimensions of point of view of the narrator, that is, at the character-to-character level of communication. Among the findings of this study is that the narrator's point of view can be maintained by the writer's linguistic and stylistic use of modality, particularly the epistemic modality. Pariña and de Leon's (2014) study concludes that approaching

modality linguistically facilitates the process of understanding texts, either textually and/or contextually. In another study, Khafaga and Aldawsari (2021) discussed the indicative part played by pronouns in communicating ideologies and practicing power. By using a drama text as its main corpus, the main objective of Khafaga and Aldawsari's (2021) study is to explore the extent to which agency can be produced, reproduced and practiced by pronouns. Their study reveals that specific meanings can be seized at the discourse level, which, in turn, serves to expose hidden relations of power in and behind discourse.

METHOD

Data

The data in this article constitutes George Orwell's *Animal Farm* (1944). The selected novel consists of 10 chapters. For Bolton (1984), the novel tells the story of the totalitarian Russia and calls for a socialist system that is based on democracy. The political background of the story as well as its symbolism shapes the whole atmosphere of the novel. The rationale for selecting this novel in particular is that it abounds in linguistic usages of pronouns and modality that go beyond their perceived grammatical use towards further pragmatic and ideological purposes. These ideological purposes revolve around one main function: to produce and maintain a persuasive and/or manipulative discourse. Crucially, marking such an ideological weight of both pronouns and modality is analytically enabled by the

use of a frequency-based analysis, through which the total frequency and the indicative occurrences of the searched items are reported.

Procedures

Four procedural stages are adopted in the analysis of the selected novel. The first stage is textually-based, in which the novel was precisely read to highlight the different textual expressions that carry any of the pronouns (*I, we*) and the modals (*must, should, will*). This stage further provides a general idea of the way the linguistic items under investigation are employed at the character-to-character level of discourse. With the second stage comes the role of the computational linguistics work manifested in the program of concordance. In this stage, the selected pronouns and modals are searched through concordance to arrive at the total frequency of each searched item. The third stage is contextually-based, in which all occurrences of each searched item arrived at by means of concordance are investigated in terms of their contextual environment in the novel. This contextual reading has resulted in marking the indicative occurrences out of the total frequency of each searched item. The fourth stage is an interpretative one, wherein the indicative occurrences are linguistically analyzed by means of CDA to arrive at the different pragmatic and ideological purposes beyond the use of the selected pronouns and modals. Importantly, all italicized words in the extracts are emphasized by the author for analytical purposes.

It is worth mentioning that Simple Concordance Program (free concordance software for Windows) is the software utilized in this study. It allows three main analytical options: concordance, word list and statistics that are used to extract the concordance lines, arrive at the total frequency of each searched item, and identify the contextual environment in which each searched item occurs in texts. For analytical purposes pertinent to the objective of the current study, concordancing is the only option adopted from the employed software. By means of the concordancing option, a searched item is inserted in the search engine of the program to get all occurrences of such an item, which is also called key word in context (KWIC); users can also highlight the searched items to distinguish them from previous and consequent words. By clicking on frequency, the total frequency for each searched item is displayed within its contextual environment in text. The employed software was confined to search only the selected pronouns and modality under investigation. Because the employed software allows the search criteria to be determined and modified, the search was limited to identify only five words both in the left and the right sides of the searched items. Due to the numerous number of concordance lines extracted for each searched item, only the total frequency of the searched items and the indicative occurrences were recorded and demonstrated in the tables. This frequency analysis was followed by a thematic analysis that was based on the contexts of each

searched item; this was conducted by activating the analytical nature of CDA with the work of concordance. In this stage of analysis lies the analytical integration between CDA and the work of computer: concordance software.

ANALYSIS

Pronouns

This section analyzes two types of pronouns as carriers of persuasive and/or manipulative ideologies in the selected novel: the first person singular pronoun *I* and the first person plural pronoun *we*.

The First Person Pronoun *I*. The first person singular pronoun *I* is used in the discourse of equality to indicate agency. Consider Old Major's following words:

Comrades, you have heard already about the strange dream that *I* had last night. But *I* will come to the dream later...*I* do not think, comrades, that *I* shall be with you for many months longer, and before *I* die, *I feel* it my duty to pass on to you such wisdom as *I have acquired. I have had a long life, I have had much time for thought as I* lay alone in my stall, and *I think I* may say that *I understand* the nature of life on this earth as well as any animal now living. (Orwell, 1944, pp. 7-8)

Old Major gathers the animals to tell them about a dream he had the night before. Old Major foregrounds himself as the authoritative *I* who has the right to speak on the animals' behalf due to his long experience as the oldest animal in the farm

who understands the nature of life more than any animal. Major's overuse of the pronoun *I* reflects his power and authority over the other animals. It indicates that he has a strong popularity among animals, the thing which makes everyone on the farm "quite ready to lose an hour's sleep in order to hear what he had to say" (Orwell, 1944, p. 5). Old Major uses the pronoun *I* to emphasize his competency via showing his experience on the farm's affairs. He attempts to assert his

trustworthiness and benevolence in order to prepare the animals' minds to accept what he is going to communicate. Major's utterance *I feel it my duty to pass on to you such wisdom* implicates that he is the only authoritative source of wisdom. The combination between *my duty* and *wisdom* serves to convey Major's competency and to motivate the rest of animals towards a specific action. Consider the following table.

Table 1
A concordance of the first person singular I

I.....TF (82)			
Indicative Occurrences (10)			
Context	Word	Context	Line
longer, and before I die,	I	feel it my duty to	83
you such wisdom as	I	have acquired. I have	84
have had a long life	I	have had much time for	85
think I may say that	I	understand the nature of life	86
It is about this that	I	wish to speak to you.	87
Comrades, he said,	I	trust that every animal here	99
actually dislike milk and apples.	I	dislike them myself. Our	107
Comrades, here and now	I	pronounce the death sentence upon	133
then paused and added impressively	I	warn every animal on this farm	213
'Snowball! He has been here!	I	can smell him distinctly!' and	246

Note. TF means Total Frequency

Table 1 demonstrates a high frequency of the first person singular pronoun *I* (82 occurrences). However, only 10 occurrences are indicative in communicating specific ideologies in the discourse of the novel. These can be monitored by the contextual environment wherein the pronoun occurs.

The First Person Pronoun *We*. The first person plural pronoun *we* is employed in *Animal Farm* both inclusively and exclusively. In the discourse of equality, the pronoun *we* is used inclusively to include both speaker and hearer in order to achieve pure persuasion, whereas it is used

exclusively in the discourse of inequality to achieve manipulative persuasion. Consider the following extracts:

Our lives are miserable, laborious, and short. *We are born, we are given just so much food as will* keep the breath in *our* bodies, and those of *us* who are capable of it are forced to work to the last atom of *our* strength; and the very instant that *our* usefulness has come to an end, *we* are slaughtered with hideous cruelty. (Orwell, 1944, p. 8)

And above all, no animal must ever tyrannize over his own kind. Weak or strong, clever or simple, *we are* all brothers. (Orwell, 1944, p. 12)

Old Major uses the first person plural pronoun *we* inclusively to express solidarity and intimacy between him and the other animals. He conveys that they share the same fate. In the first extract, Major explains

to the animals how they suffer under Major’s rule. Major’s use of the pronoun *we* accompanied with the passive construction in *we are born, we are given* and *we are slaughtered* is to emphasize that the animals are both the agent and the patient in an attempt to persuade them of their ability to lead the farm themselves. Major tries to assure them that their silence is the main reason beyond Mr. Jones’s exploitation to them. This atmosphere of closeness and solidarity, which Major tries to create, serves to pave the way for what he is going to convey. In the second extract, the same solidarity and inclusion are expressed by Major in his utterance *we are all brothers*. He uses the pronoun *we* to emphasize the animals’ equality and to unify their efforts to end the oppressive regime of Mr. Jones. The following table presents a concordance of the inclusive *we*.

Table 2
A concordance of inclusive *We*

WE.....TF (59)			
Indicative Occurrences (12)			
Context	Word	Context	Line
are miserable, laborious, and short.	we	are born, we are given	62
and short. We are born,	we	are given just so much	62
has come to an end	we	are slaughtered with hideous cruelty	65
our imagining. Why then do	we	continue in this miserable condition	74
is the only real enemy	we	have. Remove Man from the	77
And even the miserable lives	we	lead are not allowed to	94
a year. To that horror	we	all must come cows, pigs	99

Table 2 (Continued)

WE.....TF (59)			
Indicative Occurrences (12)			
Context	Word	Context	Line
be our own. Almost overnight	we	could become rich and free	106
and free. What then must	we	do? Why, work night and	107
that in fighting against Man,	we	must not come to resemble	133
or strong, clever or simple,	we	are all brothers. No animal	137
us free. For that day	we	all must labour, Though we	173

Table 2 shows that the first person plural pronoun *we* is used inclusively 12 times out of 59. These occurrences are indicative in conveying a persuasive ideology of their speakers.

Once the rebellion had been accomplished, the pronoun *we* is ceased to be used inclusively; that is, including all animals. The pigs begin to use the same pronoun exclusively, by establishing a discourse of distinction that shows the pigs' superiority over other animals. Notice the following extract:

Comrades! He cried. You do not imagine, I hope, that *we pigs* are doing this in a spirit of selfishness and privilege? Many of *us* actually dislike milk and apples.... *Our* sole object in taking these things is to preserve *our* health....*We pigs* are brain-workers. Day and night *we are* watching over your welfare. (Orwell, 1944, p. 32)

Squealer uses the first person plural pronoun *we* exclusively to emphasize the distinction between the pigs and the other animals, and to assert the pigs' higher status and their skill in running the farm. He communicates the pigs' need for such milk and apples to be able to organize the farm. Proclaiming public interest is a way of justifying their violation of the principles of animalism. This public interest is engulfed with an indirect threat as the alternative of the animals' objection, which is represented in Jones's return. Here, there is a big difference in the terms of address; that is in the discourse of equality, the pronoun *we* is uttered and is followed immediately by a verb as in *we are slaughtered*, *we are born*, and *we are given* but now the same pronoun is followed by the word *pigs*, which indicates that there are two different groups of animals on the farm: the pigs and the others. The following table present concordances of the exclusive *we*.

Table 3
A concordance of exclusive We

WE.....TF (59)			
Indicative Occurrences (5)			
Context	Word	Context	Line
not imagine, I hope, that	we	pigs are doing this in	528
the well-being of a pig.	we	pigs are brainworkers. The whole	532
is for YOUR sake that	we	drink that milk and eat	534
know what would happen if	we	pigs failed in our duty	535
then, comrades? He said, ?that	we	pigs now sleep in the	1041

Table 3 indicates that the pronoun *we* is used exclusively 5 times out of 59 to achieve manipulative persuasion.

Modality

This section presents two types of modality: obligation modality, which is represented by the modals *must* and *should*; and truth modality, which is manifested in the modal *will*.

Obligation Modality. The obligation modals *must* and *should* are used to produce both pure and manipulative persuasion in the discourse of equality and the discourse of inequality. Notice the following extract:

And remember, comrades, your resolution *must* never falter. No argument *must* lead you astray. Never listen when they tell you that Man and

the animal have a common interest, that the prosperity of the one is the prosperity of the others. It is all lies. (Orwell, 1944, p. 11)

The obligation modal *must* in *your resolution must never falter* and *no argument must lead you astray* is employed by Old Major to emphasize the animals’ enmity towards Mr. Jones, and to arouse their revolutionary spirits to revolt against him. The modal *must* carries a sense of necessity and obligation and signifies to force the animals to get rid of Man. Major assures the animals not to listen to any argument that leads them to forget man’s enmity or share his interests. Obligation modality then is used to achieve pure persuasion. The following table presents a concordance of the modal *must*.

Table 4

A concordance of persuasive Must

MUST.....TF (26)			
Indicative Occurrences (7)			
Context	Word	Context	Line
And remember, comrades, your resolution	must	never falter. No argument must	114
must never falter. No argument	must	lead you astray. Never listen	114
in fighting against Man, we	must	not come to resemble him	133
adopt his vices. No animal	must	ever live in a house	134
And, above all, no animal	must	ever tyrannise over his own	136
are all brothers. No animal	must	ever kill any other animal	137
For that day we all	must	labour, Though we die before	173

Table 4 displays that 7 occurrences out of 26 of the modal *must* are indicative in the production of pure persuasion.

Another example of using the obligation modals to achieve pure persuasion can be found in the following words:

‘Ribbons’, he said, *should be* considered as clothes, which are the mark of a human being. All animals *should go* naked. (Orwell, 1944, p. 20)

Snowball tries to persuade the animals that ribbons which some of them used to wear

are forbidden now since they are considered clothes which are considered to be a *mark of a human being*. In doing so, Snowball uses the obligation modal ‘should’ in *ribbons should be considered as clothes* and *all animals should go naked* to reflect the necessity of removing such ribbons. The obligation modal *should* is preceded by the positive quantifier *all* to generalize the process of prohibition in order to include all animals without any exception. The following table presents a concordance of the modal *should*.

Table 5

A concordance of Should

SHOULD.....TF (33)			
Indicative Occurrences (2)			
Context	Word	Context	Line
market days? Ribbons? he said?	should	be considered as clothes, which	297
a human being. All animals	should	go naked.? When Boxer heard	298

Table 5 demonstrates that 2 occurrences out of 33 of the modal *should* are indicative in the production of pure persuasion.

Obligation modality is also used to produce manipulative persuasion. Notice the following:

Remember, comrades, there *must* be no alteration in our plans: They shall be carried out to the day. Forward, comrades! Long live the windmill! Long live Animal Farm. (Orwell, 1944, p. 63)

Napoleon is talking to the other animals after the destruction of the windmill. He uses the obligation modal *must* in *there must be no alteration in our plans* to make them certain of their ability to build another windmill. He narrows the gap between him as the leader of the farm and the other animals by using the word *comrades* in an attempt to show that both of them share the same fate. Napoleon’s use of the obligation modal *must* serves to manipulate the animals to work day and night in order to rebuild the windmill. The following table presents a concordance of the modal *must*.

Table 6
A concordance of manipulative Must

MUST.....TF (26)			
Indicative Occurrences (2)			
Context	Word	Context	Line
The needs of the windmill	must	override everything else, he said	966
so easily. Remember, comrades, there	must	be no alteration in our	1100

Table 6 shows that 2 occurrences out of 26 of the modal *must* are indicative in the production of manipulative persuasion.

Truth Modality. The truth modal *will* is used to produce pure and manipulative persuasion. Consider the following extract:

You young porkers who are sitting in front of me, every one of you *will* scream your lives out at the block within a yearyou, Boxer, the very day that those great muscles of yours

lose their power, Jones *will* sell you to the knacker, who *will* cut your throat and boil you down for the foxhounds. (Orwell, 1944, p. 10)

The use of the truth modal *will* in *you will scream your lives out at the block within a year* and *Jones will sell you to the Knacker, who will cut your throat and boil you down* signifies to reflect a high level of certitude and serves to persuade the animals of the expected suffering under Jones’ regime if they remain silent. Old Major tries to

communicate that if the animals do not carry out what he is going to deliver, they will not escape the atrocities of Mr. Jones. He tries to motivate them to rebel against Mr. Jones in order to end their suffering and toil. The phrases *scream your lives* and *cut your throat*, which follow the modal *will*, together with the verb *boil* in *boil you down* function

to arouse their fear since these phrases carry torture-related verbs: *scream*, *cut*, and *boil*. These verbs carry the connotative meanings of death and suffering, which, in turn, forces them to do their best in order to remove Mr. Jones. The following table presents a concordance of the modal *will*.

Table 7
A concordance of persuasive Will

WILL.....TF (36)			
Indicative Occurrences (7)			
Context	Word	Context	Line
at a year old? you	will	never see one of them	91
me, every one of you	will	scream your lives out at	98
yours lose their power, Jones	will	sell you to the knacker	101
you to the knacker, who	will	cut your throat and boil	101
not know when that Rebellion	will	come, it might be in	109
that sooner or later justice	will	be done. Fix your eyes	110
do not need sugar. You	will	have all the oats and	230

Table 7 shows that 7 occurrences out of 36 of the modal *will* are indicative in the production of pure persuasion.

The truth modal *will* is also employed to produce manipulative persuasion. Notice the following extract by Napoleon, “This very morning we begin rebuilding the windmill, and we *will* build all through the winter, rain or shine. We *will* teach this miserable traitor that he cannot undo our work so easily” (Orwell, 1944, p. 63). Here, Napoleon is talking to the animals after the destruction of the windmill. He tries to motivate the animals to rebuild it, pointing out that Snowball is the only one

who is responsible for this destruction. To manipulate them into working again, Napoleon uses the truth modal *will* in *we will build all through winter* and *we will teach this miserable traitor that he cannot undo our work, so easily*. Napoleon’s use of the truth modal *will* has two functions: to emphasize Snowball’s treachery and to stimulate the animals’ potential capabilities to rebuild the windmill. The modal *will* here indicates credibility and certitude of doing the job. The connection between the first person plural pronoun *we* and the truth modal *will* serves to prove closeness and intimacy between Napoleon and the

other animals. Through using the modal *will*, Napoleon attempts to manipulate the animals into accepting both Snowball's treachery and his decision to rebuild the windmill. Notice the following table.

Table 8
A concordance of manipulative Will

WILL.....TF (36)			
Indicative Occurrences (4)			
Context	Word	Context	Line
rebuilding the windmill, and we	will	build all through the winter	1099
winter, rain or shine. We	will	teach this miserable traitor that	1099
two years! ? What matter? We	will	build another windmill. We will	1622
will build another windmill. We	will	build six windmills if we	1622

Table 8 shows that 4 occurrences out of 36 of the modal *will* are indicative in the production of manipulative persuasion.

are employed in Orwell's *Animal Farm* to achieve persuasion (*I*, inclusive *we*, *must*, *should*, and *will*) or manipulation (exclusive *we*, *must*, and *will*). Table 9 below adds more clarification.

DISCUSSION

Findings reveal that pronouns and modals

Table 9
Linguistic manifestations and ideological functions of pronouns and modals and their frequencies in *Animal Farm*

Word Type	Linguistic Manifestation	Ideological Function	Total Frequency	Indicative Occurrences	
Pronouns	I	Persuasion	82	10	
	We (inclusive)	Persuasion	59	12	
	We (exclusive)	Manipulation	64	10	
Modality	Obligation	Must	Persuasion	26	7
			Manipulation	26	2
	Should	Persuasion	33	2	
	Truth	Will	Persuasion	36	7
			Manipulation	36	4

Table 9 clarifies that pronouns and modality are utilized in the discourse of *Animal Farm* as carriers of both persuasion and manipulation. The table shows that the first person singular pronoun *I* occurs 82 times, but only 10 occurrences are indicative in the realization of persuasion. The first person plural pronoun *we* has a frequency of 59 when it is used inclusively, and occurs 64 times when it is employed exclusively; only 12 and 10 occurrences are indicative in carrying either manipulative or persuasive ideologies, respectively. In the same vein, the obligation modals *must* and *should* have the total frequency of 26 and 33, respectively; yet the indicative occurrences for each modal are 9 and 2, respectively. Likewise, the truth modal *will* has the total frequency of 36; 7 of which are employed to convey a persuasive ideology, whereas 4 occurrences are utilized to channel a manipulative ideology.

The findings obtained from the analysis and summarized in Table 9 above demonstrate the different ideologies communicated by the pronouns and modality under investigation. The identification of the type of ideology as persuasive and/or manipulative is entirely based on the interpretation linguistically conducted to the contextual environment in which each function word occurs in the discourse of the novel. As alluded earlier, the key word in context option offered by concordance has the task of identifying these different contexts, which are discursively interpreted by linking the formal linguistic features of the novel with both the interpersonal interaction

between discourse participants and the sociopolitical contexts of discourse. This, in light of Fairclough's (1989) three stages of critical discourse analysis, represents the reciprocal tripartite relationship between texts, interaction and contexts.

The analysis demonstrates that pronouns and modality are conduits of specific ideologies. In many conversational situations in the discourse of the novel, pronouns and modality go beyond their mere grammatical functions and prove useful in communicating particular ideological meanings. These meanings usually target the benefits of those in power. This ideological weight of such linguistic devices goes in conformity with Fowler's (1996) argument that each single word in language is ideological. That is, all lexis are ideological in nature in the sense that they reflect the cognitive background of their users. Such a cognitive background is called "store of knowledge" (van Dijk, 2004, p. 46), and is always shaped and reshaped by the individual's ideology concerning the different aspects of life. As such, the use of specific vocabulary, including pronouns and modality, is motivated by the general schemata of the language users; they usually use language in a way that goes in conformity with their store of knowledge and avoid using language in a way that challenges their cognitive beliefs and attitudes. This ideological weight of lexis is also accentuated by Fairclough (1989) who postulates that the way vocabulary is used, consumed and structured is ideologically based.

Thus, writers/speakers can encode their ideology in vocabulary through wording, meaning relations, metaphor, or euphemism. Consequently, pronouns and modality in the discourse of the selected novel go beyond their grammatical functions towards further discursive functions constituting persuasion and/or manipulation.

Furthermore, ideology is always there in language, and agency is one of the linguistic conduits of such ideology. This reconciles with Fowler's (1991) argument that language is ideology-laden means of communication. Each communicative act has a purpose that serves the benefit of discourse participants. This sheds light on an important idea; that is, the word, being the smallest syntactic unit, can carry further meanings and communicate different ideologies rather than what is conveyed by its surface propositional meaning. It is analytically evidenced that it is not only content words that can carry ideological significance in discourse. However, function words are also contributive in this regard. The analysis shows that pronouns and modality go beyond their semantic functions of conveying their prescribed grammatical function, such as the deictic function, truthfulness, and certitude, towards further pragmatic functions that add to the general understanding of the ideologies encoded in discourse.

It is analytically evidenced that the application of a frequency-based analysis to the critical study of discourse is relevant and contributes to the ideological interpretation of discourse. This manifests

itself in the obtained results shown in the analysis, which clarify that despite the high frequencies of the pronouns and modals under investigation, only few occurrences are indicative in the realization of both persuasion and manipulation in the selected novel. As demonstrated in the analysis, the use of concordance proves useful in the linguistic investigation of texts, particularly those that contains a gigantic number of words such as the literary ones. The analytical part conducted by the frequency analysis in the current study shows that not only high frequency words are indicative in communicating ideologies, but also low frequency words are of great ideological weight in channeling ideologies of their users. Obviously, the frequency analysis makes it possible to process and examine large data for a variety of purposes and to investigate questions which could not feasibly be answered if the analysis was carried manually. This has previously been accentuated by Kennedy's (1998) contention that the application of computer-aided frequency analysis to large data texts allows analysts to monitor more credible and authentic results than those realized by a mere manual analysis.

CONCLUSION

This paper applied a computer-aided critical discourse analysis to test the hypothesis that function words (pronouns and modals) can go beyond their semantic functions towards further pragmatic purposes. The analysis has linguistically evidenced that pronouns and modals are ideology carriers

that convey particular pragmatic functions. These intended pragmatic functions revolve around specific ideologies such as persuasion, manipulation, competency, and dominance (research question No. 1). The analysis clarified that some of the pronouns and modals under investigation are ideologically employed in the discourse of the selected novel to convey persuasion (the first person singular pronoun *I* and the obligation modal *Should*), whereas the other function words discussed in this study are used to communicate both persuasion and manipulation (the first person plural pronoun *We*, the obligation modal *Must*, and the truth modal *Will*; research question No. 2).

The analysis also showed that a computer-based frequency analysis proves useful in discourse studies in general and in linguistic analyses in particular. This computational approach helps arrive at credible and accurate results during the process of data analysis, which, in turn, helps to uncover the hidden ideologies beyond the use of each single word in the text under investigation. The frequency analysis conducted in this study also accentuates the ideological weight pronouns and modals convey in texts, either individually, by the number of occurrences they have, or in combination with other neighboring words, by the contextual environment wherein they occur. The analysis further demonstrated that in order to understand language, one has to deconstruct its elements, i.e. words, phrases, and sentences in order to uncover the ideological purpose beyond

each single word used in a particular context (Khafaga, 2017a, 2017b). Obviously, such a process of decoding meanings is analytically strengthened by the application of the computer work in corpus linguistics (research questions No. 3 and 4).

Finally, this paper recommends further applications of computer software programs to discourse studies. This could yield more credible and accurate results to the linguistic study of texts than those approached by means of the traditional linguistic analysis, particularly in large data texts. Pedagogically, the paper recommends the use and application of computer-assisted tools in the EFL and TESOL contexts. This is anticipated to contribute to the teaching methods employed in the EFL courses delivery, which, in turn, serves to produce better learning outcomes in the process of teaching and learning literary texts.

ACKNOWLEDGEMENT

The researcher would like to thank Prince Sattam bin Abdulaziz University in Saudi Arabia alongside its Scientific Research Deanship for all technical support it has provided to complete this study.

REFERENCES

- Bolton, W. F. (1984). *The language of 1984. Orwell's English and ours*. Basil Blackwell Publisher Limited.
- Edelman, M. (2001). *The politics of misinformation*. Cambridge University Press. <https://doi.org/10.1017/CBO9780511612640>
- Fairclough, N. (1989). *Language and power* (2nd ed.). Longman.

- Fairclough, N. (1995). *Critical discourse analysis: The critical study of language*. Longman.
- Fairclough, N., & Wodak, R. (1997). Critical discourse analysis. In T. van Dijk (Ed.), *Discourse as social interaction: Discourse studies: A multidisciplinary introduction* (Vol. 2, pp. 258-284). Sage.
- Flowerdew, J. (1993). Concordancing as a tool in course design. *System*, 21(2), 231-244. [https://doi.org/10.1016/0346-251X\(93\)90044-H](https://doi.org/10.1016/0346-251X(93)90044-H)
- Fowler, R. (1981). *Literature as social discourse*. Batsford Academic and Educational Ltd.
- Fowler, R. (1991). *Language in the news: Discourse and ideology in the press*. Routledge.
- Fowler, R. (1996). On critical linguistics. In C. R. Caldas-Coulthard & M. Coulthard (Eds.), *Texts and practices: Readings in critical discourse analysis* (pp. 15-31). Routledge.
- Halliday, M. A. K. (1985). *An introduction to functional grammar*. Edward.
- Hockey, S. (1980). *A guide to computer applications in the humanities*. The Johns Hopkins University Press.
- Kennedy, G. (1998). *An introduction to corpus linguistics*. Longman.
- Khafaga, A. (2017a). Linguistic manipulation of political myth in Margaret Atwood's *The Handmaid's Tale*. *International Journal of English Linguistics*, 7(3), 189-200. <https://doi.org/10.5539/ijel.v7n3p189>
- Khafaga, A. (2017b). Discourse interpretation: A deconstructive reader-oriented approach to critical discourse analysis. *International Journal of Applied Linguistics & English Literature*, 6(2), 138-146. <https://doi.org/10.7575/aiac.ijalel.v.6n.2p.138>
- Khafaga, A. (2019). Linguistic representation of power in Edward Bond's *Lear*: A lexico-pragmatic approach to critical discourse analysis. *International Journal of English Linguistics*, 9(6), 404-420. <https://doi.org/10.5539/ijel.v9n6p404>
- Khafaga, A., & Aldawsari, M. (2021). Ideological agency in Edward Bond's *Lear*. *Applied Linguistics Research Journal*, 5(2), 11-23. <https://doi.org/10.14744/alrj.2021.63496>
- Khafaga, A., & Shaalan, I. (2020). Using concordance to decode the ideological weight of lexis in learning narrative literature: A computational approach. *International Journal of Advanced Computer Science and Applications*, 11(4), 246-252. <https://doi.org/10.14569/IJACSA.2020.0110433>
- Krieger, D. (2003). Corpus linguistics: What it is and how it can be applied to teaching. *The Internet TESL Journal*, IX(3), 123-141.
- Orwell, G. (1944). *Animal farm*. Penguin Books Ltd.
- Palmer, F. R. (1986). *Mood and modality*. Cambridge University Press.
- Palmer, F. R. (1990). *Modality and the English modals*. Longman.
- Pariña, J., & de Leon, K. (2014). A stylistic analysis of the use of modality to identify the point of view in a short story. *3L The Southeast Asian Journal of English Language Studies*, 20(2), 91-10. <https://doi.org/10.17576/3L-2014-2002-08>
- Partington, A. (2003). *The linguistics of political argument: The spin-doctor and the wolf-park at the White House*. Routledge. <https://doi.org/10.4324/9780203218259>
- Peachey, N. (2005). *Concordancers in ELT*. Teaching English. <http://www.teachingenglish.org.uk/think/articles/concordancers-elt>
- Pinto, D. (2004). Indoctrinating the youth of post-war Spain: A discourse analysis of a Fascist Civics textbook. *Discourse & Society*, 15(5), 649-667. <https://doi.org/10.1177/0957926504045036>

- Quirk, R., Greenbaum S., Leech, G., & Svartvik, G. (1985). *A comprehensive grammar of the English Language*. Longman.
- van Dijk, T. A. (1993). Principles of critical discourse analysis. *Discourse & Society*, 4(2), 249-283. <https://doi.org/10.1177/0957926593004002006>
- van Dijk, T. A. (1995). Ideological discourse analysis. In E. Ventola & A. Solin (Eds.), *Interdisciplinary approaches to discourse analysis* (pp. 135-161). New Courant.
- van Dijk, T. A. (1996). Discourse, power and access. In C. Caldas-Coulthard, & M. Coulthard (Eds.), *Texts and practices: Readings in critical discourse analysis* (pp. 84-104). Routledge.
- van Dijk, T. A. (1997a). Political discourse and racism: Describing others in western parliaments. In S. H. Riggins (Ed.), *The language and politics of exclusion: Others in discourse* (pp. 31-64). Sage.
- van Dijk, T. A. (Ed.). (1997b). Discourse as interaction in society. In *Discourse as social Interaction: Discourse studies: A multidisciplinary introduction* (Vol. 2, pp. 1-37). Sage.
- van Dijk, T. A. (2000). On the analysis of parliamentary debates on immigration. In M. Reisigl & R. Wodak (Eds.), *The semiotics of racism: Approaches to critical discourse analysis* (pp. 85-103). Passagen Verlag.
- van Dijk, T. A. (2001a). Critical discourse analysis. In D. Schiffrin, D. Tannan, & H. Hamilton (Eds.), *The handbook of discourse analysis* (pp. 352-392). Blackwell.
- van Dijk, T. A. (2001b). Discourse, ideology and context. *Folia Linguistica*, 35(1-2), 11-40. <https://doi.org/10.1515/flin.2001.35.1-2.11>
- van Dijk, T. A. (2004). *Communicating ideologies*. Academic Press.
- Weiss, G., & Wodak, R. (Eds.). (2003). *Critical discourse analysis: Theory and interdisciplinarity*. Palgrave Macmillan Ltd. <https://doi.org/10.1057/9780230514560>
- Widdowson, H. G. (2007). *Discourse analysis*. Oxford University Press.
- Wiechmann D., & Fuhs, S. (2006). Concordancing software. *Corpus Linguistics And Linguistic Theory*, 2(2), 107-127. <https://doi.org/10.1515/CLLT.2006.006>
- Wodak, R., & Meyer, M. (Eds.). (2001). *Methods of critical discourse analysis*. Sage. <https://doi.org/10.4135/9780857028020>
- Wood, L., & Kroger, R. (2000). *Doing discourse analysis: Methods for studying action in talk and text*. Sage Publications, Inc.
- Wood, T. (2004). Ideology: The power of prior discourse. In P. Martin, N. A. JoAnne, & T. A. van Dijk (Eds.), *Communicating ideologies: Multidisciplinary perspectives on language, discourse, and social practice* (pp. 39-58). Peter Lang.
- Yavuz, F. (2014). The use of concordancing programs in ELT. *Procedia- Social and Behavioral Sciences*, 116, 2312-2315. <https://doi.org/10.1016/j.sbspro.2014.01.565>



REFEREES FOR THE PERTANIKA JOURNAL OF SOCIAL SCIENCES AND HUMANITIES

VOL. 29 (3) SEP. 2021

The Editorial Board of Pertanika Journal of Social Sciences and Humanities wishes to thank the following:

Abdolmohammad Movahhed
(PGU, Iran)

Hicham Lahlou
(USM, Malaysia)

Md. Safwan Samsir
(UMS, Malaysia)

Abdul Rasid Jamian
(UPSI, Malaysia)

Hidayah Mohd Fadzil
(UM, Malaysia)

Mohamad Ibrani Shahrinin
Adam Assim
(UPM, Malaysia)

Adam Abdul Malik
(USM, Malaysia)

Julina Ismail @ Kamal
(USM, Malaysia)

Mohamad Zaidi Abdul Rahman
(UM, Malaysia)

Aimillia Mohd Ramli
(IIUM, Malaysia)

Junaidah Yusof
(UTM, Malaysia)

Mohammad Mujaheed Hassan
(UPM, Malaysia)

Ali Md. Nadzalan
(UPSI, Malaysia)

Kamarul Faizal Hashim
(UD, UAE)

Mohammadreza Esfandiari
(IAU, Iran)

Alla Baksh Mohamed Ayub Khan
(USM, Malaysia)

Kean Wah Lee
(Nottingham, Malaysia)

Mohd Faizal Kasmani
(USIM, Malaysia)

Ang Pei Soo
(UM, Malaysia)

Kesumawati Abu Bakar
(UKM, Malaysia)

Mohd Khairie Ahmad
(UUM, Malaysia)

Azmi Aziz
(UKM, Malaysia)

Kiranjit Kaur
(UITM, Malaysia)

Mohd Muzhafar Idrus
(USIM, Malaysia)

Bee Wah Tan
(UOW Malaysia KDU, Malaysia)

Ku Hasnita Ku Samsu
(UPM, Malaysia)

Mohd Rahimi Che Jusoh
(USM, Malaysia)

Brigitte Smit
(UNISA, South Africa)

Lau Poh Hock Evan
(UNIMAS, Malaysia)

Mohd. Yuszaidy Mohd Yusoff
(UKM, Malaysia)

Choon Keong Tan
(UMS, Malaysia)

Layla Hasan AlSaqer
(UOB, Bahrain)

Muhammad Danial Azman
(UM, Malaysia)

Fadhli Muhibuddin
(UMPO, Indonesia)

Lee Geok Imm
(UPM, Malaysia)

Nkaepe E. E. Olaniyi
(Kaplan Inc., UK)

Ghulam Shabbir
(FCC, Pakistan)

M Sultana Alam
(UTAR, Malaysia)

Nooraida Yakob
(USM, Malaysia)

Hasherah Mohd Ibrahim
(UKM, Malaysia)

Mahadi Bahari
(UTM, Malaysia)

Nor Azlah Sham Rambely
(UUM, Malaysia)

Hasrina Mustafa
(USM, Malaysia)

Mahazan Abdul Mutalib
(USIM, Malaysia)

Nor Aznin Abu Bakar
(UUM, Malaysia)

Hendun Abd Rahman Shah
(USIM, Malaysia)

Makmor Tumin
(UM, Malaysia)

Nor Azrita Mohamed Zain
(IIUM, Malaysia)

Nor Hashima Hashim
(UiTM, Malaysia)

Nur Aira Abdrahim
(UPM, Malaysia)

Nurul Hamiruddin Salleh
(IIUM, Malaysia)

Omar M. Abdullah
(UOA, Iraq)

Rabia Ali
(IIU, Pakistan)

Rashid Ali Farrah Diebaa
(IIUM, Malaysia)

Rashidah Mamat
(UUM, Malaysia)

Reyhan Sabri
(University of Sharjah, UAE)

Rhocchie Avelino E. Matienzo
(UST, Philippines)

Rohaiza Rokis
(IIUM, Malaysia)

Roslina Abu Bakar
(UPM, Malaysia)

Rozita Ibrahim
(UKM, Malaysia)

Shaidatul Akma Adi Kasuma
(USM, Malaysia)

Shanti Chandran Sandaran
(UTM, Malaysia)

Sharifah Rohayah Sheikh
Dawood
(USM, Malaysia)

Shazlin Shahrudin
(USM, Malaysia)

Siti Aisyah Panatik
(UTM, Malaysia)

Siti Katijah Johari
(UMS, Malaysia)

Siti Noranizahhafizah Boyman
(UPSI, Malaysia)

Siti Norbaya Azizan
(Sunway University, Malaysia)

Sofiah Kadar Khan
(QUIP, Malaysia)

Sok Gee Chan
(UM, Malaysia)

Sulong Jasni
(USM, Malaysia)

Suzana Muhammad
(USM, Malaysia)

Syed Zamanat Abbas
(PSAU, Saudi Arabia)

Tai Shzee Yew
(UTAR, Malaysia)

Trent Larson
(NCAT, USA)

Valerie M. Hudson
(TAMU, USA)

Velan Kunjuraman
(UMK, Malaysia)

Zaiton Hassan
(UNIMAS, Malaysia)

Zanaton H Iksan
(UKM, Malaysia)

Zuliza Mohd Kusrin
(UKM, Malaysia)

UKM – Universiti Kebangsaan Malaysia
UM – Universiti Malaya
UMK – Universiti Malaysia Kelantan
UNIMAS – Universiti Malaysia Sarawak
UMS – Universiti Malaysia Sabah
NCAT – North Carolina Agricultural and Technical State University
TAMU – Texas A&M University
PSAU – Prince Sattmam Bin Abdulaziz University
IAU – Islamic Azad University
PGU – Persian Gulf University
UOA – University Of Anbar
UPM – Universiti Putra Malaysia
UTAR – Universiti Tunku Abdul Rahman
IIU – International Islamic University
Nottingham – University of Nottingham Malaysia

UPSI – Universiti Pendidikan Sultan Idris
USIM – Universiti Sains Islam Malaysia
UUM – Universiti Utara Malaysia
USM – Universiti Sains Malaysia
IIUM – International Islamic University Malaysia
UTM – Universiti Teknologi Malaysia
UST – University of Santo Tomas
UNITAR – Universiti Tunku Abdul Rahman
UMPO – Universitas Muhammadiyah Ponorogo
QUIP – Quest International University Perak
UNISA – University of South Africa
UD – University of Dubai
UiTM – Universiti Teknologi MARA
UOB – University of Bahrain
FCC – Forman Christian College

While every effort has been made to include a complete list of referees for the period stated above, however if any name(s) have been omitted unintentionally or spelt incorrectly, please notify the Chief Executive Editor, *Pertanika* Journals at executive_editor.pertanika@upm.edu.my

Any inclusion or exclusion of name(s) on this page does not commit the *Pertanika* Editorial Office, nor the UPM Press or the University to provide any liability for whatsoever reason.

Pertanika Journal of Social Sciences & Humanities

Our goal is to bring high-quality research to the widest possible audience

INSTRUCTIONS TO AUTHORS

(REGULAR ISSUE)

(Manuscript Preparation & Submission Guide)

Revised: December 2020

Please read the *Pertanika* guidelines and follow these instructions carefully. The Chief Executive Editor reserves the right to return manuscripts that are not prepared in accordance with these guidelines.

MANUSCRIPT PREPARATION Manuscript Types

Pertanika accepts submission of mainly 4 types of manuscripts

- that have not been published elsewhere (including proceedings)
- that are not currently being submitted to other journals

1. Regular article

Regular article is a full-length original empirical investigation, consisting of introduction, methods, results, and discussion. Original research work should present new and significant findings that contribute to the advancement of the research area. *Analysis and Discussion* must be supported with relevant references.

Size: Generally, each manuscript is **not to exceed 6000 words** (excluding the abstract, references, tables, and/or figures), a maximum of **80 references**, and **an abstract of less than 250 words**.

2. Review article

A review article reports a critical evaluation of materials about current research that has already been published by organising, integrating, and evaluating previously published materials. It summarises the status of knowledge and outlines future directions of research within the journal scope. A review article should aim to provide systemic overviews, evaluations, and interpretations of research in a given field. Re-analyses as meta-analysis and systemic reviews are encouraged.

Size: Generally, it is expected **not to exceed 6000 words** (excluding the abstract, references, tables, and/or figures), a maximum of **80 references**, and **an abstract of less than 250 words**.

3. Short communications

Each article should be timely and brief. It is suitable for the publication of significant technical advances and maybe used to:

- reports new developments, significant advances and novel aspects of experimental and theoretical methods and techniques which are relevant for scientific investigations within the journal scope;
- reports/discuss on significant matters of policy and perspective related to the science of the journal, including 'personal' commentary;
- disseminates information and data on topical events of significant scientific and/or social interest within the scope of the journal.

Size: It is limited to **3000 words** and have a maximum of **3 figures and/or tables, from 8 to 20 references, and an abstract length not exceeding 100 words**. The information must be in short but complete form and it is not intended to publish preliminary results or to be a reduced version of a regular paper.

4. Others

Brief reports, case studies, comments, concept papers, letters to the editor, and replies on previously published articles may be considered.

Language Accuracy

Pertanika emphasises on the linguistic accuracy of every manuscript published. Articles can be written in **English** or **Bahasa Malaysia** and they must be competently written and presented in clear and concise grammatical English/Bahasa Malaysia. Contributors are strongly advised to have the manuscript checked by a colleague with ample experience in writing English manuscripts or a competent English language editor. For articles in Bahasa Malaysia, **the title, abstract, and keywords should be written in both English and Bahasa Malaysia**.

Author(s) **may be required to provide a certificate** confirming that their manuscripts have been adequately edited. **All editing costs must be borne by the authors.**

Linguistically hopeless manuscripts will be rejected straightaway (e.g., when the language is so poor that one cannot be sure of what the authors are really trying to say). This process, taken by authors before submission, will greatly facilitate reviewing, and thus, publication.

MANUSCRIPT FORMAT

The paper should be submitted in **one-column format** with 1.5 line spacing throughout. Authors are advised to use Times New Roman 12-point font and *MS Word* format.

1. Manuscript Structure

The manuscripts, in general, should be organised in the following order:

Page 1: Running title

This page should **only** contain the running title of your paper. The running title is an abbreviated title used as the running head on every page of the manuscript. The running title **should not exceed 60 characters, counting letters and spaces.**

Page 2: Author(s) and Corresponding author's information

General information: This page should contain the **full title** of your paper **not exceeding 25 words**, with the name of all the authors, institutions and corresponding author's name, institution and full address (Street address, telephone number (including extension), handphone number, and e-mail address) for editorial correspondence. **The corresponding author must be clearly indicated with a superscripted asterisk symbol (*).**

Authors' name: The names of the authors should be named **in full without academic titles**. For Asian (Chinese, Korean, Japanese, Vietnamese), please write first name and middle name before surname (family name). The last name in the sequence is considered the surname.

Authors' addresses: Multiple authors with different addresses must indicate their respective addresses separately by superscript numbers.

Tables/figures list: A list of the number of **black and white/colour figures and tables** should also be indicated on this page. See "**5. Figures & Photographs**" for details.

Example (page 2):

The Mediating Role of Cognitive Emotion Regulation Strategies in the Development of Social Behavior among Adolescents

Samsilah Roslan^{1*}, Noorhayati Zakaria², Siaw Yan-Li³ and Noorlila Ahmad¹

¹Department of Foundations of Education, Faculty of Educational, Studies, Universiti Putra Malaysia, 43400 Serdang, Malaysia

²Politeknik Banting, 42700 Banting, Selangor, Malaysia

³Department of Educational Psychology and Counseling, Faculty of Education, Universiti Malaya, 50603 Kuala Lumpur, Malaysia

E-mail addresses:

samsilah@upm.edu.my (Samsilah Roslan)

znorhayati@polibanting.edu.my (Noorhayati Zakaria)

yanli@um.edu.my (Siaw Yan-Li)

noorlila_ahmad@yahoo.com (Noorlila Ahmad)

*Corresponding author

List of Table/Figure: Table 1.

Figure 1.

Page 3: Abstract

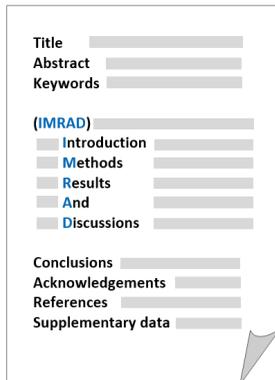
This page should **repeat** the **full title** of your paper with only the **Abstract**, usually in one paragraph and **Keywords**.

Keywords: **Not more than 8 keywords in alphabetical order** must be provided to describe the content of the manuscript.

For articles in Bahasa Malaysia, **the title, abstract and keywords should be written in both English and Bahasa Malaysia.**

Page 4: Text

A regular paper should be prepared with the headings *Introduction, Materials and Methods, Results and Discussions, Conclusions, Acknowledgements, References, and Supplementary data* (if any) in this order. The literature review may be part of or separated from the *Introduction*.



MAKE YOUR ARTICLES AS CONCISE AS POSSIBLE

Most scientific papers are prepared according to a format called IMRAD. The term represents the first letters of the words Introduction, Materials and Methods, Results, And, Discussion. It indicates a pattern or format rather than a complete list of headings or components of research papers; the missing parts of a paper are: Title, Authors, Keywords, Abstract, Conclusions, and References. Additionally, some papers include Acknowledgments and Appendices.

The Introduction explains the scope and objective of the study in the light of current knowledge on the subject; the Materials and Methods describes how the study was conducted; the Results section reports what was found in the study; and the Discussion section explains meaning and significance of the results and provides suggestions for future directions of research. The manuscript must be prepared according to the Journal's instructions to authors.

2. Levels of Heading

Level of heading	Format
1 st	LEFT, BOLD, UPPERCASE
2 nd	Flush left, Bold, Capitalise each word
3 rd	Bold, Capitalise each word, ending with .
4 th	Bold italic, Capitalise each word, ending with .

3. Equations and Formulae

These must be set up clearly and should be typed double-spaced. Numbers identifying equations should be in square brackets and placed on the right margin of the text.

4. Tables

- All tables should be prepared in a form consistent with recent issues of *Pertanika* and should be numbered consecutively with Roman numerals (Table 1, Table 2).
- A brief title should be provided, which should be shown at the top of each table (APA format):

Example:

Table 1

Reliability of subscales of the job satisfaction questionnaire

- Explanatory material should be given in the table legends and footnotes.
- Each table should be prepared on a new page, embedded in the manuscript.
- Authors are advised to keep backup files of all tables.

**** Please submit all tables in Microsoft word format only, because tables submitted as image data cannot be edited for publication and are usually in low-resolution.**

5. Figures & Photographs

- Submit an original figure or photograph.
- Line drawings must be clear, with a high black and white contrast.
- Each figure or photograph should be prepared on a new page, embedded in the manuscript for reviewing to keep the file of the manuscript under 5 MB.
- These should be numbered consecutively with Roman numerals (Figure 1, Figure 2).
- Provide a brief title, which should be shown at the bottom of each table (**APA format**):

Example: *Figure 1. Mean willingness to pay (WTP) for a clean environment*

- If a figure has been previously published, acknowledge the original source, and submit written permission from the copyright holder to reproduce the material.
- Authors are advised to keep backup files of all figures.

**** Figures or photographs must also be submitted separately as TIFF or JPEG, because figures or photographs submitted in low-resolution embedded in the manuscript cannot be accepted for publication. For electronic figures, create your figures using applications that are capable of preparing high-resolution TIFF files.**

6. Acknowledgement

Any individuals and entities who have contributed to the research should be acknowledged appropriately.

7. References

References begin on their own page and are listed in alphabetical order by the first author's last name. Only references cited within the text should be included. All references should be in 12-point font and double-spaced. If a Digital Object Identifier (DOI) is listed on a print or electronic source, **it is required to include the DOI in the reference list.** Use Crossref to find a DOI using author and title information.

NOTE: When formatting your references, please follow the **APA-reference style** (7th edition) (refer to the examples). Ensure that the references are strictly in the journal's prescribed style, failing which your article will **not be accepted for peer-review**. You may refer to the *Publication Manual of the American Psychological Association* (<https://apastyle.apa.org/>) for further details.

Examples of reference style are given below:

Books		
	Insertion in text	In reference list
Book/E-Book with 1-2 authors	<p>Information prominent' (the author's name is within parentheses):</p> <p>... (Bales, 2017)</p> <p>... (Mahat & Ali, 2020)</p> <p>... Or</p> <p>'Author prominent' (the author's name is outside the parentheses):</p> <p>Bales (2017)...</p> <p>Mahat and Ali (2020) ...</p>	<p>Bales, S. (2017). <i>Social justice and library work: A guide to theory and practice</i>. Chandos Publishing. https://doi.org/10.1016/C2016-0-00181-X</p> <p>Mahat, F., & Ali, N. A. (2020). <i>Fundamental of Islamic finance</i>. UPM Press.</p>
Book/E-Book with 3 or more authors	<p><i>For all in-text references, list only the first author's family name and followed by 'et al.'</i></p> <p>Information prominent' (the author's name is within parentheses):</p> <p>... (Meera et al., 2012)</p> <p>... Or</p> <p>'Author prominent' (the author's name is outside the parentheses):</p> <p>Meera et al. (2012) ...</p>	<p>Meera. N., Ampofo-Boateng, K., & Abd Latif, R. (2012). <i>Coaching athletes with disabilities</i>. UPM Press.</p>
Book/E-Book with more than 20 authors		<p>For books with more than 20 authors, please follow the guidelines for journal articles with more than 20 authors.</p>
Chapter in an edited Book/E-Book	<p>Information prominent' (the author's name is within parentheses):</p> <p>... (Nagamine et al., 2018) ...</p> <p>... (Van der Port, 2015) ...</p> <p>Or</p> <p>'Author prominent' (the author's name is outside the parentheses):</p> <p>Nagamine et al. (2018) ...</p> <p>Van der Port (2015) ...</p>	<p>Nagamine, T., Fujieda, Y., & Iida, A. (2018) The role of emotions in reflective teaching in second language classrooms: Felt sense, emotionality, and practical knowledge acquisition. In J. Martinez Agudo (Ed.), <i>Emotions in second language teaching</i> (pp. 145-163). Springer, Cham. https://doi.org/10.1007/978-3-319-75438-3_9</p> <p>Van de Port, M. (2015). Reading Bruno Latour in Bahia. In M. Jackson & A. Piette (Eds.), <i>What is existential anthropology?</i> Berghahn Books.</p>

	Insertion in text	In reference list
Editor	<p>Information prominent' (the author's name is within parentheses): ... (Machado & Davim, 2014) (Sheldon & Turner-Vorbeck, 2019) ... Or 'Author prominent' (the author's name is outside the parentheses): Machado and Davim (2014) ... Sheldon and Turner-Vorbeck (2019) ...</p>	<p>Machado, C., & Davim, J. P. (Eds). (2014). <i>Work organization and human resource management</i>. Springer, Cham. https://doi.org/10.1007/978-3-319-06376-8</p> <p>Sheldon, S. B., & Turner-Vorbeck, T. A. (Eds.). (2019). <i>The Wiley handbook of family, school, and community relationships in education</i>. New Jersey, USA: John Wiley & Sons.</p>
Several works by the same author in the same year	<p>Information prominent' (the author's name is within parentheses): ... (Camilleri, 2018a, 2018b) ... Or 'Author prominent' (the author's name is outside the parentheses): Camilleri (2018a, 2018b) ...</p>	<p>Camilleri, M. A. (2018a). <i>Travel marketing, tourism economics and the airline product: An introduction to theory and practice</i>. Springer, Cham. https://doi.org/10.1007/978-3-319-49849-2</p> <p>Camilleri, M. A. (2018b). Understanding customer needs and wants. In <i>Travel marketing, tourism economics and the airline product: An introduction to theory and practice</i> (pp. 29-50). Springer, Cham. https://doi.org/10.1007/978-3-319-49849-2_2</p>
Journals		
Journal article with 1-2 authors	<p>Information prominent' (the author's name is within parentheses): ... (Al-Shboul & Maros, 2020) ... Or 'Author prominent' (the author's name is outside the parentheses): Al-Shboul and Maros (2020) ...</p>	<p>Al-Shboul, Y., & Maros, M. (2020). The high and low-context communication styles in refusal strategies by Jordanian Arabic and American English speakers. <i>Pertanika Journal of Social Sciences and Humanities</i>, 28(3), 2063-2080.</p>
Journal article with 3 or more authors	<p><i>For all in-text references, list only the first author's family name and followed by 'et al.'</i></p> <p>Information prominent' (the author's name is within parentheses): ... (Khajouei et al., 2018) (Yusop et al., 2020) ... Or 'Author prominent' (the author's name is outside the parentheses): Khajouei et al. (2018) ... Yusop et al. (2020) ...</p>	<p>Khajouei, R., Abbasi, R., & Mirzaee, M. (2018). Errors and causes of communication failures from hospital information systems to electronic health record: A record-review study. <i>International Journal of Medical Informatics</i>, 119(January), 47-53. https://doi.org/10.1016/j.ijmedinf.2018.09.004</p> <p>Yusop, F. D., Ab Ghaffar, F., Danaee, M., Firdaus, A., Hamzaid, M. A., Abu Hassan, Z. F., Senom, F., Ebrahim, N. A., Bonn, B. Y., & Chen, Y. M. (2020). Two decades of research on early career faculties (ECFs): A bibliometric analysis of trends across regions. <i>Pertanika Journal of Social Sciences and Humanities</i>, 28(1), 325-342.</p>
Journal article with more than 20	<p>Information prominent' (the author's name is within parentheses): ... (Tobler et al., 2017) ... Or 'Author prominent' (the author's name is outside the parentheses): Tobler et al. (2017) ...</p>	<p>Tobler, R., Rohrlach, A., Soubrier, J., Bover, P., Llamas, B., Tuke, J., Bean, N., Abdullah-Highfold, A., Agius, S., O'Donoghue, A., O'Loughlin, I., Sutton, P., Zilio, F., Walshe, K., Williams, A. N., Turney, C. S. M., Williams, M., Richards, S. M., Mitchell, N. ... Cooper, A. (2017). <i>Aboriginal mitogenomes reveal 50,000 years of regionalism in Australia</i>. <i>Nature</i>, 544(7649), 180-184. https://doi.org/10.1038/nature21416</p>
Journal article with an article number	<p>Information prominent' (the author's name is within parentheses): ... (De Rubeis et al., 2017) ... Or 'Author prominent' (the author's name is outside the parentheses): De Rubeis et al. (2017) ...</p>	<p>De Rubeis, J., Lugo, R. G., Witthöft, M., Sütterlin, S., Pawelzik, M. R., & Vögele, C. (2017). Rejection sensitivity as a vulnerability marker for depressive symptom deterioration in men. <i>PLoS One</i>, 12(10), Article e0185802. doi: 10.1371/journal.pone.0185802</p>
Journal article with missing information	<p>Information prominent' (the author's name is within parentheses): ... (Bajaj et al., 2014) (Jdaitawi, 2015) (Nastasa & Farcas, 2015) ...</p>	<p>Missing volume number Bajaj, G., Deepa, N., Bhat, J. S., D'Souza, D., & Sheth, P. (2014). Self-efficacy and verbal fluency — does age play a role? <i>Healthy Aging & Clinical Care in the Elderly</i>, (6), 17-24. http://dx.doi.org/10.4137/HACCE.S14292</p>

	Insertion in text	In reference list
Journal article with missing information	Or 'Author prominent' (the author's name is outside the parentheses): Bajaj et al. (2014) ... Jdaitawi (2015) ... Nastasa and Farcas (2015) ...	Missing issue number Nastasa, L. E., & Farcas, A. D. (2015). The effect of emotional intelligence on burnout in healthcare professionals. <i>Procedia - Social and Behavioral Sciences</i> , 187, 78-82. Missing page or article number Jdaitawi, M. (2015). Social connectedness, academic, non-academic behaviors related to self-regulation among university students in Saudi Arabia. <i>International Education Studies</i> , 8(2). https://doi.org/10.5539/ies.v8n2p84
Several works by the same author in the same year	Information prominent' (the author's name is within parentheses): ... (Ibrahim, 2019a, 2019b) ... Or 'Author prominent' (the author's name is outside the parentheses): Ibrahim (2019a, 2019b) ...	Ibrahim, M. H. (2019a). Capital regulation and Islamic banking performance: panel evidence. <i>Bulletin of Monetary Economics and Banking</i> , 22(1), 47-68. Ibrahim, M. H. (2019b). Oil and macro-financial linkages: Evidence from the GCC countries. <i>The Quarterly Review of Economics and Finance</i> , 72(May) 1-13. https://doi.org/10.1016/j.qref.2019.01.014
Newspaper		
Newspaper article – with an author	... (Davidson, 2018) ... Or ... Davidson (2018) ...	Davidson, J. (2018, January 9). CES 2018: Samsung vows to add artificial intelligence to everything it does. <i>Australian Financial Review</i> . https://www.afr.com/technology/ces-2018-samsung-vows-to-add-artificial-intelligence-to-everything-it-does-20180109-h0fdtd
Newspaper article – without an author	("Economics nudging," 2017). OR "Economics nudging" (2017) ... Use a shortened title (or full title if it is short) in Headline Case enclosed in double quotation marks.	Economics nudging people away from war. (2017, December 16). <i>The Age</i> , 33.
Dissertation/Thesis		
Published Dissertation or Thesis References	... (Solomon, 2016) ... Or ... Solomon (2016) ...	Solomon, M. (2016). <i>Social media and self-evaluation: The examination of social media use on identity, social comparison, and self-esteem in young female adults</i> [Doctoral dissertation, William James College]. ProQuest Dissertations Publishing. https://search.proquest.com/openview/7d66a63f277a84a64907db68ff991ba/1?pq-origsite=gscholar&cbl=18750&diss=y
Unpublished Dissertation or Thesis References	... (Curry, 2016) ... Or ... Curry (2016) ...	Curry, J. (2016). <i>A guide to educating single mothers about early gang intervention and prevention</i> (Unpublished Master's thesis). Pacific Oaks College.
Conference/Seminar Papers		
Conference proceedings published in a journal	... (Chaudhuri et al., 2017) ... Or ... Chaudhuri et al. (2017) ...	Chaudhuri, S., & Biswas, A. (2017). External terms-of-trade and labor market imperfections in developing countries: Theory and evidence. <i>Proceedings of the Academy of Economics and Economic Education</i> , 20(1), 11-16. https://search-proquest-com.elibrary.jcu.edu.au/docview/1928612180?accountid=16285
Conference proceedings published as a book chapter	... (Morgan et al., 2017) ... Or ... Morgan et al. (2017) ...	Morgan, R., Meldrum, K., Bryan, S., Mathiesen, B., Yakob, N., Esa, N., & Ziden, A. A. (2017). Embedding digital literacies in curricula: Australian and Malaysian experiences. In G. B. Teh & S. C. Choy (Eds.), <i>Empowering 21st century learners through holistic and enterprising learning: Selected papers from Tunku Abdul Rahman University College International Conference 2016</i> (pp. 11-19). Springer. https://doi.org/10.1007/978-981-10-4241-6_2

	Insertion in text	In reference list
Online	... (McDonald et al., 2019) ... Or ... McDonald et al. (2019) ...	McDonald, E., Manassis, R., & Blanksby, T. (2019, July 7-10). <i>Peer mentoring in nursing - Improving retention, enhancing education</i> [Poster presentation]. STARS 2019 Conference, Melbourne, Australia. https://unistars.org/papers/STARS2019/P30-POSTER.pdf
Government Publications		
Government as author	First in-text reference: Spell out the full name with the abbreviation of the body. ... U.S. Department of Housing and Urban Development (2020) ... Or ... (U.S. Department of Housing and Urban Development, 2020) ...	U.S. Department of Housing and Urban Development. (2020). <i>National comprehensive housing market analysis</i> . https://www.huduser.gov/portal//publications/pdf/National-CHMA-20.pdf

8. General Guidelines

Abbreviations: Define alphabetically, other than abbreviations that can be used without definition. Words or phrases that are abbreviated in the *Introduction* and following text should be written out in full the first time that they appear in the text, with each abbreviated form in parenthesis. Include the common name or scientific name, or both, of animal and plant materials.

Authors' Affiliation: The primary affiliation for each author should be the institution where the majority of their work was done. If an author has subsequently moved to another institution, the current address may also be stated in the footer.

Co-Authors: The commonly accepted guideline for authorship is that one must have substantially contributed to the development of the paper and share accountability for the results. Researchers should decide who will be an author and what order they will be listed depending upon their order of importance to the study. Other contributions should be cited in the manuscript's *Acknowledgements*.

Similarity Index: All articles received must undergo the initial screening for originality before being sent for peer review. *Pertanika* does not accept any article with a similarity index exceeding **20%**.

Copyright Permissions: Authors should seek necessary permissions for quotations, artwork, boxes or tables taken from other publications or other freely available sources on the Internet before submission to *Pertanika*. The *Acknowledgement* must be given to the original source in the illustration legend, in a table footnote, or at the end of the quotation.

Footnotes: Current addresses of authors if different from heading may be inserted here.

Page Numbering: Every page of the manuscript, including the title page, references, and tables should be numbered.

Spelling: The journal uses American or British spelling and authors may follow the latest edition of the Oxford Advanced Learner's Dictionary for British spellings. Each manuscript should follow one type of spelling only.

SUBMISSION OF MANUSCRIPTS

All submissions must be made electronically through the submission link in the [Online Submission page](#). Owing to the volume of manuscripts received by the editorial office, the authors are insisted to follow the 2-steps submission process:

STEP 1: The manuscript MUST be submitted to <https://forms.gle/SRyCB1pA3i2LYKkj8> for Editorial Screening. Authors have to fill the form that requires basic information of the manuscript and upload the COMPLETE manuscript.

STEP 2: Successful authors will be supplied with the link to *ScholarOne* and the Submission Guidelines.

Submission Checklist (*ScholarOne* submission)

1. MANUSCRIPT:

Ensure your manuscript has followed the *Pertanika* style particularly the first-4-pages as explained earlier. The article should be written in a good academic style and provide an accurate and succinct description of the contents ensuring that grammar and spelling errors have been corrected before submission. It should also not exceed the suggested length.

2. DECLARATION FORM:

Author has to sign a declaration form. In signing the form, authors declare that the work submitted for publication is original, previously unpublished, and not under consideration for any publication elsewhere.

Author has to agree to pay the publishing fee once the paper is accepted for publication in Pertanika.

3. COVER LETTER:

In Step 6 of the ScholarOne system, author is asked to upload a cover letter in *Pertanika* format. Please ignore this instruction and replace the cover letter with the [Declaration Form](#).

Note:

COPYRIGHT FORM: Author will be asked to sign a copyright form when the paper is accepted. In signing the form, it is assumed that authors have obtained permission to use any copyrighted or previously published material. All authors must read and agree to the conditions outlined in the form and must sign the form or agree that the corresponding author can sign on their behalf. Articles cannot be published until a signed form (original pen-to-paper signature) has been received.

Visit our Journal's website for more details at <http://www.pertanika.upm.edu.my/>.

ACCESS TO PUBLISHED MATERIALS

Under the journal's open access initiative, authors can choose to download free material (via PDF link) from any of the journal issues from *Pertanika*'s website. Under "**Browse Journals**" you will see a link, "*Regular Issue*", "*Special Issue*" or "*Archives*". Here you will get access to all current and back-issues from 1978 onwards. No hard copy of journals or offprints are printed.

Visit our Journal's website at:

http://www.pertanika.upm.edu.my/regular_issues.php for "Regular Issue"
http://www.pertanika.upm.edu.my/cspecial_issues.php for "Special Issue"
http://www.pertanika.upm.edu.my/journal_archives.php for "Archives"

PUBLICATION CHARGE

Upon acceptance of a manuscript, a processing fee of RM 750 / USD 250 will be imposed on authors; RM 750 for any corresponding author affiliated to an institution in Malaysia; USD 250 for any corresponding author affiliated to an institution outside Malaysia. Payment must be made online at <https://paygate.upm.edu.my/action.do?do=>

Any queries may be directed to the **Chief Executive Editor's** office via email to executive_editor.pertanika@upm.edu.my

Review article

Exploring The Impact of Pandemic on Global Economy: Perspective
from Literature Review 2033

*Van Ky Long Nguyen, Thi My Hanh Le, Thi Minh Chau Tran, Thi
Thu Hien Le, Thi Ngoc Mai Duong, Thi Hien Le, Tien Son Nguyen
and Nhu Hoa Vo*

Exploring Ideologies of Function Words in George Orwell's Animal Farm 2089
Ayman Farid Khafaga

<i>Case study</i>	
Ideological Manipulation of Translation through Translator’s Comments: A Case Study of Barks’ Translation of Rumi’s Poetry <i>Bitu Naghmeh-Abbaspour, Tengku Sepora Tengku Mahadi and Iqbal Zulkali</i>	1831
<i>Review article</i>	
Socioeconomic Status and Mental Health among Low-income Employees: A Systematic Literature Review <i>Errna Nadhirah Kamalulil and Siti Aisyah Panatik</i>	1853
“Assessment for Learning” Practices Amongst the Primary School English Language Teachers: A Mixed Methods Approach <i>Mazidah Mohamed, Mohd Sallehudin Abd Aziz and Kemboja Ismail</i>	1875
Leadership Attitude and Clan-Structure: Lessons for Leadership Practices in Contemporary Post-Conflict Nation Building in Somalia <i>Abdisamad Hassan</i>	1901
Mapping the Use of Boosters in Academic Writing by Malaysian First- Year Doctoral Students <i>Yueh Yea Lo, Juliana Othman and Jia Wei Lim</i>	1917
Effects of Resistance Training and Whole-Body Electromyostimulation on Muscular Strength in Female Collegiate Softball Players <i>Raja Nurul Jannat Raja Hussain and Maisarah Shari</i>	1939
<i>Review article</i>	
Bibliometric Analysis of Research on Peer Feedback in Teaching and Learning <i>Catherine Nguoi Chui Lam and Hadina Habil</i>	1957
<i>Review article</i>	
A Systematic Analysis on the Admissibility of Digital Documents as Evidence in Malaysian Syariah Courts <i>Wan Abdul Fattah Wan Ismail, Ahmad Syukran Baharuddin, Lukman Abdul Mutalib and Mohamad Aniq Aiman Alias</i>	1981
Understanding COVID-19 Pandemic through Science, Technology and Society (STS) Education: A Textual Analysis of Student Reflection Papers <i>Jerome V. Cleofas</i>	1997
Using Online Platforms for Political Communication in Bahrain Election Campaigns <i>Mokhtar Elareshi, Mohammed Habes, Sana Ali and Abdulkrim Ziani</i>	2013

Driving Factors of Continuity for Kano Emir Palace towards Safeguarding its Cultural Heritage <i>Bashir Umar Salim, Ismail Said, Lee Yoke Lai and Raja Nafida Raja Shahminan</i>	1631
Women in Leadership: Insights from Female Principals of Rural Secondary Schools in Vhembe District of South Africa <i>Livhalani Bridget Sinyosi and Onoriode Collins Potokri</i>	1651
Spiritual Well-being and Work Performance among Ground-level Employees: Unravelling the Connection <i>Jeffrey Khong Loong Yee, Jonathan Smith and Simon Robinson</i>	1671
Legal Literacy for Muslim Converts in Malaysia <i>Mohd Al Adib Samuri and Azlan Shah Nabees Khan</i>	1693
<i>Case study</i> Building Social Resilience after the 2014 Flood Disaster <i>Sarina Yusoff and Nur Hafizah Yusoff</i>	1709
<i>Review article</i> “Please Stay, Don’t Leave!”: A Systematic Literature Review of Safeguarding Intangible Cultural Heritage in the Fourth Industrial Revolution <i>Wan Juliana Emeih Wahed, Noorhayati Saad, Saiful Bahari Mohd Yusoff and Patricia Pawa Pital</i>	1723
Perceived Competence as a Mediator in Parental Engagement in Speech Therapy <i>Nurfariha Mdshah, Zainal Madon and Nellie Ismail</i>	1745
Unpaid Domestic Work and Gender Inequality in the Time of COVID-19 in Malaysia <i>Harn Shian Boo</i>	1765
Dimensions of National Ethos among Educated Youths in Malaysia <i>Mohd Mahadee Ismail, Nor Azlili Hassan, Azlina Abdullah, Hairol Anuar Mak Din, Marzudi Md Yunus and Mansor Mohd Noor</i>	1783
<i>Case study</i> Strengthening Marine Ecotourism Management’s Institutional Performance in Raja Ampat, Indonesia <i>Nuraini, Arif Satria, Ekawati Sri Wahyuni and Dietrieck Geoffrey Bengen</i>	1809

Pertanika Journal of Social Sciences & Humanities
Vol. 29 (3) Sep. 2021

Content

Foreword <i>Mohammad Jawaid</i>	i
Determinants of Bioenergy Consumption in the European Continental Countries: Evidence from GMM Estimation <i>Mohd Alsaleh and Abdul Samad Abdul-Rahim</i>	1467
Sustaining Successful ICT Integration in Remote Rural Schools <i>Elenita Natalio Que</i>	1487
Evaluating the Performance of e-government: Does Citizens' Access to ICT Matter? <i>Abdulrazaq Kayode Abdulkareem and Razlini Mohd Ramli</i>	1507
Malaysian State Sports Schools Football Coaching Process Key Themes Development: Constant Comparison Method in Data Analysis <i>Ramesh Ram Ramalu, Zulakbal Abd Karim and Gunathevan Elumalai</i>	1535
<i>Review article</i> The Impact of Government Efficiency, Corruption, and Inflation on Public Debt: Empirical Evidence from Advanced and Emerging Economies <i>Wei Ni Soh, Haslinah Muhamad and Ong Tze San</i>	1551
Online Learning during COVID-19 Pandemic. Are Malaysian High School Students Ready? <i>Nagaletchimee Annamalai</i>	1571
Characteristics and Success Factors of Rural Community Leadership in Malaysia: A Focus Group Analysis <i>Ahmad Aizuddin Md Rami, Mohd Faiq Abd Aziz, Nurfaizreen Aina Muhamad Nasharudin and Roziah Mohd Rasdi</i>	1591
Newspaper Exposure, Efficacy Feeling and Political Apathy among Youths in South-East Nigeria <i>Joshua Aghogho Erubami, Paul Bebenimibo and Edith Ugochi Ohaja</i>	1611



Pertanika Editorial Office, Journal Division
Putra Science Park
1st Floor, IDEA Tower II
UPM-MTDC Technology Centre
Universiti Putra Malaysia
43400 UPM Serdang
Selangor Darul Ehsan
Malaysia

<http://www.pertanika.upm.edu.my/>
E-mail: executive_editor.pertanika@upm.edu.my
Tel: +603 9769 1622

PENERBIT
UPM
UNIVERSITI PUTRA MALAYSIA
P R E S S

<http://penerbit.upm.edu.my>
E-mail: penerbit@upm.edu.my
Tel: +603 9769 8851

