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PERTANIKA JOURNAL OF SOCIAL SCIENCES & HUMANITIES

About the Journal

Overview

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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).

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 - 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.
- 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.
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Foreword

Welcome to the first issue of 2022 for the Pertanika Journal of Social Sciences and Humanities (PJSSH)!

PJSSH is an open-access journal for studies in Social Sciences and Humianities 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 19 articles; two review articles and the rest are regular articles. The authors of these articles come from different countries namely Bangladesh, Indonesia, India, Malaysia and Philippines.

A selected article from the scope of Language and linguistics, titled "The Influence of Apprenticeship of Observation on Business Teacher's Beliefs and Attitudes towards English-Medium Instruction: A Case Study" targets to explores a case of an English medium instruction (EMI) teacher from the business discipline working in a private university in Bangladesh, whose beliefs regarding English and EMI adoption were influenced by the apprenticeship of observation. Two thought-based data collection instruments were used to collect the data, which are a semistructured interview and a narrative frame. The case reported in this study proved an ideal example of how a positive English language ideology converges on the deep-rooted belief that English proficiency would benefit both students and the teachers at the individual level. Details of this study are available on page 171.

A regular article titled "Regulation of the Credit Community and Consumer Sovereignty in Malaysia: The Role of Regulator and the NGOs" sought to investigate whether the regulation enhancement of the Credit Community supports or deter consumers' sovereignty. This study reveals that the present state of regulated moneylending is not fully supportive of the consumers. The detailed information of this article is presented on page 191 .

Siti Sara Ibrahim and colleagues had done research to examine how the level of understanding and awareness about our Royal Institution amongst young millennials can significantly influence their perceptions about the institution, in their article entitled "Social Media Influence Towards Understanding, Awareness, and Perception on Royal Institutions; Empirical Study on Young Millennials". The data gathered from social media confirmed that the influence of understanding and awareness has reflected young millennials' perception of Royal Institutions. Further details of the study can be found on page 363.

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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

executive editor.pertanika@upm.edu.my



SOCIAL SCIENCES & HUMANITIES

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Purposeful Field Trip: Impact on Experiential Learning Opportunities and Critical Thinking Skills

Su Chern Foo1,2* and Kien Kheng Foo3

- ¹School of Science, Monash University Malaysia, Jalan Lagoon Selatan, 47500, Selangor Darul Ehsan, Malaysia
- ²Tropical Medicine and Biology Multidisciplinary Platform, 47500 Selangor Darul Ehsan, Malaysia ³Sparks Education PLT, 51200, Kuala Lumpur, Malaysia

ABSTRACT

While Bloom's taxonomy is a well-established learning hierarchy, higher-order thinking skills (HOTS), defined as the three upper levels, are seldom attained due to traditional teaching practices and time constraints of units or subjects. Therefore, adopting innovative pedagogy models like experiential learning provides opportunities for the demonstration and development of HOTS. The study's objective shows that field trips are crucial components of experiential learning, and when designed with a purpose, promote higher-order thinking skills. This study used a descriptive design, specifically videos, to collect qualitative data for small sample sizes followed by a structured questionnaire consisting of closed questions. All videos were transcribed, and thematic analyses were used. The quantitative data were analysed descriptively, and data were presented using frequency distribution. It was found that this field trip assessment design enabled the skills demonstration spanning Bloom's learning spectrum. Furthermore, HOTS were used more frequently than basic thinking skills. A quantitative survey on student perceptions revealed that pre-trip activities are equally important as during-trip activities. Findings from this exploratory study provide insights for future education-related research in the field of HOTS, transferable skills, and values.

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E-mail addresses:

foo.suchern@monash.edu, suchern@gmail.com (Su Chern Foo) kienkheng@yahoo.com (Kien Kheng Foo)

* Corresponding author

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INTRODUCTION

Higher-order thinking skills or HOTS are defined as the three upper levels of Bloom's revised taxonomy, i.e., analysis, evaluation, and creation (Anderson & Krathwohl, 2001;

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Essig et al., 2018). HOTS verbs commonly include design, develop, propose, construct, plan, solve. While educators acknowledge the importance of HOTS, the challenge of effectively conducting HOTS activities within a limited timeframe (Ganapathy et al., 2017) and traditional linear learning and teaching concepts (Zohar et al., 2001) discourages implementation. It is a common problem faced in education institutions wherein teaching and learning pedagogies in an exam-based education system result in the emphasis of fact memorisation instead of thinking skills (Jones, 2010; Mustaffa, 2007). HOTS can be observed in some field trip units (Hurley, 2006; Kuchel et al., 2015), but most traditional fieldwork designs engage only basic levels of thinking, i.e., knowledge, comprehension, and application. While these are irrefutably important components for cognitive thinking, learning seldom goes beyond the cognitive spectrum's basic levels. Indeed, HOTS are more difficult to learn or teach but more valuable and practical because these skills are highly likely to be used in the workplace. Teaching activities that promote HOTS include field trips, creating an environment for idea exploration and prompting students to make a hypothesis, problem-solving, engaging students in oral presentations, asking students to reflect on their experiences or encouraging students to reflect on how content is related to world issues. Among these, field trips are an important component of experiential learning and have shown to be successful in promoting HOTS. For example, Peasland et al. (2019) found that fieldwork in environmental science enabled opportunities for students to develop employer-desirable technical skills, e.g., identifying organisms, describing soil profiles, and transferable skills, e.g., problem-solving, critical thinking, adapting to new situations.

Experiential learning or "learning-bydoing" is the process of knowledge creation through transformative experiences where knowledge results from the combination of grasping and transforming knowledge (Kolb & Kolb, 2009). The 4 phases of experiential learning are design, conduct, evaluation and feedback (Wolfe & Byrne, 1975). Transformative learning experiences come in experiential learning opportunities from classrooms, laboratory practicals, field trips (Scarce, 1997), internships and employment (Huisman et al., 2019), knowledge transfer workshops in academia and industry and personal development training for lifelong learning. Experiential learning is a timely and modern educational theory (Sharlanova, 2004) and is increasingly becoming a major component of teaching delivery in schools and universities to promote science education (Oliver et al., 2018), environment studies (Jose et al., 2017) and even culture awareness (Dabamona & Cater, 2018). The value provided by experiential learning is that it facilitates the individual's integrated development of the affective, perceptual, cognitive, and behavioural domains (Passarelli, 2016). For example, Boyle et al. (2007) showed that field trips directly engage students with intense and immersive experiences by activating affective and cognitive domains.

Educators designed field trips with an educational goal in mind (Kuchel et al., 2015; Peasland et al., 2019). These goals can vary but mostly include enforcing classroom learning, promoting applications, encouraging group interaction, deepening conceptual development, and stimulating appreciation for the environment (Lei, 2010). It is where our research comes in. The design of purposeful "pre-trip," "during-trip," and "post-trip" learning activities aligned to the learning outcomes of the unit will determine the effectiveness of teaching and learning. The traditional field trip design in undergraduate biology courses used expository learning design activities, which included activities like "show and tell" and simple observations (Domin, 1999). It is comparable to in-house, recipe-style laboratory practical, with the disadvantage of limiting student learning with instructional approaches. Students are often left alone to contextualise what they have done in the lab to its relevance in daily life. When unable to connect the dots, such instructional approaches can severely limit student motivations. Besides, traditional field trip activities tend to engage lower cognitive levels of learning like recalling information and understanding. It results in the preclusion of higher cognitive thinking like analysis, evaluation, and creation.

Field trips are an important component of experiential learning, and when designed with a purpose, could promote higher-order thinking skills. This study describes a purposeful field trip design of an experiential learning trip, with a focus on (1) identifying HOTS skills exhibited during the three stages (pre, during, post) of the field trip activities and (2) mapping these demonstrated skills according to Bloom's revised taxonomy. This study is aligned to the Malaysian Education Blueprint 2015-2025, National Higher Education Action Plan (NHEAP) and current worldwide science education reforms to facilitate the development of HOTS in students via purposeful experiential learning opportunities. Furthermore, the study adds value to the existing body of knowledge in the last ten years by showing how a field trip design stimulates the demonstration of HOTS among third-year undergraduates. Our findings may focus on higher education but can benefit instructors of a wider range of educational levels by being one of the few targeted experiential learning research projects conducted in a tropical biodiversity hotspot. This paper investigates how purposefully designed field trips can promote higher-order thinking skills. The impact of this study is two-fold and achieved by firstly, collating video data that evidences the demonstration of HOTS during the field trip. In addition, it also aims to measure student perception of their learning experiences post field trip.

MATERIALS AND METHODS

Ethics Approval

This study was approved by the Human Research Ethics Committee reference number: 22574.

Field Trip Design

Third-year BSc tropical environmental biology students participated in a field trip at Lang Tengah, a tropical island in Kuala Terengganu, Malaysia, for four days three nights (22nd April 2019–25th April 2019). The selection of Lang Tengah Island, an island off the East Coast of Malaysia, as a field site and its' timing, was to capitalise on the intact tropical corals located in marine parks as well as a rare opportunity to observe sea turtle landings. Students consisted of 15 Malaysians and three international students (two Australians and 1 British). The gender ratio of the respondents was fairly distributed, i.e., ten females and eight males with an age range from 20 to 23 years old. Thirteen students were from tropical environmental biology, three from biotechnology, one from medical bioscience and one from food science and technology. Figure 1 illustrates this field trip designed according to Wolfe and Byrne (1975), while Table 1 details the learning activities and assessments selected to meet the intended learning outcomes of the field trip.

Pre-Trip. Prior to this study, a preliminary survey was carried out to collect data on student perception regarding the participation in field trips in April 2018. No fieldwork projects and only observational studies were carried out for that year. In the open-ended survey question on "identified gaps and room for improvement," students suggested to "include field experiments that could be done" and "perhaps in the future the group presentations could be made

into one, class-wide, presentation, which include videos, PowerPoint slides etc." This valuable student feedback in 2018 formed the basis for a purposeful field trip design in 2019. The main intent of this new field trip design was to provide experiential learning opportunities for students to acquire and utilise higher-order thinking throughout the three stages of the design.

In the lecture series that led up to the field trip, students learn about water characteristics and how it supports life in the freshwater and marine ecosystems, coastal landforms and coral reefs, various groups of aquatic organisms (from phytoplankton, zooplankton, aquatic plants, insects, amphibians, reptilians, birds, and mammals). They followed an instructorled field trip outlined in a field manual to learn about phytoplankton and water sampling techniques early in the semester. The subsequent laboratory sessions made microscopic observations, identification, enumeration, and taxonomic classification of the collected phytoplankton. These pretrip learning activities were intended to prepare students and develop skills relevant to the fieldwork proposal assessment. The fieldwork proposal assessment requires the student to work in teams to design and propose a field project. They then receive feedback on the fieldwork proposal from the lecturer and invited experts through the inquiry approach to provide better clarity and understanding of their respective projects prior to the days leading up to the field trip itself. This field trip design followed the recommendation by Orion (1993) and Wolfe and Byrne (1975) on good practices in field trip design for learning. In addition, safety was a priority as it was a high-risk field trip activity. Risk management strategies included a staff: student ratio of 1:4 and implementing a buddy system. Moreover, all staff joining the field trip were first aid trained, and a certified diver joined all snorkelling trips. Prior to the field trip, students also underwent a water confidence test and compulsory safety briefing. It is worthy to note that during the journey to the field site itself, students were introduced to a wide range of life skills. These skills included completing a risk assessment and emergency contact forms, preparing and packing sampling equipment and working in areas with little or no internet access.

During-Trip. As an integral part of the unit, the field trip took place early in the learning sequence, i.e., mid-semester, to close the student-instructor feedback loop. On the first day of the trip, students were safety-briefed by a local guide. Also, a walking tour around the island was done to survey suitable project sites for conducting each fieldwork project. In the following days between project execution timings, students joined sea turtle and coral biology conservation talks conducted by conservationists from a local NGO. At night, all students participated in the night walk to observe sea turtle landings. For each field trip project, the detailed methodology explained by each group can be found in Appendix 1 (Supplementary materials). On the last day of the field trip, students participated in a beach clean-up activity.

Post-Trip. Post field trips, students participated in a debriefing activity to encourage reflection on their learnings. It included presenting study findings and sharing new personal experiences and insights gained. Students did so by reporting study findings in the form of 6-minute videos. Video transcriptions can be accessed in Appendix 2 (Supplementary materials). Post transcription, thematic analysis, and mapping identified skills to learning outcomes were tabulated in Table 1. In addition, a survey was conducted to gain student perception about the field trip. The instructor also completed a selfevaluation exercise to improve future field trips continuously.

Data Collection

Descriptive design, a qualitative approach to assess the skills gained by students during fieldwork, were collected from four group videos, each lasting approximately six minutes. All video data were transcribed, and thematic analyses were used in accordance with past studies (Heath et al., 2010; Nowell et al., 2017; Saldaña, 2015). Coding is an iterative process, i.e., when a new code emerges from data, previously coded transcripts are revisited to check coding accuracy, and new codes are applied as appropriate. Once coding was completed, the codes were organised into main and subthemes. It is worthy to note that the main author is also the instructor for this unit and therefore acknowledges the positionality influence on study findings. In order to reduce bias, this process was repeated between an independent transcriber and co-authors.

Quantitative data collection consisted of a structured questionnaire. It was aimed at evaluating student perceptions about their learning experiences. A series of closed questions (n=9) were distributed to all students involved. The survey asked respondents to rate their learning experiences at Lang Tengah captured in a 5-point Likert scale (one-strongly disagree; five-strongly agree). The quantitative data were analysed descriptively, and data were presented using frequency distribution.

RESULTS

Learning Outcomes, Assessments, Field Trip Stages and Evidential Learning Skills

From the qualitative data, four themes and ten sub-themes emerged from the transcribed data in the videos. The themes are (1) cognitive skills in Bloom's revised taxonomy, (2) transferable skills, (3) values and (4) others. Among the ten sub-themes identified (n=146), cognitive skills were the most recounted skills by the students (n=101). It was followed by transferable knowledge (n=24), values (n=13), and others (n=8) (Figure 2). Overall, pre-trip activities represented a combination of both student-led and instructor-led tasks. These tasks motivate the students by providing learning-by-doing or experiential learning opportunities for all the cognitive skills ascribed to Bloom's revised taxonomy. At the same time, students hone transferable skills, environmental values while having

fun, which could not have happened without these experiential learning opportunities. Detailed evidence mapped to the cognitive skills are shown in Table 1.

The updated Bloom's classification of cognitive skills ranks from level 1 to level 6, starting with knowledge, comprehension, application, analysis, evaluation, and ending with the creation spectrum (Anderson & Bloom, 2001). Interestingly, HOTS, i.e., the three upper levels of Bloom's revised taxonomy, were found to be in a higher frequency (n= 57) as compared to the three lower levels (n=44). Specifically, the cognitive evaluation skills were the most demonstrated (n=28), while the rest of the cognitive skills were approximately the same. Meanwhile, equally important findings like transferable skills (i.e., collaboration within a team, technologically prepared), values (i.e., environmental awareness), and others (learning while having fun) are noted in the analysis. It was also noted that students exhibited teamwork (n=13), ICT (n=11), environmental sustainability awareness (n=13), and learning while having fun (n=8).

STUDENT PERCEPTION ANALYSIS

Feedback was collected from 14 out of 18 students (78% response rate) with survey questions related to the pre-trip, during-trip and post-trip activities. Overall, it was found that more than 50% of students agreed or strongly agreed to all nine survey questions (Figure 3). In pre-trip activities, more than 90% of respondents agreed that "the organisation and progression of the field

Table 1

Learning outcomes, associated assessments, and field trip stages mapped against evidential learning skills across Bloom's taxonomy

Evidence in field trip videos	 Group 1 and 4 proved that they conducted adequate background knowledge about their project as reflected by methodology explanation and observational skill in the videos. For example, Group 1 explained methods "Quadrates of 0.5m was set on rocks in both pristine and disturbed site." and "4 quadrates were placed at each site, and they were divided into pairs to count the abundance of species." Group 2 listed out all equipment needed to properly conduct their specific work, which was to describe coral species in relation to the distance of the collection site 3. Group 3 recalled information on plastic pollution during the lecture and attempted to find out the extent of pollution on a tourist island. 	1. Group 2 extended existing learnings from lab demonstration to field trip as shown in the video where a student was seen reading and noting coordinates of the GPS location of the site. 2. Group 3 demonstrated the ability to research into standardised methods internationally recognised to quantify microplastics, thereby enabling the comparison of their findings to existing literature. 3. Group 4 was able to describe the food web well, "Food chains are sequential networks that show how energy is transferred from one trophic level to another, when several are combined together, then you get a food web. Each life inhabiting this unique and delicate ecosystem are all interconnected, and each interaction can be represented by a food web." 4. More than that, Group 1 was able to make a hypothesis that "due to heavy tourism, it is predicted that there will be less barnacle abundance at the disturbed site from the effects of human activities."
Learning skills across the Blooms taxonomy spectrum	Knowledge spectrum • Understanding the role of biotic and abiotic factors in aquatic ecosystems	Comprehension spectrum This theme runs through the entire unit, including experiential learning. Students learn and recognise anthropogenic implications to changes in the aquatic ecosystems
Stage of field trip	All stages	All stages
Associated learning and assessments	Student builds knowledge and gains new field and technical skills from a lecturer, field experts, NGOs in the form of: 1. Weekly lectures and formative assessments 2. Weekly lab demonstration and practical 3. Invited marine conservation talks 4. Summative assessments	Student extends knowledge to understanding by identification of a conservation issue, gathering information from the scientific literature to: 1. propose written solutions to the problem and 2. present results in a minireview
Learning outcome	1. Demonstrate knowledge of the diversity and ecology of freshwater and marine environments in the tropics with particular reference to the Malaysian region	2. Demonstrate understanding of the conservation and management issues relating to aquatic ecosystems.

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Associated learning and assessments	Stage of field trip	Learning skills across the Blooms taxonomy spectrum	Evidence in field trip videos
Students translate knowledge to collectively solve a and designing a field sampling work to assess environmental changes by anthropogenic disturbances via: 1. A written proposal for ecological sampling fieldwork 2. oral presentation to field experts 3. Incorporating feedback for proposal improvement	Pre-field trip and post-field trip trip	Application and synthesis spectrum Creativity, resourcefulness, problem solving and learning adaptation is encouraged through designing sampling programs to assess changes in the aquatic ecosystems	 Group I were shown to translate existing knowledge and skills to solve new problems, i.e., differentiating barnacle species endemic to the location site. One of the group members mentioned that "he learnt how to identify and differentiate barnacle's species because the barnacles they found were different from those found in other beaches he has gone to before" he further added that "the colours of the barnacles here is white and black with stripes." Group 2 demonstrated the ability to change according to circumstances to achieve their goal when a problem encountered as reported by the students was the inability to use the corer sampling tool as the sand was too dense; thus, they had to make use of their hands to pick up the corals on the surface that were bigger than 5cm. Group 3 solved unexpected problems that arose through creative thinking where they planned to sift out plastic and coral using a 5mm sieve. They realised that the process was too slow, and thus, this posed a challenge and problem in their progress. This group demonstrated problem-solving skills via using a mesh bag instead of sifting. Furthermore, they noticed that immersing sand in water accelerated the sifting process. Group 4 showed that they exhibited science process skills, such as observation and execution skills "to gather data for their food web, they conducted an observational sampling at areas with varying degree of disturbational."
Learning outcome 3. Design and analyse sampling programs to examin flora and fauna of aquatic habitats and to assess changes;	u v	Associated learning and assessments Students translate knowledge to collectively solve a e problem through planning and designing a field sampling work to assess environmental changes by anthropogenic disturbances via: 1. A written proposal for ecological sampling fieldwork 2. oral presentation to field experts 3. Incorporating feedback for proposal improvement	Associated learning and assessments field trip field trip spectrum Students translate knowledge pre-field Application and synthesis to collectively solve a frip and designing a field trip problem through planning post-field problem through planning work to assess sampling on the analysis of an designing and designing and designing and designing and first proposal for ecological sampling 1. A written proposal for ecological sampling 2. oral presentation to field experts 2. oral presentation to field experts 3. Incorporating feedback for proposal improvement

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Learning outcome	Associated learning and	Stage of	Learning skills across the Blooms taxonomy	Evidence in field trip videos
4. Demonstrate the ability to identify aquatic animals and plants from Malaysian tropical ecosystems;	Students use dichotomous keys to identify species and recognise patterns observed in the field trips to present findings in: 1. Freshwater field trip practical report 2. Post marine field trip video report trip video report	Field trips	Analysis and synthesis spectrum • Students exhibit knowledge depth about species identification, interaction, and processes at the study site	 Group I demonstrated the ability to recognise patterns of barnacle distribution in pristine vs disturbed areas and subsequently use the findings to test their hypothesis where "the results they found answered the proposed hypothesis where they predicted that they would find more abundance of barnacles in the pristine site compared to the disturbed site" Group 2 identified and then classified coral species to family levels, i.e., "The coral species found by the group are: Isopora, Montastrea, Acropora, Pavona, Seriatopora, Pocillopora, Porites, Turbinaria, and Psammocora". The group increased knowledge on species identification, but they were also able to make associations on species dominance and ecosystem degradation at the study site. Group 3 deduced the mesoplastic pollution spots based on the type and number of plastics in different sites. From here, the extent of pollution for each site could be concluded. "The results show that litter in Site I was composed of far smaller plastics that that of Site 2. Also, litter was mainly composed of plastic drink bottles, nylon and straws. It was also discovered that the average weight of plastic found at Site 2 was almost seven times more than site 2, implying that it was significantly higher than site 1." Group 4 was shown to categorise marine animals to trophic levels whilst making associations of the importance of food webs to marine ecosystems as quoted from a student "Each node represents a marine organism, and their prey-predator relationship is depicted by a line. Food webs can be used to visualise the transfer of genergy up various trophic levels. This helps in providing important insights into the effects and extent of pollution on the marine ecosystem as

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Learning outcome	Associated learning and assessments	Stage of field trip	Learning skills across the Blooms taxonomy spectrum	Evidence in field trip videos
5. Demonstrate advanced scientific report writing skills;	Student's reason, synthesise findings and recommends steps for continuous improvements to future work in the form of: 1. Freshwater field trip report 2. Post marine field trip video report trip video report	Pre and post field trips	Evaluation spectrum Sudents communicate biological observation in the freshwater environment whilst demonstrating scientific writing skills via the practical report	1. Group I justified the findings and supported prediction with observations. For example, in the findings, they observed lesser barnacle abundance at a site in which they justified "this could be explained by the heavy human activity surrounding their disturbed site, located at the front of the resort". Furthermore, they were able to further improve the existing sampling method with the suggestion of "after conducting our experiment, the improvements that we found could be made to the methods were to place a rope anchored with something heavy down to the bottom of the water like so to allow barnacles to colonise the rope. Then, after three months, we would come back and investigate the barnacle species and abundance on the rope. Then, after three months, we would come back and investigate the barnacle species, and they reasoned that "this could be due to the occurrence of the Monsoon season where tides are high, therefore new day coral species could be washed out of inland areas." 3. Interestingly, Group 3 demonstrated deep learning aptitudes where aside from sampling work, students took the initiative to not only relate but also support their experimental findings with interviews, i.e., with the findings from the experiment, they conducted a short interview with the resort staff, and it was revealed that it was also discovered that the island's recycling is pied right behind Site 2 for pickup and can spread easily onto the beach." 4. Group 4 made clever improvisations, such as the DIY extension, to improve the quality of underwater pictures/videos. The captured footage of marine animals was then identified and classified according to trophic levels to construct the food web.

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Learning outcome	Associated learning and assessments	Stage of field trip	Learning skills across the Blooms taxonomy spectrum	Evidence in field trip videos
6. Make effective oral and visual presentations;	Students communicate new learnings and findings in: 1. In-class presentations 2. Class discussions 3. Pre-trip proposal 4. Post-trip scientific reports and videos	All stages	• Students communicate biological observations verbally in presentations and visual means (videos)	 Group 1 reflected and developed new insights on human impacts and the importance of sustainability awareness whilst recognising the importance of overlooked marine organisms. In one of the interviews, a group member stated that "one of the benefits of the study is the increase of awareness on the importance of barnacles to the ocean". She further stated, "this is so because barnacles are largely overlooked, and their role to the ecosystems is not really recognised, especially in countries, such as Malaysia." Group 2 made a recommendation for method improvement whilst and developing new ideas, e.g. "Therefore, for future references, we recommend the study of live corals instead of dead ones, of course with the help of divers, so that a better representation of the coral diversity in Lang Tengah can be obtained." Group 3 proposed the benefits of understanding the extent of pollution research and promoted improving plastic waste management. It was stated in the video that "improving waste management on tourist islands will benefit hotel by bringing in more "eco-tourists", hence providing an economic incentive. Also, removing the risk of mesoplastic pollution from tourist islands will reduce plastic bioaccumulation and injury in wildlife." Group 4 combined data collection with information and communication technology skills to construct the marine food web of Lang Tengah "After the identification stage, we constructed the food web using Adobe Photoshop and Adobe Illustrator."

trip were sensible and coherent". Further to this, 79% of respondents strongly agreed that "pre-trip preparation work enriched the learning experience." Secondly, 85% of respondents strongly agreed with survey question no. 4 that "individual assistance and guidance during the trip (face-to face) was available when needed". Also, all respondents unanimously agreed that "the learning resources provided during the trip supported their learning needs". Finally, more than 85% of the respondents agreed or strongly agreed that "the field experience was useful and intellectually stimulating". It led to the achievement of the learning outcomes of the unit as reflected by survey question number eight on "overall satisfaction of the field trip". As a result, more than 79% of respondents strongly recommended juniors to enrol in the unit in the future (survey question no.9).

DISCUSSION

Students Demonstrated All Cognitive Skills Across Bloom's Revised Taxonomy

Field trips provide unique learning environments that present different and challenging learning opportunities like the workplace. While maximising the potential of the selected marine site, the field trip design consisting of pre-trip, during-trip, and post-trip components were central to providing experiential learning opportunities while enforcing learnings from lectures. Table 1 describes the learning outcomes, associated learning tasks, and their educational underpinnings mapped

against the evidential learning skills across Bloom's taxonomy. At the same time, the table also shows learning progression through the different field trip stages.

A Field Trip Design That Promotes HOTS

Higher-order thinking skills is a highly sought-after employment skill set. Kenayathulla et al. (2019) stated that aside from being able to work independently, proactive and able to perform under pressure, employers look for soft skills, e.g., managing resources, good communication and interpersonal skills, team-playing, and HOTS like reasoning, problem-solving, and decision making (Shafie & Nayan, 2010). For instance, the field trip activities listed in Table 1 had groups complete their task within a limited timeframe and resource availability, providing students with learning opportunities to hone HOTS. In addition, the design of assessment tasks across pre-trip, during trip and post trip enabled the demonstration of all six cognitive processes. Unlike in house, recipe-style laboratory experiments, this field trip design mimicked the workplace environment by providing experiential learning opportunities (Figure 1). Detailed planning, decision making, creative thinking and cohesive communication were important to reach the final goal.

Besides that, a past study by Hurley (2006) found that the higher cognitive levels of analysis, synthesis, and evaluation were achieved when the field trip ended. However, this was not the case in this study. During the field trip, not only did students

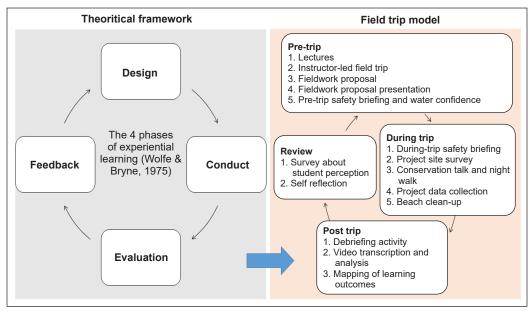


Figure 1. Theoretical framework and field trip model in this study

demonstrate learning skills across Bloom's revised taxonomy, but the frequency of students also demonstrating HOTS (i.e., analysis, evaluation, and creation) were higher (n=57), compared to basic learning skills (i.e., knowledge, comprehension and application) of n=44 (Figure 2). In the analysis spectrum, it was observed that students demonstrated skills in species identification, classification, enumeration and recognising patterns in collected data subsequently presented in the form of tables and figures. For example, Group 1 formed a hypothesis in their field trip proposal as part of pre-trip learning activities. During the trip, they demonstrated the ability to recognise patterns of barnacle distribution in pristine vs disturbed areas, and findings were then used to answer the initial postulation. In the evaluation learning spectrum, students demonstrated skills in justifying findings, supporting findings

with evidence, comparing and reflecting on whether the findings were consistent with their prior knowledge, and finally drawing conclusions. It is evident when Group 1 justified new findings and supported prediction with site observations. They explained that there was lesser barnacle abundance at a site in which they further justified "this could be explained by heavy human activity surrounding their disturbed site, located at the front of the resort".

In the creation spectrum, the field trip enabled experiential learning opportunities for students to make future recommendations to improve their respective projects. For example, it was suggested by group 1 that, "after conducting our experiment, the improvements that we found could be made to the methods were to place a rope anchored with something heavy down to the bottom of the water like so to allow barnacles to colonise the rope. Then,

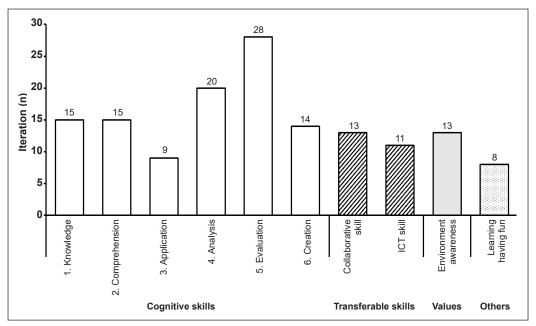


Figure 2. Frequency distribution of Bloom's taxonomy of cognitive skills, transferable skills, values, and others

after three months, we would come back and investigate the barnacle species and abundance on the rope." Furthermore, they recognised the importance of overlooked marine organisms. Student A stated that "one of the benefits of the study is the increase of awareness on the importance of barnacles to the ocean." She further stated, "This is because barnacles are largely overlooked and their role to the ecosystems is not really recognised, especially in countries, such as Malaysia."

Moreover, this study found that specific skills in the evaluation spectrum were the most used among the three HOTS. These skills included evaluating, reasoning, justifying, predicting, solving, combining, verifying, and improvising. In the field, changing circumstances like weather, tidal timings, physical boulders, or restricted areas

compel students to use skills not usually applied in the laboratory environment. It includes a combination of HOTS and transferable skills, i.e., adapting to current circumstances, problem-solving and good time management. This type of first-hand environmental study is a prime example of an experiential learning opportunity that promotes quick thinking and collaborative decision making to achieve a common goal. For example, adapting and problem-solving skills were required from both Group 2 and 3. Group 2 faced the challenge of using the sand corer due to dense sandy beach as mentioned by student B: 'Unfortunately, we were unable to use the sand corer as the sand was too dense at lower elevation level. Thus, the alternative was to select corals on the surface that were bigger than 5cm.' Another good example concerns the sand

sifting process for mesoplastics previously planned in Group 3, where it was too slow. It was how student C described it: 'Excavate top 5cm of sand from the quadrat and sift out plastic and coral using a 5mm sieve was too slow. Instead, fill up a mesh bag with the quadrat's sand and immerse the bag in water to sift out the sand.' The last group had a different challenge altogether. They had to be creative by crafting make-shift poles to record marine organisms hiding behind coral crevices during the snorkelling session. In addition, good organisational skills were demonstrated by students. For example, in Group 1, they were tasked to study barnacle abundance at low tides. It meant tidal tables and good planning during the trip were crucial to complete the task. For example, this group had to manage their project work around low tides, which meant waking up at 4 am.

Indeed, HOTS fosters deep approaches to learning where Entwistle (1991) described that relating evidence to conclusions by reasoning and relating knowledge to experiences are forms of deep learning compared to surface learning, i.e., passively accepting ideas and routine memorisation of facts and procedures. Also, the learning agility to shift from one learning mode to another (i.e., learning-by-listening to learning-by-doing) in the learning cycle is important for effective experiential learning. When the student adapts and innovates to the demands of the learning situation, in this case, the field site, they learn to be problem solvers. Whilst the field trip allowed the demonstration of HOTS, it is unclear if these were new skills or students acquired beforehand, which is outside the scope of this paper. Nevertheless, it is clear from the qualitative video narratives that field trips are irreplaceable to laboratory practical wherein labs, students are learning in a protected and more constrained learning environment. Nevertheless, field trips enable experiential learning opportunities to use uncommonly utilised science processing skills, where a closed and controlled laboratory environment could not have replicated. These include designing field experiments, working within the limits of time and resources, adapting to unforeseen circumstances, including weather and tides, and the opportunity to witness for the first time unique marine ecosystems like the coral reefs.

In addition to cognitive skills, three other themes were identified, i.e., transferable skills (teamwork, ICT skill, e.g., proposal writing, video editing), values (environment awareness) and others (learning while having fun), which may be developed through the field trip. It is in line with past studies by Peasland et al. (2019), showing that when students have more control over their tasks, they develop a greater variety of transferable skills. Field experiences can provide a first-hand experience like the workplace environment by providing cognitive practice and improvement opportunities. In addition, effectively designed learning experiences that are student-centred student-driven with peer-to-peer interaction improve social skills (Rickinson, 2004), boosting confidence in working with peers and

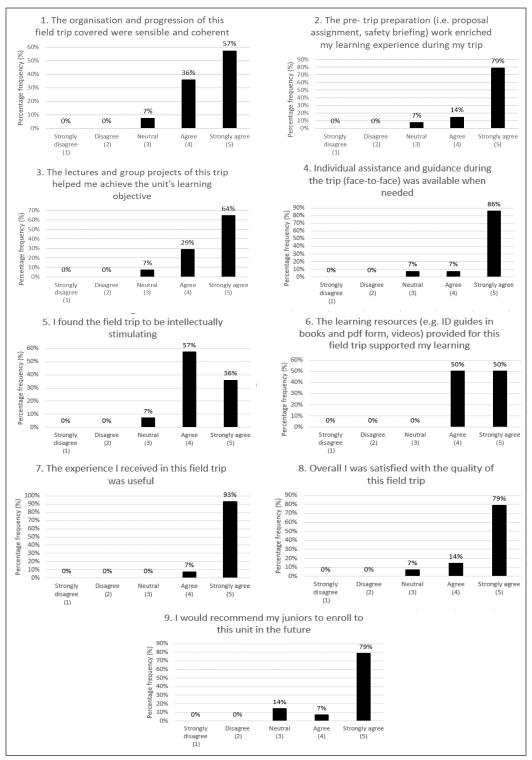


Figure 3. Student perception on field trip design

developing skills transferable beyond the studied degree (Boyle et al., 2007). When students work collaboratively to share ideas and information, they can collectively bring up the standard of learning and knowledge. It could be in the form of picking up new and advanced ICT skills from each other that ultimately improves digital literacy. For example, video production skills, i.e., storyboarding, shooting, interviewing, transcribing, and editing, are used as they go along the learning sequence of their field project. Therefore, it is undeniable that experiential learning opportunities like these provide a collaborative platform for students to build HOTS skills, gain field experiences and further hone their collaborative skills to achieve a common goal. Ultimately, this can boost students' employability because to be employable in the twenty-first century, workers need to have skills, such as problem-solving and analytical, decision making, organisation and time management, risk-taking and effective communication (Robinson, 2006). Besides, a past study by Crompton and Sellar (1981) reported that fun outdoor education experiences could contribute to positive development in the affective domain. It was further supported by Boyle et al. (2007)'s findings that positive affective responses improve motivation, and consequently, students develop deeper approaches to learning and understanding. Also, Kuchel et al. (2015) discussed that field experiences could influence environmentally responsible attitudes and behaviours as students engage in a deeper understanding of the natural environment.

In other words, fun and engaging field trips positively affect motivation to approach learning on a deeper level, which could potentially manifest as one becoming more environmentally aware and responsible, as was the case for student D mentioning that "it was a memorable experience to witness the works of nature and the massive biodiversity of the coral reefs in Lang Tengah." He continued saying that "it makes him more determined to support marine conservation." It is especially heartening to see, but further validation work is needed to verify if positive affective responses from field trips can significantly influence environmentally responsible behaviours.

Pre-Trip Activities Laid the Foundation for HOTS

The quantitative analysis on students' perception of experiential learning opportunities showed that student perception was positive towards the pre-trip, duringtrip, and post-trip activities, respectively. It is aligned with qualitative analysis showing that the field trip design successfully provided experiential learning opportunities that enabled students to demonstrate all learning skills across Bloom's revised taxonomy. For example, more than 75% of respondents strongly agreed in the quantitative survey question no. 2 that "the pre-trip preparation work enriched my learning experience during my trip." Indeed, Panelli and Welch (2005) and Scott et al. (2012) supported that fieldwork training is necessary before increasing autonomy to allow students to use past experiences to inform future practice. From here, the pretrip activities, e.g., instructor-led fieldwork, is shown to be effective in equipping the students with the technical know-how before the field trip. This process is based upon "self-determination theory," where three governing criteria, i.e., autonomy, relatedness and competence, are needed to achieve optimal personal development (Deci & Ryan, 2004). It is an interesting finding and worthy for future investigation, focusing on evaluating optimal levels of autonomy needed to facilitate the demonstration of an increased level of HOTS. Moreover, students felt that they were well supported during the field trip as reflected by more than 50% of respondents strongly agreeing for both survey question no. 4, "Individual assistance and guidance during the trip was available when needed" and survey question no. 6, "the learning resources provided for this field trip supported by learning." The level of support provided was shown to create a safe environment for students to be creative and confident in demonstrating HOTS when given the opportunities.

Instructor Self-Reflection for Continuous Improvement

This study began with a discussion of the field trip design to deliver experiential learning opportunities to students at a higher learning institution. After the unit was completed, the authors reviewed the introduced field trip design in terms of its bottlenecks and identified ways to improve further. First, in the following years, students will be shown videos made by the previous student cohort as part of the pre-trip activities. It will help new students understand the field trip expectations, especially on the field site's physical and geographical characteristics as well as limitations in terms of duration and equipment availabilities. Students can also identify past mistakes and challenges faced by their seniors and seek to improve from there. Secondly, students will be encouraged to complete a skills diary every night during the field trip. It is to aid them in reflecting on the learnings for that day, which would help them identify skills gained and learning gaps. Thirdly, a post-trip sharing session will be carried out. During the session, videos will be followed by a focus group discussion with instructor-guided questions. It can enable students to learn about the specific challenges encountered by other group members and how they overcame the problem together. It will allow students to build knowledge on the experiences and findings of other groups and stengthen student confidence as they share their findings and learning with the class. Finally, in terms of dealing with patchy internet connections on the island, it was noted that preparing a whiteboard with agenda details would enable students to keep track of program timings. Overall, by incorporating the points above, it is hoped that the field trip design becomes more refined with each successive improvement cycle for a better teaching and learning experience that facilitates HOTS.

STUDY LIMITATIONS

This study has its caveats. Therefore, recommendations for future work are provided. The first caveat concerns the demonstration of HOTS in the current study using qualitative data extracted from the videos. In future work, it would be more convincing to conduct a pre-post survey to evaluate if HOTS were acquired before the study or during the field trip itself. Besides, student interviews and focus groups could help to understand further the relationship and influence of HOTS that encompasses deep learning elements like motivation, learner's intention and teacher influence (Marton et al., 1997).

Secondly, one of the study limitations was its small sample size limited to a learning unit at a university. Consequently, findings may not represent the population and can only serve as a general guide about the overall outcomes. It was inevitable because, as a third-year unit, university safety procedures limit a maximum of 20 people for any high-risk activities at any one time. One of the options to address this is for replicative studies to be conducted over the years to confirm the findings. Furthermore, the field trip design outlined in this study is suited for small classes and meets the learning needs of final year undergraduate students in which higher levels of cognitive thinking and transferable skills are critical to preparing them for the workplace. It is further recommended that due to the small sample size, face-to-face in-depth interviews with a few of the students would provide

invaluable insights into their experiences and HOTS acquisition. From here, the field trip design in this study could be adapted for second years and pre-university education through a simplification exercise. Finally, this study recommends evaluating the effectiveness of formal (e.g., didactic lectures) and informal education (e.g., guest talk on conservation issues and field trips) and the long-term impacts on students' attitudes and behavioural changes in environmental awareness.

CONCLUSIONS

This study has described a purposeful field trip design to provide experiential learning opportunities to demonstrate HOTS in all three stages (pre, during, post) of the field trip. Indeed, field trips offer students valuable experiential learning opportunities to develop a wide range of cognitive skills, as revealed by the qualitative analysis. It is established here that the field trip design enables students to demonstrate learning skills across Bloom's taxonomy. In addition, study findings showed that students demonstrated a higher number of HOTS than basic thinking skills, further validating the assertion that purposefully designed field trips enable experiential learning opportunities that could not be reproducible in a closed environment like the laboratory setting. It was supported by a quantitative survey where the majority of respondents agreed that the pre-trip activities built an important foundation for students to demonstrate HOTS. In contrast, instructor self-reflection on the field trip design allowed continuous improvement year on year.

More than ever, the importance of purposeful field trip designs cannot be understated in a post-CoVID-19 pandemic world. With comprehensive risk assessment and management strategies, field trips should be continually emphasised and not be pressured to be removed as part of a cost-cutting exercise. Now is a window of opportunity to rethink, reframe and refine existing field trips. This work will serve a threefold impact by providing how an authentic experiential learning experience can be executed, an innovative teaching model for promoting higher-order thinking skills (HOTS), and a model of pedagogy reform for field trip designs. For a better teaching and learning experience that facilitates HOTS, future research could include collaborations with local NGOs to exchange and share new and related information.

DECLARATION OF INTEREST STATEMENT

The authors declare no conflict of interest.

DATA AVAILABILITY STATEMENT

The authors confirm that the data supporting the findings of this study, i.e., group project methodology and video transcription are available in the article's supplementary materials.

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REFERENCES

Anderson, L. W., & Krathwohl, D. R. (2001). A taxonomy for learning, teaching, and assessing: A revision of Bloom's taxonomy of educational objectives. Allyn & Bacon.

Boyle, A., Maguire, S., Martin, A., Milsom, C., Nash, R., Rawlinson, S., Turner, A., Wurthmann, S., & Conchie, S. (2007). Fieldwork is good: The student perception and the affective domain. *Journal of Geography in Higher Education*, 31(2), 299-317. https://doi.org/10.1080/03098260601063628

Crompton, J. L., & Sellar, C. (1981). Do outdoor education experiences contribute to positive development in the affective domain? *The Journal of Environmental Education*, 12(4), 21-29. https://doi.org/10.1080/00958964.1981.9942638

Dabamona, S. A., & Cater, C. (2018). Understanding students' learning experience on a cultural school trip: Findings from Eastern Indonesia. *Journal of Teaching in Travel & Tourism*, 1-18. https://doi.org/10.1080/15313220.2018.1561349

Deci, E. L., & Ryan, R. M. (2004). *Handbook of self-determination research*. University Rochester Press.

- Domin, D. S. (1999). A review of laboratory instruction styles. *Journal of Chemical Education*, 76(4), 543. https://doi.org/10.1021/ed076p543
- Entwistle, N. J. (1991). Approaches to learning and perceptions of the learning environment: Introduction to the Special Issue. *Higher Education*, 22(3), 201-204. http://www.jstor.org/stable/3447172
- Essig, R. R., Troy, C. D., Jesiek, B. K., Buswell, N. T., & Boyd, J. E. (2018). Assessment and characterization of writing exercises in core engineering textbooks. *Journal of Professional Issues in Engineering Education and Practice*, 144(4), 04018007. https://doi.org/10.1061/ (ASCE)EI.1943-5541.0000378
- Ganapathy, M., Singh, M. K. M., Kaur, S., & Kit, L. W. (2017). Promoting higher order thinking skills via teaching practices. 3L: Language, Linguistics, Literature, 23(1), 75-85. http://doi. org/10.17576/3L-2017-2301-06
- Heath, C., Hindmarsh, J., & Luff, P. (2010). *Video in qualitative research*. Sage Publications.
- Huisman, J., Kiviaho-Kallio, P., & Lyon, D. (2019).
 Enhancing employability through experiential learning and reflective learning. In Conference Proceedings: The Future of Education International Conference. Filodiritto Editore. http://doi.org/10.26352/D627_2384-9509_2019
- Hurley, M. M. (2006). Field trips as cognitive motivators for high level science learning. *The American Biology Teacher*, 68(6), 61-66. https://doi.org/10.1662/0002-7685(2006)68[61:FTACMF]2.0.CO;2
- Jones, H. (2010). National Curriculum tests and the teaching of thinking skills at primary schools-parallel or paradox? *International Journal of Primary, Elementary and Early Years Education*, 38(1), 69-86. https://doi.org/10.1080/03004270903099785

- Jose, S., Patrick, P. G., & Moseley, C. (2017). Experiential learning theory: The importance of outdoor classrooms in environmental education. *International Journal of Science Education, Part* B, 7(3), 269-284. https://doi.org/10.1080/21548 455.2016.1272144
- Kenayathulla, H. B., Ahmad, N. A., & Idris, A. R. (2019). Gaps between competence and importance of employability skills: Evidence from Malaysia. *Higher Education Evaluation and Development*, 13(2), 97-112.
- Kolb, A., & Kolb, D. (2009). Experiential learning theory: A dynamic, holistic approach to management learning, education and development. In S. J. Armstrong, & C. V. Fukami (Eds.), The SAGE handbook of management learning, education and development (pp. 42-68). SAGE Publications Ltd. https://www.doi. org/10.4135/9780857021038.n3
- Kuchel, L., Wilson, R. S., & Ellis, W. H. (2015). Cameras, competition and creativity: Assessing 1st year ecology in the field. *International Journal* of Innovation in Science and Mathematics Education, 23(2), 34-45.
- Lei, S. A. (2010). Field trips in college biology and ecology courses: Revisiting benefits and drawbacks. *Journal of Instructional Psychology*, 37(1), 42-48.
- Marton, F., Hounsell, D., & Entwistle, N. J. (1997).
 The experience of learning: Implications for teaching and studying in higher education.
 Scottish Academic Press.
- Mustaffa, R. (2007). Mengadaptasikan gaya pembelajaran pelajar ESL: Satu kajian kes pelajar tahun satu di UKM [Adapting ESL students' learning approach: A case study of first year students at UKM]. GEMA Online Journal of Language Studies, 7(1), 1-32. https:// ejournal.ukm.my/gema/article/viewFile/185/158

- Nowell, L. S., Norris, J. M., White, D. E., & Moules, N. J. (2017). Thematic analysis: Striving to meet the trustworthiness criteria. *International Journal of Qualitative Methods*, 16(1), 1-13 https://doi.org/10.1177/1609406917733847
- Oliver, C., Leader, S., & Kettridge, N. (2018). Birmingham Bog outdoor laboratory: Potentials and possibilities for embedding field-based teaching within the undergraduate classroom. *Journal of Geography in Higher Education*, 42(3), 442-459. https://doi.org/10.1080/030982 65.2018.1455816
- Orion, N. (1993). A model for the development and implementation of field trips as an integral part of the science curriculum. *School Science and Mathematics*, *93*(6), 325-331. https://doi.org/10.1111/j.1949-8594.1993.tb12254.x
- Panelli, R., & Welch, R. V. (2005). Teaching research through field studies: A cumulative opportunity for teaching methodology to human geography undergraduates. *Journal of Geography in Higher Education*, 29(2), 255-277. https://doi. org/10.1080/03098260500130494
- Passarelli, A. M. (2016). Using experiential learning theory to promote student learning and development in programs of education abroad (ORBH Working Paper 9/13/2011). Stylus Publishing. https://weatherhead.case.edu/departments/organizational-behavior/workingPapers/WP-11-03.pdf_
- Peasland, E. L., Henri, D. C., Morrell, L. J., & Scott, G. W. (2019). The influence of fieldwork design on student perceptions of skills development during field courses. *International Journal of Science Education*, 1-20. https://doi.org/10.108 0/09500693.2019.1679906
- Rickinson, M. (2004). A review of research on outdoor learning. Field Studies Council, National foundation for educational research, United Kingdom, https://www.informalscience. org/sites/default/files/Review%20of%20

- research%20on%20outdoor%20learning.pdf
- Robinson, J. S. (2006). Graduates' and employers' perceptions of entry-level employability skills needed by Agriculture, Food and Natural Resources graduates [PhD thesis, University of Missouri]. https://doi.org/10.32469/10355/4328
- Saldaña, J. (2015). *The coding manual for qualitative researchers*. Sage Publications Ltd. https://www.sagepub.com/sites/default/files/upmbinaries/49731 Saldana Chapter 1.pdf
- Scarce, R. (1997). Field trips as short-term experiential education. *Teaching Sociology*, 25(3), 219-226. https://www.jstor.org/stable/1319398
- Scott, G. W., Goulder, R., Wheeler, P., Scott, L. J., Tobin, M. L., & Marsham, S. (2012). The value of fieldwork in life and environmental sciences in the context of higher education: A case study in learning about biodiversity. *Journal of Science Education and Technology*, 21(1), 11-21. https://www.jstor.org/stable/41413281
- Shafie, L. A., & Nayan, S. (2010). Employability awareness among Malaysian undergraduates. *International Journal of Business and Management*, 5(8), 119-123. https://doi.org/10.5539/ijbm.v5n8p119
- Sharlanova, V. (2004). Experiential learning. *Trakia Journal of Sciences*, 2(4), 36-39.
- Wolfe, D. E., & Byrne, E. T. (1975). Research on experiential learning: Enhancing the process.
 In Developments in Business Simulation and Experiential Learning: Proceedings of the Annual ABSEL Conference. Association for Business Simulation and Experiential Learning.
- Zohar, A., Degani, A., & Vaaknin, E. (2001). Teachers' beliefs about low-achieving students and higher order thinking. *Teaching and Teacher Education*, 17(4), 469-485. https://doi.org/10.1016/S0742-051X(01)00007-5

APPENDICES

Appendix 1

Methodology of 4 group projects

GROUP 1: BARNACLES

This experiment aimed to investigate the effects of disturbance on barnacle communities by comparing data from disturbed and undisturbed sites on Lang Tengah Island. The project objective was to better understand the impact of anthropogenic activities on barnacle communities. The findings of this study could contribute in the broader understanding of the role of disturbance in shaping barnacle communities in tropical waters and this can be further applied to mitigate the negative impacts of disturbance on barnacle communities. Three square quadrats of varying sizes, 1 m by 1 m (large), 0.75 m by 0.75 m (medium) and 0.5 m by 0.5 m (small) will be placed at each site; adopted method by Farrell (1989). The number of barnacles within the quadrat was be counted, however if the barnacle density were too numerous to count individually, percentage cover of barnacles in the quadrat was recorded instead. A size-wise comparison of the quadrats were made between both sampling sites. Reference sheets of common barnacle species were used to identify the species of barnacles on site, and pictures were for species unable to be identified immediately.

GROUP 2: COASTAL MACROINVERTEBRATES

This experiment aimed to compare the coastal macroinvertebrate species diversity between the disturbed site (high human traffic) and undisturbed site (low human traffic) on the Lang Tengah Island beaches to further evaluate the significance of human disturbances. The team was split into two groups where duplicates of disturbed and undisturbed sites were carried out simultaneously. A sand corer was inserted 30 cm into the sand and the area around the corer were cleared before removing the corer. The coring contents were immediately filtered using sieves of 1 mm pore size (Barba et al. 2010) into four buckets (Disturbed 1 and Disturbed 2; Undisturbed 1 and Undisturbed 2). The filtered samples were then categorised into morphology to aid in the quantification and identification processes.

GROUP 3: MACROPLASTICS POLLUTION

This project aimed to study macro-plastic abundance at varying sites on Lang Tengah's beaches, such as sites with varying public accessibility or sites of differing distance from the shoreline. The significance of this study were to raise student awareness of the impacts of human activities/behaviours on the marine and coastal ecosystems/habitats. In the long term, local community populations and tourists visiting the island could further their understanding of the importance of sustainable material usage by limiting their contribution to plastic pollution through personal actions such as; recycling, waste reduction and responsible purchasing. Four sites were chosen, two pristine, and two with high levels of human activity. At each site, students sampled along a 50m transect line, constructing a 1x1m quadrat, sampling randomly every five metres within three metres of the transect line. A shovel and bucket were used to collect the top layer of sand to a depth of 10cm to be filtered through a 5mm pored sieve; the separated macroplastic were then transferred into a bucket ready for identification and weighing. Plastic composition were identified using visible recycling codes, while unidentifiable plastics were be categorized under other" and subdivided into hard and soft plastics.

GROUP 4: MARINE FOOD WEB

This project aimed to construct a concise marine food web specifically for the Lang Tengah Island. Various observational samplings were undertaken in order to establish the existing marine life present and then later identifying them to at least a genus level and analysing their species-specific interactions. Using the constructed food web, comparison of species presence/absence, species densities and abiotic factors in both pristine and disturbed ecosystems were done as well as to illustrate indirect interactions among species.

Appendix 2

Video transcription

GROUP 1: BARNACLE ABUNDANCE

The major task of this group was the comparing of barnacle abundance between the disturbed and pristine sites on *Lang Tengah Island*.

According to the first speaker, she informed that *due to heavy tourism they predicted that there will be less barnacle abundance at the disturbed site from the effects of human activities*, thus it is presumed that she was able to apply some knowledge of what they have been taught already in class, as well as showed some values of environmental awareness.

Another student informed that on the first day, they went out as a group to different parts of the island to survey for their sites. This shows that the students were able to work in groups, thus applying teamwork/collaborative skill to be able to successfully complete their project. The student further stated that they decided on their pristine and disturbed site based on the amount of people they observed throughout the day at the beach. From the video, it was obvious that the students were actually in a group (1 boy, and three girls), and they cooperatively worked together in critical thinking and applying how to achieve their goals, thus solving the problem at hand. Still on knowledge gained by the group, the student further informed that disturbed area has tourist stepping on the rocks to take pictures, snorkelers, etc.; while the pristine area was nearer toward the turtle bay where the tides are higher and less people were observed.

On the second day of their field trip, the student reported that: quadrates of 0.5m was set on rocks in both pristine and disturbed site. This shows that the students of this group had knowledge about what they were to carry out in the field. Furthermore, 4 quadrates were placed at each site and they were divided into pairs to count the abundance by species. Here it is observed again that the students possessed group skills; Teamwork/ collaborative skill: which enabled them to successfully complete the project, and showed how each role was achieved. Each group counted the abundance according to various species.

Regarding the Problem solving/critical thinking skills by the students, it was observed as reported by the students that they encountered some problems. Thus, the students stated that: Some of the problems that they faced was that they had to go underwater to count the barnacles; besides that, there was an abundance of clams that has outcompete the barnacles which made it hard for them to observe the abundance of barnacles.

What then was the **findings** of this group? According to the one of the students, who reported, they found a total of 41 barnacles in the pristine site and 32 barnacles in the disturbed site. It was also reported that the results that they found was able to actually fit their proposed hypothesis where they predicted that they would find more abundance of barnacles in the pristine site compared to the disturbed site. Furthermore, this can be explained by heavy human activity surrounding their disturbed site, which was in front of the resort. Again here the students were able to exhibit some skills, specifically science process skills as well as higher order thinking skills, as they were able to explain reasons for the variances in the abundance of barnacles with regards to locations of the pristine site and the disturbed site. Furthermore, the students informed that they saw a lot of humans snorkelling around the area and also climbing on the rocks to take photos, among other activities. This shows that the students were very observant, which is one of the science process skills. They also stated that: this could have potentially affected the barnacle abundance in that area. Here it is seen that the students were able to apply higher thinking skills such as analysing, being creative in their assumptions, amongst others. Furthermore, the student also reported that the water in the disturbed area was also seen to be more polluted, and that in that area they saw a lot of plastic debris and in certain areas they also saw an oily sheen on the water, thus this could also contribute to the degradation of the barnacle community in the disturbed area. It was also discovered that barnacles found on a plastic bottle washed up the beach. All these shows that the students were critical in their analysis, and thus were able to combine application of their knowledge to what was seen in the field physically.

Next was the **new skills learnt** by the students. As reported by one of the group members, he mentioned that for the new skills he learned or acquired from this project, firstly, he learnt how to find and also differentiate barnacles, because the barnacles they found were different from those found in other beaches he has gone to before. The student also stated that these barnacles were small in size, so basically they had to look very closely to find it, and also the amount of the barnacles was small (like around 0.6cm). He also stated that he learnt how to differentiate barnacles according to their colour and sizes, the colours of the barnacles here is white and black with stripes. The second new skills learnt by the student was: how to undergo quadrat sampling using the rope. According to the student, sometimes during their quadrat sampling, the rope submerged in the water, thus making them to count the barnacles in the quadrat under water. He stated that sometimes, he had to dive his head into the water. Here, it is observed that the student also possessed some critical thinking skills combined with problem solving skills, going extra mile to achieve the goal of the experiment.

The next part is regarding **the benefits of this study** to the students. One of the group members reported that one of the benefits of the study is the increase of awareness on the importance of barnacles to the ocean (AWARE OF IMPORTANCE OF SUSTAINABILITY). She further stated that this is so because barnacles are largely overlooked and their role to the ecosystem is not really recognized, especially in countries such as Malaysia. Thus, they hoped that as a result of conducting this study, they (group members) can increase the awareness on the importance of barnacles on Lang Tengah Island to the local community (ENVIRONMENTAL AWARENESS). From here, it could be noticed that the student answering this question was having fun, sitting on a moving bench on the beach, however, this didn't distract the student from giving great insights to questions being asked. Still on the benefits, the student stated that another benefit of the study is that the results being found by their group can help in improving the understanding of the effects of human disturbance on barnacle communities so that in the future, these effects can potentially be migrated.

Another student took it up from there, and summed it up stating thus: that their disturbed site has less barnacle abundance than their pristine site due to the effect of human activities such as snorkelling, tramping and water pollution. She also stated that they were able to identify 2 distinct barnacle species which were present at both sites. She further stated that they were able to overcome all the problems faced as a group together. Again, this indicates that the group members were able to exhibit their problem solving/critical thinking skills to eventually achieve their goals of the project.

However, the student mentioned that *although the experiment can be concluded as successful, yet there is a lot of room for improvements.* This shows that the students had quite a great knowledge of the field project, to the extent of even identifying and proposing other rooms for improvements.

So the next section discusses the **improvements** that could be made from the experiment, as reported by the students. One of the students, while having fun on the beach, reported thus: that after conducting their experiment, the improvements found could be made to the methods being used, such as placing a rope anchored with something heavy down to the bottom of the water to allow barnacles to colonize the rope (The student actually demonstrated the improvement being suggested by placing the rope into the water). This could indicate how the student was able to learn while having fun, as well as being able to apply critical knowledge in a practical way, also it could be stated that the student also had higher thinking skills, to have being able to come up with such improvement ideas. Furthermore, the student stated that with the new method, after three months, the investigators can them come back and investigate the barnacle species and abundance on the rope.

As reported by another student, due to the time constraints of their experiment, they actually couldn't conduct the rope method because three months is needed; however they stated that they would try using a belt transect; where they would lay about a 10 meter line and use a 1 meter pole and go along the 10 meter transect and thus everything that falls within the 1 meter line would be counted as their data. The student further gave an example stating that; for example, they would count everything that falls within this line (as described in the video) and go along the transect as follows.

The students were able to apply a lot of knowledge regarding their experiment topic, and worked together as a group to achieve their expected outcome.

GROUP 2: CORAL ABUNDANCE

The major task of this group was to identify the description of coral species in relation with the distance of the collection site from the sea on *Lang Tengah Island*.

The students started by presenting the materials that were used which are: PVC pipes, sieves, buckets, coral, and shovel. The students reported that the first sampling site has an elevation of 9M, the second sampling site has an elevation of 7M, and the third sampling site has an elevation of 5M. It is discovered that this group exhibited a good science process skills, most especially in classifying and measuring via the use of numbers, as stated above. Also, it was discovered that the group possessed a team-like/collaborative skill, as it was seen that they worked together in group, while carrying the coral net. At an instance, a student was found reading the GPS location thus exhibiting some information technology skill, while other group members were performing other respective duties, some observing, some fixing the pipes in appropriate places, thus having a strong collaborative power to achieve their goal. At the point of searching for the corals, it was obvious that the students possessed another skill of carefully identifying the corals from the sand. They carefully picked out the corals from the sand and put into a separate container.

The team were not left of problems, however they were able to adapt to the problem they faced, thus indicating that they possessed the problem solving/critical thinking skills. The problem faced as reported by the students was the inability to use the coral sampling tool as the sand was too dense, thus they had to make use of their hands to pick up the corals on the surface that were bigger than 5cm. Lastly, they separated the corals based on their morphology.... The also stated the importance of corals, that they are essential as they provide shelter for many royal organisms and they also protect from damaging infections. This shows that the students had great knowledge about their project, and also had some higher order critical thinking skills. The students also stated that their findings can be used as a baseline study for future studies who wish to further investigate on the coral biodiversity of Lang Tengah. Another skill of evaluation and analysing was applied as the students after the whole experiment still measured the corals via the use of barometers to reconfirm the measurements so as not to miss anything out. Here, it can also be noted that they possessed science process skills. After categorizing the corals according to species, they weighed the corals of each sizes so that a representation of species abundance can be obtained. It can also be discovered that the students exhibited some higher order thinking skills, as they weighed each coral according to their sizes, for purpose of obtaining representation of the abundance of each species.

The findings from this group, as they were more into identifying species of corals is given thus. The coral species found by the group are: *Isopora, Montastrea, Acropora, Pavona, Seriatopora, Pocillopora, Porites, Turbinaria,* and *Psammocora.*

For the discussion segment, a question was raised as to: Why they observed more dead coral species at site 3? The answers were provided thus: Water from the high tidewashes out and only reaches a certain elevation, and based on that reason, the high tide....does not go pass collection site 3, but at a higher elevation, they were still able to observe exclusive species like: Turbinaria species with elevation of 9M, Montastrea species with elevation of 7M. Furthermore, this could be due to the occurrence of the Monso season where tides are higher, therefore new day coral species could be washed out for the inland. Perhaps this explains it was able to still observe new species in collection site 1 and 2. Apart from the species of the corals observed, another parameters that was measured in this experiment is the weight of the corals as representatives of the species abundance. Their results suggested that Acropora species is the most abundant coral species observed as it was present in all sites and had the heaviest weight across the three sites. This information suggests that the students were able to make inferences with regards to their findings from the experiment.

In conclusion, the gaps identified by the group was the proper knowledge of coral diversities with regards to the morphology of corals in Lang Tengah Highland. Also, the students stated that it was difficult to identify the coral species (space?) morphology alone even after using the coral enabler. Therefore for future references, the students recommend the study of live corals instead of dead ones, of course with the help of guide tips, so that a better representation of the coral diversity in Lang Tengah can be obtained.

At the end of the video, there were clips showing the group members having more funny adventures and being able to have fun even while learning.

GROUP 3: LANG TENGAH PLASTIC PROJECT

This group project involved Mesoplastic pollution in Lang Tengah, with the aim of studying the effect of the hotel presence on the plastic pollution on the beach. Their research question is: How does the presence of hotels impact the amount of mesoplastic on a beach?

Mesoplastic pollution is an ecological hazard on tourist islands like Lang Tengah.

The research methodology as chosen by the students was to select sites with and without hotels. This shows the creative higher order thinking skills of the students.

The students were able to work as a team, in a collaborative manner, as they helped each other achieve their goal, like measuring the transect at each site together, holding the measurement ropes, etc.

At each site, measure a 50m transect parallel to the shore; throw a quadrat haphazardly every 10 metres. The students also excavated the top 5cm of sand from the quadrat (This again was done in group, by two girls, thus showing the collaborative/team spirit.

Furthermore, they *sift out plastic and coral using a 5mm sieve*. At this point, they noticed that the process was too slow and thus, this posed as a challenge and problem in their research progress. To be able to solve this problem, they exhibited a creative higher order thinking skills, and problem solving skills by *instead filling up a mesh bag with the quadrat sand* which definitely hastened up the process and also produce better result.

Further, they immersed the bag in the water to sift out the sand, which according to them was much faster. Next, they sift through coral fragments to find plastic. This shows the analysing skills of the students, and their evaluation skills in finding plastics. They bag plastic pieces according to quadrat, Here, some science process skills were exhibited by the students, most especially in classifying and measuring via numbers and dimensions, as regarding the use of quadrats. The next step was to weigh each bag analytical scales; here the students manifested the information and communication technology skills, as they were able to make use of the technology in the lab to perform their analysis.

This section provides the **results** from their project. The results show that litter in Site 1 was composed of far smaller plastics that that of Site 2. Also, Litter was mainly composed of plastic drink bottles, nylon and straws. It was also discovered that the average weight of plastic found at Site two is almost seven times more than site 2, implying that it was significantly higher than Site one. They were also able to apply some scientific process skills, as they stated that the standard variation shows that site 2 has higher variation of plastic found in each quadrant, thus the amount of plastic found in each quadrat has more variableness at site 2.

The students in this group further went ahead to find out the reasons for their results, thus this implies that they exhibited higher thinking order skills, as well as utilized information and communication technology skills to sieve more information from their experiment sites, to be able to make inferences. In regards to this, they conducted a short interview with the hotel staff and it revealed that Site 1 is being cleaned daily by the hotel staff, while Site 2 is being cleaned on occasional basis by the Turtle Watch volunteers. In addition to

that, it was also discovered that the island's recycling is piled right behind Site 2 for pickup, and can spread easily onto the beach.

They went further to find out and explain how their data can be used. Here it can be discovered that the students exhibited some inference making skills, enabling them to make valuable contributions from their study. Thus, they stated that the data can be used to encourage hotels to implement or expand cleaning programs. Also, the litter composition enables them to determine an approximate source; for the tourists (bottles + wrappers), and for the fishing boats (nylon rope).

Further, a question as to how these findings could benefit the society was discussed, thus showing that the students had acquired vast knowledge from their project and were able to apply it even for future benefits. Thus, it was stated that *improving waste management on tourist islands will benefit hotel staff by bringing in more "eco-tourists"*, hence providing an economic incentive. Also, removing the risk of mesoplastic pollution from tourist islands will reduce plastic bioaccumulation and injury in wildlife.

Next was the **gaps** that were identified by the students in their study. Firstly, they weren't able to identify the exact source of the plastic (island/mainland) or the manufacturer. Secondly, there is no research on how plastic is affecting the marine or terrestrial biodiversity on Lang Tengah (even though the Turtle Watch have useful observations). Thirdly, it wasn't possible to identify the type of plastic or the manufacturer in most cases.

They also made some recommendations for future projects, thus exhibiting inference skills (science process skills). They stated that Firstly, in order to improve their study in the future, rather than digging, it is better to only collect plastic from the surface so that transects can be longer and quadrats can be more frequent. Second recommendation is to run a transect perpendicular to the shore to better understand patterns of litter disposal: so as to find out if it is coming from the land or the sea? Thirdly is to compare more sites and pair transects with a biodiversity survey to check for any associations.

GROUP 4: LANG TENGAH FOOD WEB

Some information from the introductory part: Coral reefs are large underwater structures composed of clusters of coral polyps held together by calcium carbonate. It harbours the most diverse underwater ecosystem in the world. In fact, coral reefs support 25% of all marine life despite only occupying about 1% of the ocean's area. Coral reefs actually provide one of the basic needs for all the reef fishes, which is actually shelter. By supporting a wide range of plants and animals, reefs play an important role in maintaining a balanced relationship between predators, prey and organisms in competition for the same resources. They also provide hundreds of millions of people with essential food provisions, livelihoods, flood protection and crucial economic opportunities. Malaysia houses approximately 4000 square kilometres of coral reefs and is part of the Coral Triangle, making it an important hotspot for marine ecosystem. However, the reefs of Malaysia are significantly understudied and this study sets out to understand the marine ecosystems of Lang Tengah and to address the knowledge gaps. The students proved that they had adequate background knowledge about their project; this is perhaps based on what they have studied in class before coming to the field.

The students were found having fun on the beach cruise, and this indicates that they were learning and having fun at the same time, thus balancing the whole process.

As reported by **one of the students**, Food chains are sequential networks that show how energy is transferred from one trophic level to another, when several are combined together, then you get a food web. Each life inhabiting this unique and delicate ecosystem are all interconnected and each interactions can be represented by a food web. They further indicated that their project site is Lang Tengah, a small island situated off coast of Kuala Terengganu and sandwiched between Perhentian and Redang island. Further, it was noted that it is also a popular spot for hundreds of green sea turtles to lay their eggs on the island's white sand beach.

Reports were also made regarding the site collection. For the site selection, the students reported that they had 5 different snorkelling sites to conduct their observational sampling. They also informed that the data obtained will be used to construct a comprehensive and representative food web of Lang Tengah. The five sites are selected in such a way that it consists of pristine and disturbed area. How they defined the status of a snorkelling site is based on human activities, human inhabitant (showing that they possessed values of environmental awareness, and were aware of the importance of sustainability), infrastructure such as jetty and condition of the coral.

Further is the data gathering process. They stated that to gather data for their food web, they conducted an observational sampling at areas with varying degree of disturbance. This shows that the exhibited some science process skills, such as observation and analysis skills. With underwater cameras, they snorkel at the selected sites and record the aquatic flora and fauna present at each site (this showed that they also exhibited some information and communication technology skills, as well as were able to apply some higher order thinking skills to achieve their goal). Also, they made use of clever little improvisations, such as DIY extension to improve the quality of pictures/videos taken for later identification. Again this shows that they had problem solving/critical thinking skills, as they were able to think critically and come up with better improvisations to carry out their work, thus troubleshooting problems on hand. They informed that the good thing about conducting an observational study is that it is cost-effective and has relatively low impact to the environment. (Again, they possessed values such as environmental awareness and knew the importance of sustainability to environment). After the identification stage, they constructed the food web using Adobe Photoshop and Adobe Illustrator (This showed that the students had skills of information and communication technology, which helped them to be able to make use of the technology tools in constructing their food web).

They were also able to classify and make representations of each elements. Each node represents a marine organism and their prey-predator relationship is depicted by a line. Food webs can be used to visualize the transfer of energy up various trophic levels. This helps in providing important insights into the effects and extent of pollution on the marine ecosystem and the mechanics of bioaccumulation. Besides that, it serves as a foundation for further research opportunities.

Here, the students showed that they exhibited science process skills, thus being able to make inference from their findings. They stated that through their findings for the past few days on the field, they studied that at the bottom of the food web, there exists the autotrophs, which are the primary producers such as corals and algae. Also, they discovered that there are primary consumers, of which most of them are herbivores, such as parrotfishes and sea urchins that feed on corals. Further, there are many sea cucumbers that feed on the algae. Going along the food web, they observed and saw many secondary producers; these are the reef fishes which they noticed were in abundance. This can be the damselfishes, butterfly fishes and so on. They feed on shrimp, plankton and other small marine invertebrates. Finally, there are the tertiary consumers, these are typically carnivores which feed on other fishes like the barracudas and black tip reef sharks. The food web can be interconnected as each species affects the population of other species, thus it is important to maintain the health and biodiversity of the coral reefs.

They further suggested improvements to be made for their study, and is stated thus. One of the improvements for their study is that there should be more snorkelling sites; also there is need for more data to be able to achieve a conclusive result. Another menial tweak is to approach the marine fishes closer by diving. This is so that it would be possible to further observe coral reefs at the bottom that are too deep from the surface.

Furthermore, though it may seem insignificant, studying food webs provide fundamental knowledge of an ecosystem which stems into many different fields. One of the group members mentioned that the field trip made him realize the aforementioned, and he also believed that everyone can agree that they all bonded up together as a team, thus exhibiting team/collaborative skills.

Another team member stated that reading papers and watching plenty of documentaries will never out win seeing the coral reefs with his own eyes, thus, they were glad to have had the opportunity of the field trip and being able to learn new things. They also reported that it was a memorable experience, to witness the works of nature (having fun) and the massive biodiversity of the coral reefs in Lang Tengah. The team member also stated that it makes him more determined to support marine conservation.

Another team member also reported and expressed his joy that: the experience was an unforgettable one, and he has learnt so much from the trip (had fun and learnt new things). He further stated that, he also learnt how to cooperate well with the team and that it also helped in providing basic skills to write a scientific proposal (acquired scientific process skills) and carry out the field experiment. He further stated that he was very grateful for this opportunity that the unit offers, stating that the experience will prove to be useful for the future.

The ending clips also showed that the students had a lot of fun during the field trip.

GEOLOGICAL INFORMATION

The geological coordinate of the field site is 5.7960° N, 102.8961° E. The island is located about 40 km north east of Kuala Terengganu (22.5 km from Tanjung Merang) on the east coast of peninsular Malaysia.



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Anchored Instruction in Teaching Business Mathematics

Rongie C. Abella

College of Teacher Education, Cebu Normal University, Osmeña Boulevard., Cebu City, 6000, Philippines

ABSTRACT

This study aims to determine the effectiveness of Anchored Instruction in teaching Business Mathematics to the senior high school students of Simala National High School in Cebu, Philippines. Anchored Instruction is a teaching method in which the learners can generate problems, look for the relevant data, and find solutions from the situated problem-solving environment shown through videos. Its instructional design highlights three main features: generative stories, embedded data, and problem complexity. A quasi-experimental research method was utilized using pretest-posttest control and experimental group design. Both the control and experimental groups with 40 subjects each were not significantly different from each other as established in the match pairing of their profile. They were given a pretest, exposed to their respective interventions, and then were given a posttest. The control group was exposed to Conventional Instruction, while the experimental group was exposed to Anchored Instruction as the method in teaching Business Mathematics. Findings revealed that Anchored Instruction is a more effective method in teaching Business Mathematics than conventional instruction. The learner-centeredness of Anchored Instruction provided opportunities for the learners to be highly engaged in the learning process, as noted in the researcher's observation and interview with selected subjects. As a result, they could identify the useful knowledge and eventually overcome the inert knowledge problem. Hence, it is recommended to utilize this method in teaching Business Mathematics.

Keywords: Anchored instruction, business mathematics, Philippines, teaching method

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INTRODUCTION

Entrepreneurship is one of the core elements of the Philippines' K12 education curriculum. Senior high school graduates are expected to engage and succeed in worthwhile business endeavors. They are expected not just to settle on being employed but to generate job

opportunities for themselves and others. The learners should be equipped with the skills essential in running a business to realize this curriculum exit. Deitz and Southam (2015) asserted that Mathematics is used in almost every phase of business; thus, mathematical skill is undeniably one of the essentials needed to succeed in business endeavors. This realization then leads to the emphasis on teaching business mathematics to all senior high school students.

Business mathematics skills are significant because of their practical applications. Hence, there is a need to teach these skills in methods that the learners can master the skills entirely and deeply. Teaching these skills should then be in a context where every concept and problem to be explored is relevant to reallife situations. In current Mathematics standards, memorizing computational facts has significantly shifted to applying problem-solving to real-life situations (Little, 2009). Introducing real-life problems in the classroom provides opportunities for the learners to understand what people experience in their day-to-day business engagements.

However, Morales (2008) stressed that problem-solving is a great challenge for most students because of its complex process, including reading the text, analyzing the ideas, identifying the unknown, and devising an approach to solve the problem successfully. Some students even exhibited negative attitudes towards problem-solving in Mathematics (Nicolaidou & Philippou, 2003). Furthermore, the concepts and

problems presented in classes are usually given orally or in print which fails to deeply capture the attention and stimulate the interest of the learners. Thus, the students are not motivated to engage in mastering the desired skills because it is exhausting, complicated and the relevance to real life is not deepened. Therefore, it has been the challenge of the teachers on how to immerse the learners in a context with real-life problems that could lead them to become motivated, independent thinkers.

Anchored Instruction has been developed by The Cognition and Technology Group at Vanderbilt, headed by John D. Bransford, to address these concerns. It aims to conquer and solve the inert knowledge problem, which is the people's condition of easily remembering the relevant knowledge when explicitly asked but is naturally not used when it comes to problem-solving (The Cognition and Technology Group at Vanderbilt [CTGV], 1990).

Anchored instruction attempts to create a setting where the learners can explore and understand real-life problems. Its goal is for the learners to generate problems, look for the relevant data and find solutions from the realistic activities shown in the videos. Its instructional design highlights three main features: generative stories, embedded data, and problem complexity. Creating a situated problem-solving environment where the learners can explore the problem from different perspectives is one of its targets (Lee, 2002). Stories or macrocontexts shown in videos are used to situate the application of knowledge (Oliver & McLoughlin, 1999). As emphasized by Crews et al. (1997), using videos, animation, graphics, and simulation addresses the problem of inert knowledge because they let the presentation of the learning material in realistic contexts while stimulating constructive and generative learning.

This interactive, realistic, and engaging nature of Anchored Instruction could be utilized in teaching the skills effectively in business mathematics. However, there is still less literature supporting the application of Anchored Instruction method in teaching Business Mathematics. Hence, this study would like to find out the effectiveness of Anchored Instruction in teaching Business Mathematics to the senior high school students of Simala National High School in Cebu, Philippines. The result of this study would determine if this method was effective in the mastery of such skills. The outcomes would eventually contribute to the successful attainment of the entrepreneurship curriculum.

LITERATURE REVIEW

Enhanced Basic Education in the Philippines

Through the Republic Act 10533 (2013), formally named as Enhanced Basic Education Act of 2013, basic education in the Philippines was strengthened, resulting to the addition of two years. The additional years were intended for the Senior High School program in which four curriculum exits were projected for the graduates, namely employment, entrepreneurship, higher education, and middle-level skills development.

Section 5 of the Enhanced Basic Education Act of 2013 specifically states that the Department of Education shall follow the standards and principles of constructivism, reflective, collaborative, integrative, and inquiry-based pedagogical approaches in the curriculum implementation. Hence, with this provision, it is mandated that the teaching and learning approaches employed in the classrooms should uphold the features of a constructivist classroom, which are democratic, student-centered and that the focus of learning is on making connections among the facts gathered towards developing new understanding (Brooks & Brooks, 1999). The learners are the center of the process of education, and they should actively construct knowledge in their minds (Bada & Olusegun, 2015).

Entrepreneurship as a Curriculum Exit

Entrepreneurship as one of the K to 12 Basic Education Curriculum exits is one of the highlights of the senior high school program. Hence, senior high school graduates are expected to engage in business endeavors with high hopes of creating job opportunities for Filipinos and eventually contributing to the Philippine economy. Setting up more businesses can stimulate economic growth, which in turn provides benefits to society (Ahlstrom, 2010).

With entrepreneurship curriculum exit, curriculum planners embedded basic business mathematics as one of the General Mathematics core subject components. Kaur (2014) agreed that learning Mathematics is essential for it is a tool to fully understand

business and finance, economics, or even medicine through the development and improvement of problem-solving skills and logical reasoning of a thinking individual. Since these essential entrepreneurship skills are embedded in a core subject, all senior high school students are mandated to learn the concepts. Particularly, the lessons that composed the basic business mathematics can be divided into four major concepts: Simple and Compound Interest, Annuities, Stocks and Bonds, and Loans.

Anchored Instruction

A group of researchers from various disciplines gathered at Vanderbilt University, specifically at the Learning Technology Center, Peabody College for Education which was eventually known as The Cognition and Technology Group at Vanderbilt (CTGV). A variety of technology-based programs that adhere to the theories of constructivism and generative learning in meaningful contexts was developed and tested by CTGV (Bransford, 1997). Hence, the team coined the term Anchored Instruction to describe a special situation for learning (Young & Kulikowich, 1992). This approach essentially targets to utilize context of meaningful problem-solving environments where the instruction is situated (Bransford, 1997; Lee, 2002; Zydney et al., 2014). CTGV experimented with programs of anchored instruction in various learning areas, including Mathematics.

CTGV (1997) outlined the governing principles of the anchored learning design. These include Generative Learning Format,

Video-Based Presentation Format, Narrative Format, Problem Complexity, Embedded Data Design, Opportunities for Transfer, and Links across the Curriculum (Love, 2004). It was emphasized that the main features of the seven design principles of Anchored Instruction are mutually influencing each other. They operate as gestalt instead of functioning as a set of independent parts (CTGV, 1997).

Thus, Anchored Instruction situates learning in a context with enough complexity, which can provide realization of the meaning of the usefulness of the information (Young & Kulikowich, 1992). It utilizes constructivist theories as its main framework (Serafino & Cicchelli, 2003). It is somehow similar to case-based learning; however, the learners need to explore and discuss the stories presented rather than simply reading or watching them (CTGV, 1997; Oliver & McLoughlin, 1999). Oliver and McLoughlin (1999) further emphasized that Anchored Instruction exhibits similarity to problem-based learning (PBL). However, Anchored Instruction is not as open-ended as problem-based learning since all of the data required to unlock and eventually solve the problems are already embedded in the anchored module, making it more manageable in environments with limited time and resources.

In a study by Bottge et al. (2015), results revealed that students exposed to enhanced anchored instruction improved their performance on math skills included in many standards. In another study, problem scenarios patterned on anchored instruction

principles were given to the pupils through web-stream video, results showed that the pupils' attitudes towards mathematics were generally favorable (Etheris & Tan, 2004). Mathematics is the learning area where Anchored Instruction is useful and effective. However, no research has been done yet to determine the effectiveness of this method, specifically in business mathematics concepts.

METHODOLOGY

A quasi-experimental research method was utilized using pretest-posttest control and experimental group design. Both the control and experimental groups were given a pretest, exposed to their respective treatments, and given a posttest. The control group was exposed to the Conventional Instruction, which followed the learner's module prescribed in the K to 12 Basic Education Curriculum. In contrast, the experimental group was exposed to Anchored Instruction as the teaching approach. T-test of Paired Samples was utilized to test if there existed a significant mean gain on the pretest and posttest scores in the Business Mathematics achievement test of the students in the control group and experimental group while T-test of Two Independent Samples was used to test if there was a significant difference on the mean gain scores of the students between both groups at 5% level of significance.

The respondents in this study were Grade 11 senior high school students under the General Academic Strand of Simala National High School in Cebu, Philippines.

They were in two class sections grouped heterogeneously at the beginning of classes. One class section had 40 students, which comprised the control group, while the other class section, which had 40 students, comprised the experimental group. A match pair design was established before conducting the experiment to ensure that the control group was not significantly different from the experimental group in terms of their profile. Age, gender, and grades in Math in the previous year were the profile considered for the match pairing.

The researcher administered pretest and posttest of the Business Mathematics Achievement Test, a 50-item multiplechoice type of test. It was designed to be answered in 60 minutes. This research tool is a teacher-made test in Business Mathematics in which the questions were focused on problem-solving. The concepts and skills included in the test were based on the competencies prescribed by the Department of Education for the General Mathematics curriculum. Experts examined it for content validity. After conducting a pilot test, Cronbach α was determined to test the reliability of the questionnaire. Results revealed a Cronbach α of 0.89, which signified high reliability.

Four videos were prepared for the intervention in the experimental group, one for each of the topics, namely "Simple and Compound Interest," "Annuities," "Basic Concepts of Stocks and Bonds," and "Basic Concepts of Loans." These videos were researcher-made involving students who were not part of the study. The videos

were written and directed by the researcher strictly following the principles of Anchored Instruction. During the intervention, the anchored videos were shown using a large classroom television. The experimental group can go back to any point of the video whenever they need certain information.

Guided by the principles of anchored learning design, a problem generated from the researcher-made anchored video in the Simple and Compound Interest lesson is hereby presented as an example. In this scene, the characters Janice and Ericka talked about investing in a cooperative that offered an annual simple interest gain. The conversation between the characters provided clues to the problems that the learners needed to generate. One problem was asking for the maturity value given a different number of years, while there were also problems looking for the principal, the term, and the interest amount. Multiple data

were strategically embedded throughout the anchored video in which the learners needed to determine its relevance. The complexity of these problems allowed the learners to be more attentive and think critically.

RESULTS AND DISCUSSION

The Pretest and Posttest Mean Gain Performance in the Business Mathematics Achievement Test of both the control and experimental groups are summarized in Table 1.

The mean gain performances between the pretest and post-test results of the control group in almost all the topics have significantly increased with P-values less than 0.05. In totality, a 5.37 mean gain had been achieved by the group with a P-Value of 0.000, which established a significant mean gain from the pretest results to the post-test results. Though the group still obtained below-average performances in

Table 1
Pretest and posttest mean gain performance in control and experimental groups

	RESPONDENTS								
Topics		Control Group				Experimental Group			
	Test	Mean	Mean Gain	T-Value	P-Value	Mean	Mean Gain	T-Value	P-Value
Simple and	pre	12.88	0.47	0.74 ns	0.466	13.03	2.07	3.66**	0.001
Compound Interest	post	13.35				15.10			
Annuities	pre	5.85	2.38	7.00**	0.000	5.78	3.00	6.69**	0.000
	post	8.23				8.78			
Stocks and Bonds	pre	3.60	1.95	6.42**	0.000	3.78	2.62	8.60**	0.000
	post	5.55				6.40			
Loans	pre	3.15	0.58	2.61**	0.013	3.08	1.22	5.38**	0.000
	post	3.73				4.30			
Totality	pre	25.48	5.37	5.50**	0.000	25.67	8.91	8.46**	0.000
	post	30.85				34.58			

Note: ** – significant when $\alpha \le 0.05$ level of statistical significance; ns–not significant

"Annuities" and "Stocks and Bonds" lessons and maintained average performances in the lessons of "Simple and Compound Interest" and "Loans," in general, they were able to improve their overall performance from below average with a mean of 25.48 to an average performance with a mean of 30.85.

These findings indicated that conventional instruction helped improve the business mathematics performance of the students. Following the learner's module with mostly direct instruction as a way of teaching, the students still learned the concepts and skills in the business mathematics component under the General Mathematics core subject. Hence, discussion with well-prepared steps and procedures would still yield a better result on student achievement. Many students still profit from structured teacher-directed learning procedures (Harris & Pressley, 1991).

On the other hand, the mean gain performance of the experimental group between the pretest and posttest results revealed that there was a significant mean gain across all the four learning outcomes resulting in an overall mean gain of 8.91 with a P-Value of 0.000. Furthermore, it was also revealed that the group improved its performance in the "Stocks and Bonds" lesson, which was from below average to an average level. In addition, the average performance in "Loans" was raised to an above-average level. Finally, though they maintained an average performance in "Simple and Compound Interest" and obtained a below-average performance in "Annuities," in totality, the group performance improved from below average to an average level with a significant mean gain.

These findings showed that the learners understood the concepts well through Anchored Instruction as supported by their posttest results. This approach essentially targets to utilize context of meaningful problem-solving environments where the instruction is anchored (Bransford, 1997; Lee, 2002). Though the students had many struggles generating the problem embedded in the story shown in the videos, they eventually exhibited improvements in the problem formulation. Thus, they had engaged more with the learning process resulting in better test results.

The mean gain difference between the experimental and control groups is shown in Table 2.

A comparison of mean gain between the two groups revealed in totality a much higher mean gain of the experimental group than of the control group with a P-Value of 0.022. There were significant differences in the mean gain scores in two out of four topics, particularly in "Simple and Compound Interest" and "Loans." It signifies that Anchored Instruction is a more effective approach to these lessons than the conventional way of teaching. The comparable performance between the two groups in the lessons of "Stocks and Bonds" and "Annuities" could be because of the first-time exposure of the students. The students were still in the process of absorbing the unfamiliar terms included in "Stocks and Bonds." While in "Annuities,"

Table 2
Mean gain difference between the experimental and control groups

Topics	Group	Mean Gain	Mean Gain Difference	T-Value	P-Value
Simple and Compound	Experimental	2.07	1.60	2.14	0.036**
Interest	Control	0.47	1.60	2.14	
Annuities	Experimental	3.00	0.62	1.12	0.268 ns
Annuities	Control	2.38	0.62		
Stocks and Bonds	Experimental	2.62	0.67	1.79	0.077 ns
Stocks and Bonds	Control	1.95	0.07		
Loans	Experimental	1.22	0.64	3.43	0.001**
Loans	Control	0.58	0.04		
Totality	Experimental	8.91	3.54	2.34	0.022**
Totality	Control	5.37	3.34	2.34	

Note: ** – significant when $\alpha \le 0.05$ level of statistical significance; ns – not significant

the topic involved complex formulas with long computations.

In general, Anchored Instruction was a more effective approach in teaching business mathematics as it exposed the students to challenging and interesting problems. This method focused on processes that highlighted deep thinking rather than only on the contents of thought (Bransford et al., 2012). It also enhances learning through technology applications in the classroom (Kariuki & Duran, 2004; Shyu, 2000). Even students who normally are not good at math can still contribute to problemsolving. For example, they may be good at noticing information in the video that is relevant in solving the problem (CTGV, 1990). This approach lets the students define and pay attention to their perception and comprehension (Bransford et al., 1997).

Through the researcher's observation and interview with selected subjects, it was confirmed that learners felt that they were highly engaged in the learning process. They greatly appreciated the teaching method because they found the activities relevant and realistic. Furthermore, they felt involved throughout the learning experience, which is the essence of learner-centered teaching. Just like in the study of Duncan and Bamberry (2010), where anchored instruction was well received and can potentially improve learning in areas where learners have limited real-life experiences.

CONCLUSION AND RECOMMENDATIONS

Findings revealed that Anchored Instruction is a more effective method in teaching Business Mathematics than conventional instruction. The learner-centeredness of Anchored Instruction provided opportunities for the learners to be highly engaged in the learning process, as noted in the researcher's observation and interview with selected subjects. As a result, they were able to identify the useful knowledge and eventually overcome the inert knowledge

problem. Hence, it is recommended to utilize this method in teaching Business Mathematics.

It is recommended to apply this method in other learning areas for comparison to further this study. Since the study was conducted only within six-week, the question of longitudinal effectiveness and sustainability of this approach over an academic year or more has yet to be established. Thus, a future study may be conducted spanning a longer period of intervention and covering more lessons in business mathematics.

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REFERENCES

- Ahlstrom, D. (2010). Innovation and growth: How business contributes to society. *Academy of management perspectives*, 24(3), 11-24. https://doi.org/10.5465/amp.24.3.11
- Bada, S. O., & Olusegun, S. (2015). Constructivism learning theory: A paradigm for teaching and learning. *Journal of Research & Method in Education*, 5(6), 66-70. https://doi.org/10.9790/7388-05616670
- Bottge, B. A., Toland, M. D., Gassaway, L., Butler, M., Choo, S., Griffen, A. K., & Ma, X. (2015). Impact of enhanced anchored instruction in inclusive math classrooms. *Exceptional Children*, 81(2), 158-175. https://doi.org/10.1177/0014402914551742

- Bransford, J. D., Sherwood, R. D., Hasselbring, T. S., Kinzer, C. K., & Williams, S. M. (2012). Anchored instruction: Why we need it and how technology can help. In *Cognition, education, and multimedia* (pp. 129-156). Routledge.
- Bransford, J. D. (1997). The Jasper Project: Lessons in curriculum, instruction, assessment, and professional development. Psychology Press.
- Brooks, J. G., & Brooks, M. G. (1999). *The case for constructivist classrooms*. Association for Supervision and Curriculum Development.
- Cognition and Technology Group at Vanderbilt. (1990). Anchored instruction and its relationship to situated cognition. *Educational Researcher*, 19(6), 2-10. https://doi.org/10.3102/0013189X019006002
- Crews, T. R., Biswas, G., Goldman, S., & Bransford, J. (1997). Anchored interactive learning environments. *International Journal of Artificial Intelligence in Education*, 8, 142-178.
- Duncan, G. W., & Bamberry, G. (2010). Anchored instruction: Its potential for teaching introductory management. *International Journal of Learning*, 17(3), 163-177.
- Deitz, J. E., & Southam, J. L. (2015). *Contemporary business mathematics for colleges, brief course.*Cengage Learning.
- Etheris, A. I., & Tan, S. C. (2004). Computer-supported collaborative problem solving and anchored instruction in a mathematics classroom: An exploratory study. *International Journal of Learning Technology, 1*(1), 16-39. https://doi.org/10.1504/IJLT.2004.003680
- Harris, K. R., & Pressley, M. (1991). The nature of cognitive strategy instruction: Interactive strategy construction. *Exceptional Children*, 57(5), 392-404. https://doi. org/10.1177/001440299105700503
- Kariuki, M., & Duran, M. (2004). Using anchored instruction to teach preservice teachers to

- integrate technology in the curriculum. *Journal* of Technology and Teacher Education, 12(3), 431-445.
- Kaur, K. (2014). Importance of business mathematics in management system: An overview. *International Journal of Management and Social Sciences Research*, 3(4), 32-33. http://www.irjcjournals.org/ijmssr/Apr2014/7.pdf
- Lee, M. (2002). Anchored instruction in a situated problem-solving environment. In *EdMedia+innovate learning* (pp. 1102-1107). Association for the Advancement of Computing in Education (AACE).
- Little, M. E. (2009). Teaching mathematics: Issues and solutions. *Teaching Exceptional Children Plus*, 6(1), 1. http://scholarship.bc.edu/education/tecplus/vol6/iss1/art1
- Love, M. S. (2004). Multimodality of learning through anchored instruction. *Journal of Adolescent* & Adult Literacy, 48(4), 300-310. https://doi. org/10.1598/JAAL.48.4.3
- Morales, E. E. (2008). The resilient mind: The psychology of academic resilience. *The Educational Forum*, 72(2), 152-167. Taylor & Francis Group. https://doi.org/10.1080/00131720701805017
- Nicolaidou, M., & Philippou, G. (2003). Attitudes towards mathematics, self-efficacy and achievement in problem solving. *European Research in Mathematics Education III*, 1-11.

- Oliver, R., & McLoughlin, C. (1999). Using web and problem-based learning environments to support the development of key skills. *Ascilite*, 99, 307-325.
- Republic Act No. 10533. (2013). https://www.officialgazette.gov.ph/2013/05/15/republic-act-no-10533/
- Serafino, K., & Cicchelli, T. (2003). Cognitive theories, prior knowledge, and anchored instruction on mathematical problem solving and transfer. *Education and Urban Society, 36*(1), 79-93. https://doi.org/10.1177/0013124503257016
- Shyu, H. Y. C. (2000). Using video-based anchored instruction to enhance learning: Taiwan's experience. *British Journal of Educational Technology*, 31(1), 57-69. https://doi.org/10.1111/1467-8535.00135
- Young, M. F., & Kulikowich, J. M. (1992). Anchored instruction and anchored assessment: An ecological approach to measuring situated learning. Connecticut University Research Foundation.
- Zydney, J. M., Bathke, A., & Hasselbring, T. S. (2014). Finding the optimal guidance for enhancing anchored instruction. *Interactive Learning Environments*, 22(5), 668-683. https://doi.org/10.1080/10494820.2012.745436



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Barriers for Implementation of E-pharmacy Policy: Views of Pharmacy Authorities, Public Institutions and Societal Groups

Amran Abu Bakar^{1,2}, Siew Chin Ong^{1*}, Chuo Yew Ting³, Guat See Ooi⁴ and Mohamed Azmi Ahmad Hassali¹

¹Discipline of Social and Administrative Pharmacy, School of Pharmaceutical Science, Universiti Sains Malaysia, 11800 Gelugor, Penang, Malaysia

²Pharmaceutical Services Programme, Ministry of Health Malaysia, Lot 36 Jalan Universiti, 46200, Petaling Jaya, Selangor, Malaysia

³Pharmaceutical Services Division, Sarawak State Health Department, Ministry of Health Malaysia, Jalan Diplomatik, Off Jalan Bako, 93050, Kuching, Sarawak

⁴Discipline of Clinical Pharmacy, School of Pharmaceutical Science, Universiti Sains Malaysia, 11800 Gelugor, Penang, Malaysia

ABSTRACT

Malaysian government has established National Digital Economy Policy to promote e-commerce adoption among small to medium enterprises (SMEs). Although this national policy has expanded to community pharmacists for providing e-pharmacy services, only a few independent pharmacies have adopted e-pharmacy practices. As such, it is important to critically investigate the implementation of e-pharmacy policies in promoting online pharmaceutical services in Malaysia. This study explores the barriers in implementing e-pharmacy policies from the perspective of pharmaceutical authorities, public agencies and societal groups. The Consolidated Criteria for Reporting Qualitative Research (COREQ) was employed in this study. Interview data were collected from key pharmaceutical authorities, agencies governing e-commerce and consumer affairs, health professionals and consumer societal groups. Thirty-three key actors participated in this study.

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E-mail addresses:
amranbinabubakar@gmail.com (Amran Abu Bakar)
oschin99@yahoo.com; siewchinong@usm.my (Siew Chin Ong)
tingchuoyew@gmail.com (Chuo Yew Ting)
guatsee.ooi@usm.my (Guat See Ooi)
azmihassali@gmail.com (Mohamed Azmi Ahmad Hassali)
* Corresponding author

Themes focusing on factors that impede the implementation of e-pharmacy policies were identified using an open-axial coding approach. Eight emerging themes were identified to be influencing policy inaction and policy barriers towards e-pharmacy implementation for empowering community pharmacists: (1) policymakers' inattention to private business interests; (2) authoritarian administrative action unsuitable for

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e-pharmacy businesses; (3) deficit of trust towards community pharmacies practising e-pharmacy services; (4) conflicting policy requirements between safeguarding patients and business applications; (5) limited organisational resources and budget constraints; (6) policy incompatibility and different jurisdiction requirements; (7) unfriendly e-pharmacy requirements; and (8) dominant interest groups opposing e-pharmacy policies. Clear and consistent policies will benefit both patients and consumers as they acquire improved access to professional consultation and various options for quality medicine at competitive prices.

Keywords: Community pharmacy, digital health, e-pharmacy, pharmaceutical policy, pharmacy practice, policy implementation

INTRODUCTION

Communication technology has revolutionised the conventions of retail business by adopting e-commerce as a platform for the promotion, buying and selling of products over the internet. E-commerce is growing in popularity in consumerist markets because it features a variety of benefits to consumers (Khatibi et al., 2006). It is also no longer complicated, and consumers feel secure utilising online banking to make purchases (Akhter, 2015). With this in mind, the government encourages small to medium enterprises (SMEs) to join the digital economy by utilising internet facilities (Zain et al., 2015).

The government has recognised the internet as an essential utility service for

the public (Economic Planning Unit, 2020). Furthermore, the government is empowering the digital economy by providing e-commerce training programmes and microfinance funding to SMEs (Malaysia Digital Economy Corporation, n.d.). The government is focusing on SMEs to help them grow their businesses in the digital sector and prepare for the challenges of the 4.0 Industrial Revolution (Economic Planning Unit, 2020).

The government's objective in creating a digital economy has enticed a number of healthcare investors to venture into the digital health market. Digital Health Malaysia (DHM) is a non-profit organisation that promotes communication technology and digital equipment connected to the internet (Internet of Things). DHM has created various public awareness campaigns on the advantages of adopting digital health technologies to improve health practices over time (Digital Health Malaysia, n.d.). DHM's activities have piqued the government's interest in digitally empowering the healthcare economy. Various government agencies have collaborated with DHM and other stakeholders to find a policy equilibrium between proper health practices, technological standards and legislative reform (Ministry of Health Malaysia, 2020).

The pharmaceutical community is among the most important healthcare providers in a community setting (Ong et al., 2020). Pharmacies provide patients with access to medicine at competitive prices (Ooi et al., 2017). Pharmacies also provide rudimentary diagnoses using basic medical

equipment, as well as health consultations to patients, in which they are provided with crucial information on their medication and how to use it correctly (Hassali et al., 2009). Pharmacies are venturing into the domains of e-commerce and e-health to provide reliable online pharmaceutical services (Orizio et al., 2011). Based on online observations, various online pharmacy platforms provide patients with attractive offers. Big chain pharmacy firms have proper e-pharmacy platforms with pharmaceutical service features, such as visual consultation, e-prescription applications and online medication adherence programmes. Most small to medium-sized pharmacies use e-commerce platforms, such as Lazada and Shopee, to sell their pharmaceutical products.

The Pharmaceutical Services Programme (PSP) is a government agency responsible for consolidating federal government policies to empower community pharmacies to venture into the digital health economy. In this regard, together with relevant stakeholders who are directly and indirectly involved with pharmaceutical policies, PSP has joined together to establish appropriate pharmaceutical practice standards for online pharmaceutical services. Among the policies developed to empower e-pharmacy services is the use of e-prescriptions (Halid, 2020). The e-prescription policy was made to ensure that transparency and reliability of the e-prescription system between prescribers, pharmacists and patients were maintained. The PSP also specifies that controlled medicine (prescription medicine and pharmacy medicine) cannot be promoted online to protect the public from counterfeit medicine and fraudulent health services (Fong, 2020). PSP prohibits the online sale of controlled medicine, reducing community pharmacists' advancements in online retail business (Pharmaceutical Services Programme, 2020).

E-pharmacy policies were intended to empower community pharmacies to venture into the e-health economy. However, e-pharmacy policies have been inactive due to numerous challenges posed by public and social actors. PSP has yet to reform legislation and remains indolent about setting-up proper requirements to protect consumers and patient safety when subscribing to e-pharmacy services. PSP inaction regarding promoting e-pharmacy adoption in a community setting has caused misperception about online pharmaceutical services being retail businesses only.

The study on policy implementation barriers is important to provide valuable insight into and improve policymaking. Therefore, the current study aims to explore and understand the challenges of e-pharmacy policy implementation from the perspectives of pharmacy authorities, relevant agencies and societal groups.

METHODOLOGY

An inductive research approach was employed in this study to implement a qualitative research guideline of Consolidated Criteria for Reporting Qualitative Research (COREQ, Tong et al., 2007).

Research Team and Reflexivity

Five investigators were involved in the study: AAB, MAHA, SCO, GSO and CYT. AAB was the principal investigator. MAHA, SCO and GSO were experts in a qualitative and quantitative study in social and administrative pharmacy, while CYT is a pharmacist working at the Sarawak State Health Department, MOH. All investigators have vast knowledge and experience in qualitative studies. AAB, MAHA, SCO, GSO and CYT were involved in the study design, interview protocol and data analysis stages.

Study Design

A semi-structured interview (Appendix 1) was employed for data collection. Articles related to policy implementation from official websites and various openaccess journals were screened by AAB, MAHA, SCO and GSO to design the study. Similar qualitative studies from various fields of policy research, such as environmental policy (Tuokuu et al., 2018), health policy (Havers et al., 2019) and energy policy (Gauthier & Moran, 2018), were adopted based on the following policy dimensions: (1) policy features, (2) policy compatibility, (3) policy limitation and (4) policy environment (see Appendix 1). All investigators were involved in designing the interview questions to be in line with the research aims, while AAB and CYT designed the interview protocol (Appendix 2) to explore the 'what,' 'why' and 'how' of the phenomenon affecting

policy implementation (Berg & Lune, 2017). This study was registered under the National Medical Research Register (NMRR ID: NMRR-19-3171-50049 (IIR)) and obtained ethical approval from the Medical Research and Ethics Committee (MREC), Ministry of Health Malaysia and the Human Ethics Research Committee of Universiti Sains Malaysia (JEPeM USM).

Participant Characteristics and Recruitment

AAB and CYT identified relevant respondents for the interview. These respondents were among the public and social actors directly involved in e-pharmacy policies. Public actors were defined as executives who worked in government institutions as regulators or enforcement authorities in either pharmaceutical practices or e-commerce faculties. Social actors were defined as individuals or groups that may be directly affected by implementing e-pharmacy policies. Accordingly, social actors were identified as pharmacy interest groups, community pharmacists, medical interest groups, private general practitioners and consumer interest groups.

A formal invitation was sent via email by AAB to the potential respondents with the help of MAHA, SCO and GSO. AAB reminded the potential respondents to give feedback after one week from the first email sent to their official email addresses.

Various government departments and organisations sent relevant officers and committee members to attend the interview sessions. E-health Development

Section (EHS) is a department under MOH that oversees digital health policies. PSP is a pharmaceutical division under MOH that administers policies related to pharmaceutical practices. The Malaysian Communication and Multimedia Commission (MCMC) is an authority that regulates internet content and network providers. The Department of Personal Data Protection (DPDP) is a government agency that supervises consumers and sensitive health data. The Ministry of Domestic Trade and Consumer Affairs (MDTCA) is a government institution that regulates e-commerce standards and consumer protection. The Malaysian Pharmaceutical Society (MPS) and the Malaysian Community Pharmacy Guild (MPCG) are organisations that protect the interests of the pharmaceutical profession. The Malaysian Medical Association (MMA) is an organisation that protects the interest of medical doctors. Community pharmacists who took part in this study were registered pharmacists with a Type A license to conduct business as retail community pharmacists. Private general practitioners are individuals who own or manage private clinics. The Malaysian Cyber Consumers Association (MCCA) is a non-government organisation to protect online consumer interests.

Invitations to participate in the study were also disseminated to two community pharmacists and two general practitioners who agreed to participate. In addition to that, another two community pharmacists agreed to take part in the study after being identified via snowballing from the respondents.

Interview Session

Face-to-face interviews were conducted with the respondents by AAB at their convenience in terms of date, time and place, according to the interview protocol. Respondents were first briefed about the study and informed of their rights to withdraw from the interview at any time during the study process. The interview only commenced after the respondents' consent to participate in the study and record their interviews. AAB took field notes during the interview. The study was deemed complete after the data reached saturation, as determined by the investigation team. A saturation point is defined as a point where no new or additional data can be gleaned to support the theme development of the study (Berg & Lune, 2017).

Analysis and Findings

All the data collected (field notes and audio recordings) was stored in Google Cloud under AAB's username and password. The data was downloaded and shared with all the investigators for analysis. Audio data was transcribed and directly translated into text. Thematic analysis was employed in this study through the open-axial coding technique. Transcription text was screened for similar codes and classified (Neuman, 2014). The investigators analysed the group codes to examine relationships, trends and intents (Berg & Lune, 2017). Themes were declared after discrepancies were addressed in the discussion, and a conclusion was agreed upon between all investigators (Nowell et al., 2017).

RESULT

Data were collected from 33 respondents (see Table 1), consisting of representatives from government agencies and social groups directly involved with e-commerce and pharmaceutical practices policies.

The study found eight themes that influence policy inaction and policy barriers towards e-pharmacy policy implementations aimed at empowering community pharmacists adopting e-pharmacy practices, which are (1) policymakers' inattention towards private business interests, (2)

authoritarian administrative action unsuitable for e-pharmacy businesses, (3) deficit of trust towards community pharmacies practising e-pharmacy services, (4) conflicting policy requirements between safeguarding patients and business applications, (5) limited organisational resources and budget constraints, (6) policy incompatibility and different jurisdiction requirements, (7) unfriendly e-pharmacy requirements and (8) dominant interest groups opposing e-pharmacy policies, as shown in Table 2.

Table 1
Study participants

Institution	Organization	Number of Participants
Ministry of Health	E-health Development Section (EHS)	4
Pharmaceutical Services	Pharmacy Enforcement Division (PED)	9
Programme (Pharmacy Authority)	Pharmacy Practice and Development Division (PPDD)	1
	Pharmacy Policy and Strategic Planning Division (PPSPD)	2
E-Commerce and Consumers Relevant	Malaysian Communications and Multimedia Commission (MCMC)	2
Authority	Ministry of Domestic Trade and Consumers Affair (MDTCA)	1
	Department of Personal Data Protection (DPDP)	2
Pharmacy and Medical	Malaysian Pharmaceutical Society (MPS)	1
Profession Group	Malaysian Community Pharmacy Guild (MCPG)	2
	Malaysian Medical Association (MMA)	1
	Community pharmacists (CP)	4
	General practitioners (GP)	2
Consumer Societal Group	Malaysian Cyber Consumer Association (MCCA)	2
Total		33

Table 2
Themes of e-pharmacy policy implementation barriers

Themes	Barriers
Policymakers' lack of attention towards private business interests	Lack of political interest
Authoritarian administrative enforcement unsuitable for e-pharmacy businesses	Authoritarian admission

Table 2 (continue)

Themes Barriers 3. Deficit of trust towards community pharmacies Trust issues towards community pharmacies' practising e-pharmacy services virtual dispensing practice Trust issues towards community pharmacists' ethics concerning profit orientation 4. Conflicting policy requirements between Inconsistency policy requirements safeguarding patients' safety and business applications 5. Policy incompatibility and different Policy incompatibility between institutions jurisdiction requirements Inadequate expertise to formulate technologyrelated policies Different technical requirements between e-commerce and pharmacy practices 6. Limited organisational resources and budget Limited resource capacity constraints 7. Unfriendly e-pharmacy requirements Lack of stakeholder involvement in the policy formulation process Unfriendly requirements affecting business sustainability 8. Dominant interest groups opposing Lack of government support to reduce tensions e-pharmacy policies in market competitiveness

Theme 1: Policymakers' Inattention Towards Private Business Interests.

Respondents stated that the e-pharmacy policy was established to facilitate community pharmacies providing e-pharmacy services for patients. This policy was expected to encourage community pharmacists to participate in the digital health economy. Respondents also clarified that e-pharmacy-related policies do not receive special attention from policymakers because e-pharmacy is a policy comprising of private business interests.

"Currently, the old Poison Act 1952 is adequate in taking action against individuals selling medicines online without an authorised pharmacist's license. We are in the midst of formulating the best course of

action to facilitate community pharmacists venturing into online health services. But, due to certain circumstances, the policymakers in Parliament do not make it a priority to amend pharmaceutical laws." – PED01 (59 years old, Pharmaceutical Enforcement Division).

Theme 2: Authoritarian Administrative Action Unsuitable For e-Pharmacy Businesses. Since the regulation is pending amendment, PSP resorts to administrative action to allow community pharmacists to provide online services.

"We exercise administrative control on pharmacists providing online services. If they are found to be contradicting the code of conduct, we revoke their pharmaceutical license and take action against them." – PED02 (59 years old, Pharmaceutical Enforcement Division).

The respondents stated that PSP is currently formulating propositions to ensure that investigation and prosecution can be imposed against impropriety and misconduct in online pharmaceutical services.

"At the moment, community pharmacies must comply with the existing regulations. We concentrate on the investigation and prosecution of rogue pharmacists." – PED06 (46 years old, Pharmaceutical Enforcement Division).

The findings show that, although PSP leans towards planning requirements that are enforceable and favourable to the enforcement of e-pharmacy services, they are less suited for e-pharmacy attributes and are in conflict with the national policy's intent.

"PED policymaking always leans towards enforcement power without considering the impact on the community pharmacy market." – MCPG01 (63 years old, Malaysian Community Pharmacy Guild).

Theme 3: Deficit Of Trust Towards Community Pharmacies Practising e-Pharmacy Services. Respondents felt that e-pharmacy would become a health trend in Malaysia. They also believe that community pharmacy services are more efficient when providing online services. Although e-pharmacy provides convenience, e-pharmacy services can be abused for profit and neglect patient safety without adequate control and supervision. Respondents also claimed that they find it difficult to trust community pharmacists who can maintain the quality of their e-pharmacy services if policy enforcement is limited.

"Can community pharmacies ensure that online dispense has the same effect as physical face-to-face interaction? We are concerned that e-pharmacy may be misused and abused to gain profit rather than providing proper health services to patients." – PED04 (59 years old, Pharmaceutical Enforcement Division).

Theme 4: Conflicting Policy Requirements
Between Safeguarding Patients and
Business Applications. E-pharmacy is a
hybrid faculty of e-commerce and online
pharmacy practices. Respondents from
PSP admitted that they are not familiar
with the e-pharmacy business concept,
as they only specialise in pharmaceutical
practices, not commerce. Respondents
voiced their concern that too much emphasis
is being placed on the requirements intended
to safeguard the interests of patients'
health without considering the fact that
e-commerce features can conflict with
e-pharmacy attributes.

"Formulating a policy without proper research has caused many e-pharmacy requirements to be rejected by stakeholders." – BDPSF02 (38 years old, Pharmacy Policy and Strategic Planning Division).

Theme 5: Limited Organisational Resources and Budget Constraints. Each institution has certain areas of expertise depending on its objectives and mandates. Hence, cooperation between institutions is needed for strategic policy implementation. However, respondents stated that complications arise when cooperation between agencies must be limited by allocating operations and the development of relevant institutions. Intra-institution agencies strategically accommodate their resources but constrain them to certain portfolios.

"PED's digital lab budget is limited, but we have to accommodate other enforcement agencies within the MOH organisation in order to produce digital evidence for investigation and court processes. With our limited budget, we must be careful to spend the budget according to case priority." – PED08 (45 years old, Pharmaceutical Enforcement Division).

Theme 6: Policy Incompatibility and Different Jurisdiction Requirements. Government institutions enforce businesses'

online transactions to safeguard the interests of the public, customers and service providers. E-pharmacy has adopted e-commerce features efficiency when providing pharmaceutical services that are still of value to community pharmacists. The different jurisdiction requirements between governmental institutions trigger technocracy and create a value gap.

"We take so much time formulating guidelines for community pharmacies providing online services because we are not familiar with online attributes. Other agencies regulate and govern internet content and customer safety. We want them to get involved with the policymaking process, but their technical input conflicts with our policy's interest. Our concern is from the health and pharmaceutical perspective. We set requirements within our jurisdiction." – PED02 (59 years old, Pharmaceutical Enforcement Division).

Theme 7: Unfriendly e-Pharmacy Requirements. Respondents from the social actors' group claimed that the existing pharmacy regulations are insufficient to encourage community pharmacists to invest in e-pharmacy services. The unclear requirements ease enforcement action rather than facilitate innovative pharmaceutical practices. With the community health services business shrinking due to competitive market shares, unfriendly

e-commerce pharmacy policies can diminish business sustainability.

When asked about the policy that affects community health services, a respondent gave an example of the requirement of a digital signature for e-prescriptions, which he perceived to be over-regulated without considering its effects on the market.

"The government has put unnecessary requirements to prescriptions, where a GP has to issue out prescriptions upon patient's request ... and if my clinic subscribes to the e-prescription system, then the system should comply with the Digital Signature Act 1997 requirements, which is costly ... The signature is to identify who issued out the prescription. There are alternatives to compensate for a digital signature. For example, a username and password. The government should consider empowering the business environment rather than focusing solely on law interpretation. Those pharmacy laws are outdated and should have been reformed yesterday..." - GPP01 (51 years old, medical practitioner).

Theme 8: Dominant Interest Groups Opposing e-Pharmacy Policies.

Respondents from the pharmacy profession believed that dispensing separation could be imposed on GPs because e-pharmacy provides better options for patients to choose their medicines, whether generic or innovator, at better retail prices.

"With e-pharmacy, patients can get better options to buy medicines, according to their preference, at reasonable prices ... rather than hopelessly accepting whatever GPs have in their stock. I think with e-pharmacy, we can move a motion for dispensing separation." – MPS01 (65 years old, Malaysian Pharmaceutical Society).

However, GPs perceived that e-pharmacy services would worsen the already tough business competition in the community setting. GPs opposing community pharmacists were operating virtual and distance dispensing affect e-pharmacy policy implementation politically.

"Even though e-pharmacy services intended to facilitate health and increase access to medical treatment, the business model never met the standard requirements of fundamental medical practices." – MMA01, (44 years old, Malaysian Medical Association).

DISCUSSION

This study analysed the perceptions of public and social actors with regard to the policy implementation process of e-pharmacy services by community pharmacies in Malaysia. Based on the description of public actors, we identified policy priority, organisation attitude, budget constraints and technocracy as barriers to e-pharmacy policy implementation. Meanwhile, descriptions of social actors identified hostile business requirements and business competitiveness as challenges limiting the investment in e-pharmacy services from a socio-economic environment perspective.

Policy Priority

The findings are consistent with the policy theory, which recognises that a political agenda has a significant influence on dictating policy features and implementation direction (Cairney & Oliver, 2017). Policies receive priority concern when the policy environment is favourable for political mileage (Heo & Seo, 2021). This study derived that the inattention of political executives and policymakers towards the business interests of community pharmacists has impeded policy action that enables business-friendly requirements for community pharmacies to provide e-pharmacy services.

Organisation's Attitude

An organisation's attitude affects policy implementation. According to Van Meter and Van Horn (1975), a lack of understanding of policy intent will reduce the organisation's motivation to enforce that policy. Hence, this study discovered that the intent of e-pharmacy policies conflicts with their content. E-pharmacy policies are intended to facilitate community pharmacies

providing online services. However, the required settings for e-pharmacy services are not business-friendly for community pharmacies. PED is an enforcement agency that focuses on compliance requirements rather than the business interests and facilitation of policy content. Lack of input from stakeholders (social actor groups) can result in impracticable e-pharmacy requirements in business settings (Elmore, 1979).

Policy development is challenging if an organisation is heavily grounded in a specific practice (Thomas & Grindle, 1990). The Pharmacy Authority, as a pharmaceutical administrator, is grounded in traditional pharmacy practices and distrusts virtual health consultation. The authority is obliged to ensure that community pharmacies emphasise patients' safety instead of profiting from patients' health. Even though e-pharmacy is a new norm in health services, it is still in its infant stage (Kuzma, 2011).

There has been little research evaluating the effectiveness of professional pharmaceutical conduct in providing e-pharmacy services (Orizio et al., 2011). Over time, e-pharmacy services will gain traction from patients and consumers, and more licensed pharmacists will adopt e-pharmacy into their pharmacy services. As such, to improve policy action, PED must consider investing in professional training for e-commerce applications and research better strategic compliances to e-pharmacy attributes.

Policy Incompatibility

This study found similarities to the Van Meter and Van Horn (1975) study, where policy incompatibility impeded policy implementation due to different institutions having different jurisdictions and policies. In the case of e-pharmacy, incompatibility occurs due to the different commerce standards for pharmaceutical products. While the MCMC and MDTCA stress consumer rights and safety, PSP focuses on the obligations of pharmacists to dispense medicine according to patients' health requirements. Medicine should not be sold as an ordinary good, as it can potentially cause deleterious health effects if not properly administered. In order to enable e-pharmacy services, a new set of standards should be established to ensure effective communication, compliance with patient safety requirements and professional conduct. Thus, inclusive policies should reach the ministry administration and relevant agencies to promote clear intent and requirements to enforce compliance. Allocation for strategic resource collaboration can facilitate better policy implementation.

Opposition by Dominant Groups

This study is consistent with Gable (1958), who indicates that dominant social groups could influence policy agenda and implementation. The competitive private health market for medication dispersal is deterring the acceptance of community pharmacists and GPs for

providing online services. E-pharmacy can trigger dispensing separation initiatives, as it promotes the use of e-prescription for patients to acquire better choices of medicine brands at competitive prices. As such, this study found that the GP fraternity strongly opposes the idea of community pharmacies providing e-pharmacy services due to the perceived risks towards medical ethics in commerce and the fear that market dominancy of prescription medicines will shift to community pharmacies. The GP fraternity, comprising a large number of health professionals, has a voice in policy determination and plays a pivotal role in the development of e-pharmacy policies. The opposition stance taken by GP groups towards dispensing separation may become an external barrier to e-pharmacy policy implementation. However, the GP fraternity respects the significant role of pharmacists as medical experts that provide access to affordable medicines and health services in a community setting (Hassali et al., 2009).

CONCLUSION

This study critically analysed the barriers to policy implementation from the perspectives of public and social actors. This study identified a lack of policymakers' attention towards private interests, unclear policy features, organisations' negative attitudes, limited resources and funding and excessive requirements as barriers to e-pharmacy policy implementation. Clear policy intent, in tandem with inclusive e-pharmacy policies, benefits patients in terms of better access to affordable medicines and

acknowledges the role of pharmacists in the digital health economy market. Private and business-related policies rarely attract the attention of policymakers, leading to many challenges in policy agenda and implementation. Overcoming these barriers requires serious commitment and perseverance from public and social actors to improve policy implementation. This study advocates five recommendations based on the research findings, which are (1) allocating strategic resources in evidence-based research to justify policy reform or change necessities, (2) positioning experts in the field to fill in the void of knowledge for better policy formulation and execution, (3) focusing on stakeholders' insights into the issues and challenges faced by community pharmacies in providing e-pharmacy services, (4) reforming policies with business-friendly requirements to encourage community pharmacies to invest in e-pharmacy services and (5) creating a collaborative partnership under the publicprivate economy initiative programme of the PSP between them and business stakeholders to enable prosperity in the digital health market.

Research Limitations and Future Prospects

This study is empirical with an inductive research approach using interviews as its data collection method. Most of the study's participants were senior officers with numerous years of experience in policymaking. However, their insights in this study were restricted to their expertise in their respective fields. It would be an advantage if this study could be extended to a higher level—political executives at top tier policymaking levels. Despite study limitations, this research has generated new knowledge that can serve as a constructive reference to improve the implementation process of technology-related health policies in Malaysia and other countries with similar policies.

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REFERENCES

- Akhter, S. H. (2015). Impact of internet usage comfort and internet technical comfort on online shopping and online banking. *Journal of International Consumer Marketing*, 27(3), 207-219. https://doi.org/10.1080/08961530.20 14.994086
- Berg, B. L., & Lune, H. (2017). *Qualitative research methods for the social sciences* (Ninth Edition) Global Edition. Pearson.
- Cairney, P., & Oliver, K. (2017). Evidence-based policymaking is not like evidence-based medicine, so how far should you go to bridge the divide between evidence and policy? *Health Research Policy and Systems*, 15(1), 1-11. https://doi.org/10.1186/s12961-017-0192-x
- Digital Health Malaysia. (n.d.). *About DHM*. https://www.digitalhealthmalaysia.org/about-dhm
- Economic Planning Unit. (2020). *National Fourth Industrial Revolution (4IR) Policy*. https://www.epu.gov.my/sites/default/files/2021-07/National-4IR-Policy.pdf
- Elmore, R. F. (1979). Mapping: Backward and implementation policy decisions. *Political Science Quarterly*, 94(4), 601-616.
- Fong, L. F. (2020, April 29). RM60mil in unapproved Covid-19 med, products seized in global Interpol operation. *The Star Online*. https://www.thestar.com.my/news/nation/2020/04/29/rm60mil-in-unapproved-covid-19-med-products-seized-in-global-interpol-operation
- Gable, R. W. (1958). Interest groups as policy shapers. The Annals of the American Academy of Political and Social Science, 319(1), 84-93. https://doi.org/10.1177/000271625831900110
- Gauthier, C., & Moran, E. F. (2018). Public policy implementation and basic sanitation issues associated with hydroelectric projects in the Brazilian Amazon: Altamira and the Belo Monte

- dam. *Geoforum*, 97(February), 10-21. https://doi.org/10.1016/j.geoforum.2018.10.001
- Halid, S. (2020, September 22). Syor pinda akta, hukuman lebih berat [Recommendation to amend the Act, severe penalties]. *BH Online*. https://www.bharian.com.my/berita/nasional/2020/09/733952/syor-pinda-akta-hukuman-lebih-berat
- Hassali, M. A., Awaisu, A., Shafie, A. A., & Saeed, M. S. (2009). Professional training and roles of community pharmacists in Malaysia: Views from general medical practitioners. *Malaysian Family Physician*, 4(2-3), 7.
- Havers, S. M., Russo, P. L., Page, K., Wilson, A., & Hall, L. (2019). Clinician perspectives of policy implementation: A qualitative study of the implementation of a national infection prevention policy in Australian hospitals. *American Journal of Infection Control*, 47(4), 366-370. https://doi.org/10.1016/j.ajic.2018.09.029
- Heo, K., & Seo, Y. (2021). Applying foresight to policy agenda-setting: A successful case in South Korea. *Futures*, 127(December 2020), Article 102701. https://doi.org/10.1016/j. futures.2021.102701
- Khatibi, A., Haque, A., & Karim, K. (2006). E-commerce: A study on internet shopping in Malaysia. *Journal of Applied Sciences*, 6(3), 696-705. https://doi.org/10.3923/jas.2006.696.705
- Kuzma, J. (2011). Web vulnerability study of online pharmacy sites. *Informatics for Health & Social Care*, 36(1), 20-34. https://doi.org/10.3109/1753 8157.2010.520418
- Malaysia Digital Economy Corporation. (n.d.). SMEs Digitalisation. https://mdec.my/digitaleconomy-initiatives/for-the-industry/sme/
- Ministry of Health Malaysia. (2020). Annual Report

 Ministry of Health Malaysia 2020. https://

 www.moh.gov.my/moh/resources/Penerbitan/

- Penerbitan%20Utama/ANNUAL%20REPORT/ Annual_Report_MOH_2020.pdf
- Neuman, W. L. (2014). Social research methods: Qualitative and quantitative approaches (Seventh Edition). Pearson, Essex.
- Nowell, L. S., Norris, J. M., White, D. E., & Moules, N. J. (2017). Thematic analysis: Striving to meet the trustworthiness criteria. *International Journal of Qualitative Methods*, 16(1). https://doi.org/10.1177/1609406917733847
- Ong, S. C., Ooi, G. S., Shafie, A. A., & Hassali, M. A. (2020). Knowledge, attitude and disposing practice of unused and expired medicines among the general public in Malaysia. *Journal of Pharmaceutical Health Services Research*, 11(2), 141-148. https://doi.org/10.1111/jphs.12333
- Ooi, G. S., Hassali, M. A., Shafie, A. A., Kong, D. C. M., Mak, V. S. L., & Chua, G. N. (2017). Consumers' perspectives of Malaysian community pharmacists as health educators: A qualitative insight. *Journal of Pharmacy Practice and Research*, 47(3), 186-192. https:// doi.org/10.1002/jppr.1219
- Orizio, G., Merla, A., Schulz, P. J., & Gelatti, U. (2011). Quality of online pharmacies and websites selling prescription drugs: A systematic review. *Journal of Medical Internet Research*, 13(3), Article e74. https://doi.org/10.2196/jmir.1795
- Pharmaceutical Services Programme. (2020, December 24). Panduan pembelian ubat "online" [Medicine online purchasing guide]. *Ministry*

- of Health Malaysia. https://www.pharmacy.gov.my/v2/ms/entri/panduan-pembelian-ubat-online.html
- Thomas, J. W., & Grindle, M. S. (1990). After the decision: Implementing policy reforms in developing countries. *World Development,* 18(8), 1163-1181. https://doi.org/10.1016/0305-750X(90)90096-G
- Tong, A., Sainsbury, P., & Craig, J. (2007). Consolidated criteria for reporting qualitative research (COREQ): A 32-item checklist for interviews and focus groups. *International Journal for Quality in Health Care*, 19(6), 349-357. https://doi.org/10.1093/intqhc/mzm042
- Tuokuu, F. X. D., Gruber, J. S., Idemudia, U., & Kayira, J. (2018). Challenges and opportunities of environmental policy implementation: Empirical evidence from Ghana's gold mining sector. *Resources Policy*, 59(August), 435-445. https://doi.org/10.1016/j.resourpol.2018.08.014
- Van Meter, D. S., & Van Horn, C. E. (1975). The policy implementation process: A conceptual framework. Administration & Society, 6(4), 445-488. https://doi.org/10.1177/009539977500600404
- Zain, J., Ismail, S., & Najib, N. A. A. (2015). DESA: Growing the digital economy from a national perspective. Department of Statistics, Malaysia. https://www.dosm.gov.my/v1/uploads/files/7_Publication/Technical_Paper/MyStats/2015/4.%20DESA%20Growing%20 the%20Digital%20Economy%20from%20a%20 National%20Perspective.pdf

APPENDIX

Appendix 1

Interview Questions

Dimension	Objective	Question
Policy features	To understand political will	How does political agenda impact policy implementation?
Policy compatibility	To explore compatibility policy between inter- and intra- agencies	How do policy requirements affect policy implementation?
Policy limitation	To understand the limitations towards policy implementation	What impedes policy implementation?
Policy environment	To explore the competitive environment that influences policy implementation	How does policy environment affect e-pharmacy businesses?

Appendix 2

Interview Protocols

Attribute	Procedure	Remarks
Greet and Meet	Provide comfort to the respondents to share their thoughts and opinions on the subject matter	Ask respondents how to make them feel comfortable during the interview session. Good gestures will provide good rapport.
Informed study and consent	Brief the respondents on the study and their right to withdraw from participating in the study.	Respondents must give their consent to study participation and audio recording before commencement of the interview session
Asking interview questions	Respondents should answer the questions with <i>bona fide</i> answers	Let the respondents digest the question, and give them ample time to respond.
		However, the investigator must ensure that the respondents do not divert from the research questions
Audio recording	To store data for thematic analysis	Must ensure that the audio recorder is turned on and can capture clear sound.
		Respondents must acknowledge that the recorder is used throughout the interview session.
Open questions	To provide respondents avenue to add any statements outside of the interview questions but relevant to the study	Towards the end of the interview session, ask the respondents to share their thoughts about the study subjects and discuss their inputs for a few minutes. This will fill a void in our insight.
End interview sessions	Brief the respondents about how the audio recording (interview data) will be used for qualitative analysis.	Inform the respondents that the investigator will contact the respondents if he needs further clarification on the interview statement given during the interview session.
	Give a token of appreciation (if any) to the respondents for their time spent participating in the study	



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The Role of High-, Moderate-, and Low-Intensity Training in Enhancing Functional Mobility and Muscle Strength of Aged Female: A Randomized Controlled Trial

Kamran Hosseinzadeh Ghasemabad^{1*}, Tengku Fadilah Tengku Kamalden¹, Roxana Dev Omar Dev¹, Pooya Nekooei¹, Sara Majlesi², Behzad Alemi¹ and Paria Nekouei³

ABSTRACT

Resistance training provides many benefits to the older population, and it is considered one of the most effective ways to counter-attack age-related sarcopenia and dynapenia disorders. This article evaluates the impacts of high, moderate, and low training intensities on muscle strength and functional mobility of older adults. A single-blinded factorial design for 12 weeks was conducted among 60 healthy older Malaysian women (>65 years). The authors assessed the Five times Sit to Stand (5STS), the Timed Up and Go test (TUG), and the 6 Minutes Walking Test (6MWT). The participants were randomly divided to the High-Intensity Group (HIT; n=15) (69.60 \pm 3.68); Moderate-Intensity Group (MIT; n=15) (69.27 \pm 3.41); Low-Intensity Training (LIT; n=15) (69.27 \pm 1.94); and Control Group (CG; n=15) (68.67 \pm 2.38). In terms of time, there is a statistically noticeable difference in the means

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E-mail addresses:

Kamran.hosseinzadeh.gh@gmail.com (Kamran Hosseinzadeh Ghasemabad)

Tengku@upm.edu.my (Tengku Fadilah Tengku Kamalden) Rdod@upm.edu.my (Roxana Dev Omar Dev) Pooya.nekooei@gmail.com (Pooya Nekooei) Sara.majlesy@gmail.com (Sara Majlesi) behzad151@gmail.com (Behzad Alemi) n.pariya@gmail.com (Paria Nekouei)

* Corresponding author

of all the variables (p< .001). Moreover, a statistically significant connection between the intervention and time was seen on all the variables (p< .001). However, there was a statistically significant difference between the means of 5STS (P< .001) and TUG (P= .025) in the intervention groups, there was no statistically significant difference observed in 6MWT (P= .90). The results suggested that all of these intensities training are beneficial for improving muscle strength and functional mobility. In addition, the HIT

¹Department of Sports Science, Faculty of Educational Studies, Universiti Putra Malaysia, Serdang, 43400, Selangor, Malaysia

²Department of Sports Centre, University Malaya, 50603 Kuala Lumpur, Malaysia

³Department of Sport and Health, Faculty of Science, University of Paderborn, Paderborn 33098, Germany

is more effective in improving the 5STS, TUG, and 6MWT, as compared to the MIT, LIT, and CG. These findings revealed that HIT tends to result in greater improvement of muscle strength and mobility.

Trial Registration: NCT04892836 (May 19, 2021)

Keywords: High-intensity training, low-intensity training, moderate-intensity training, older adults, resistance training

INTRODUCTION

The world's population is currently projecting an upward growing old (United Nations, 2019). The aging population is defined as the increased number of citizens above 65 years old in absolute terms. Thus, the aging population is one of the most noteworthy demographic transitions and hence is contributing to the social changes of the twenty-first century (Reynaud & Miccoli, 2019). In addition, these changes have become a huge trouble for both the developed and developing countries due to the prompt conversion in the number of senior people that creates critical concern, especially regarding the health of senior citizens (Lyons et al., 2018). A report in 2018 revealed that the figure of individuals matured 65 or above had surpassed the number of kids under five worldwide. Meanwhile, the population with +80 years is predicted to triple, from 143 to 426 million people between 2019 and 2050 (United Nations, 2019).

Aging has a pivotal role in reducing and disfunction of strength and functional mobility in humans (Delmonico et al., 2009).

Some studies have shown that muscular weakness is greatly related to mobility reduction and is causing an increased risk of falls. In addition, muscle weakness was labeled as one of the main contributing factors to fall, which causes a five-fold upturn in the risk of falling (Rubenstein, 2006). This descending muscle strength issue is causing various health consequences, such as decreased muscle quality, fatigability, hypertension, heightened disability, increased risk of developing cardiovascular disease, premature mortality, and respiratory failure (Cruz-Jentoft et al., 2019; Ghaffari et al., 2016; Jaul & Barron, 2017; M. J. Park et al., 2020; Wu & Ouyang, 2017). Non-productivity during the older age also boosted the chances of developing low muscle strength, as this issue tends to be higher in the 7th decade and above (Tournadre et al., 2019). Physical inactivity is a potential cause of colon and breast cancers (approximately 21-25%), heart disease (approximately 30%), and diabetes (27%) from all around the world (World Health Organization, 2019).

In the context of Malaysia, population aging is also rapidly growing as a result of increasing life expectancy, declining fertility, and mortality rates (Zamzamy Sormin et al., 2019). Malaysia is expected to transform into an aging population by 2030, estimating that 15% of the total population is categorized as elderly (Kenayathulla et al., 2016). One key issue raised by this dramatic demographic transformation is how healthy aging can be promoted in older adults (Chetty et al., 2016). Many Malaysian elders suffer from multiple chronic non-

communicable disorders. Therefore, by growing Malaysian older people, their health status seems to be a concern (Iddrisu et al., 2020).

As such, Resistance Training (RT) programs have been broadly supported as the main counteraction to the age-related deficits mentioned above. Many of the prior studies put emphasis on the safety and usefulness of strength training in senior people in order to consider and develop safer types of exercises for older adults with no related injuries or any reported adverse events (Aartolahti et al., 2020; Lichtenberg et al., 2019; Müller et al., 2020; Sahin et al., 2018; Watson et al., 2015). Moro et al. (2017), Müller et al. (2020), and Sahin et al. (2018) suggested that high-intensity RT can be performed safely even by older individuals and further stated that RT is a safe and effective means to fight against contracting chronic diseases (Keating et al., 2020). When addressing the safety issue of training in an aging population, it is vital to consider the intensity of RT (i.e., high, moderate, or low) to suit the fitness level of each participant so that the participants do not experience any extra pressures (Keating et al., 2020).

Over the last few years, some organizations have published suggestions regarding the RT programs aiming to establish a framework for training prescription guiding principles for individuals with different trainability statuses, especially for the older population (Fragala et al., 2019; Nascimento et al., 2019). Although suggestions to address effective RT training to gain more muscle strength and mass

have been reported, very few studies have been carried out to determine the types of intense training that can lead the older adults population in improving their fitness factors, such as muscle strength, as well as to improve their mobility in the shortest time and with higher effectiveness (Cobbold, 2018; Marcos-Pardo et al., 2019). Therefore, this study aims to compare the impacts of various training intensities (specifically High, Moderate, and Low), performed in 12 weeks, on the muscle strength and mobility of healthy older women. The hypothesis is that the higher intensity training would be more effective in enhancing muscle strength and mobility, especially when measured in the 4th, 8th, and 12th weeks of interventions. To the best of our knowledge, the first study in Malaysia compares the effectiveness of different intensity training on muscle strength and functional mobility of aged people.

METHODS

Study Design

A single-blinded factorial design was conducted among the healthy older women population at a fitness center in Bukit Rimau, Petaling Jaya, Kuala Lumpur. Before participants sign the written consent form, they have informed about the study procedures and potential risks. The evaluation was done based on the Declaration of Helsinki (64th WMA General Assembly, Fortaleza, Brazil, October 2013) and was accepted by the University Putra Malaysia Interior Research Ethics Committee (JKEUPM-2018-333).

Moreover, this experiment was planned based on the CONSORT guidelines (https://www.consort-statement.org/).

Participants

The G*Power version 19 software was used to estimate the sample size. An effect size of 0.25 α level of 0.05 and a Power (1- β err prob) of 0.95 necessitates the use of at least 60 volunteers (15 participants per group). Participants were recruited using advertisements in public areas; as such, 96 participants were interested in participating in this study, the sample participants were primarily selected through interviews or clinical referrals. According to the inclusion criteria, the participants should be +65 years old, follow the simple training instructions and perform the exercises without any existing health problems, interfering with their safety or ability to complete high, moderate, and low intensities training. The health problems such as recent heart attack, the occurrence of myocardial infarction in the past six months, uncontrolled hypertension (Blood Pressure >166/96 mm Hg), diagnosed osteoporosis, the incidence of a broken leg in the past six months, and diagnosed stage three and four of heart failure were important in this regard. In addition, not participating in regular balance or lower body resistance training during the past three months and not taking any regular medications impair their balancing ability (Antidepressants, Neuroleptics, or Benzodiazepines) or muscle strength (Corticosteroids) were considered. In the end, 60 healthy aged Malaysian women (age range from 65 to 76 years old) were eligible

to participate in this study (see Figure 1). The data was measured as Mean ± SD. The participants were randomly assigned to four groups: High-Intensity Training (HIT) (n=15), Moderate-Intensity Training (MIT; n=15), Low-Intensity Training (LIT; n=15), and CG (n=15) through a computerized random-number generator after an initial evaluation. A blinded researcher who was not affiliated with the study carried out the randomization process.

All the participants were blinded regarding their group allocation and throughout the completion of the entire study. If any participants could not join the scheduled training session, an alternative session was provided in the same week. All the training sessions were conducted in a fitness center in Bukit Rimau located in Petaling Jaya, Kuala Lumpur. The participant's demographic characteristics are displayed in Table 1.

Procedures

Anthropometry. Upon participants' arrival at the training location, they were asked to empty their bladders within 30 minutes before the anthropometric measurements. The body mass of each participant was calculated using an electronic scale (Omron Body Composition Monitor Weighing) to the closest 0.1 kg. The participants were advised to take off their shoes and preferably wear light attire. Then, their height was also measured by a stadiometer to the closest 0.1 cm. Next, their respective body mass index (BMI) is calculated by dividing kilograms on the square root of the height in meters.

Table 1
Demographic characteristics at baseline for HIT, MIT, LIT, and CG

Demographic	HIT	MIT	LIT	CG	D1*
Characteristics	(N=15)	(N=15)	(N=15)	(N=15)	P-value*
Age	69.60 (3.68)	69.27 (3.41)	69.27 (1.94)	68.67 (2.38)	.85
Height (cm)	167.28 (3.50)	166.34 (5.24)	166.60 (3.20)	167.17 (3.85)	.91
Weight (kg)	77.86 (5.76)	75.60 (5.61)	75.68 (4.55)	75.26 (5.25)	.52
BMI (kg/m²)	28.01 (1.23)	27.50 (1.94)	26.70 (2.15)	26.74 (1.47)	.12

Note. Data are presented as mean \pm SD; *Obtained from the one-way analysis of variance (ANOVA) Abbreviations: N = Number of participants; M = Mean; SD = Standard Deviation; HIT = High Intensity Training; MIT = Moderate Intensity Training; LIT = Low Intensity Training; CG = Control Group; BMI= Body Mass Index

Muscle Strength. The 5 Times Sit to Stand (5STS) is a valid measurement to determine the lower extremities of muscle strength (De Melo et al., 2019). The participants were instructed to sit on the standard and cushioned arm-less chair (about 45 cm higher from the floor) and complete five times sit-to-stand actions as fast as possible. Adequate practice time and familiarization were provided to the participants to try out twice and have enough rest. The average time of two experiments was recorded in the analysis.

Functional Mobility. The functional mobility analysis in this study was assessed by The Timed Up and Go (TUG) and The 6 Minutes Walking Test (6MWT).

a) The TUG is a proper and commonly used trial to measure functional mobility in the older adult population (Sebastião et al., 2016). The TUG evaluates different segments of functional mobility, such as sit-to-stand ability, balance or stability, and turning while walking (Dubois et al., 2019; S. H.

Park, 2018). To perform this test, the participant should stand up from the sitting position (armless chair 45 cm high) and walk toward a marked point located three meters away from the first point, turn back, and sit on the chair. A digital stopwatch was used to evaluate the time used to complete these actions, starting from rising until sitting on the chair for the second time. Similarly, this study employed the same procedures to obtain the functional mobility data from each participant. Additionally, the participants had a chance to familiarize themselves with the whole process by having enough resting periods before the two actual trials. The average time to complete the action from these two trials was then used in the data analysis.

b) The 6MWT examined the maximal distance walked by the participants for six minutes and is usually used for evaluating the physical functions and mobility (Kim et al.,

2016). In this study, the participants were asked to walk as fast as they could in a long hallway between two marked lines (30 meters) for six minutes. In this test, the participant was followed closely from behind by the tester. They were asked not to talk during the test. The tester informed the participants of the laps and the remaining time every two minutes.

Resistance Training Program. The RT training was designed for performing over 12 weeks during the morning period. Professional coaches guided all the participants with great experience training people to guarantee consistency and safety. The participants performed different intensities of RT by using correct exercising machines. The RT program was a lower extremity program with four exercises done in the following order: horizontal leg press, leg extension, leg curl, and seated calf raise. The HIT group performed three sets of 4 to 6 repetitions with between 80 to 90% of 1RM, the MIT group performed three sets of 8 to 10 repetitions with between 65 to 75% of 1RM, and the LIT group performed three sets of 12 to 14 repetitions with between 50 to 60 % of 1RM. In addition, the participants were trained to inhale in concentric muscle action and exhale in eccentric muscle action. Meanwhile, the movement velocity ratio was maintained at a 1:2 ratio (concentric and eccentric muscle actions, respectively). Then, they were allowed to rest two to three minutes

between each exercise. The instructors regulated loads of each exercise based on the individual ability and improvements seen in exercise capacity during the study to make certain that they were exercising with as much resistance as possible while retaining suitable exercising executional techniques. RT intensities progression was planned if the participants could do full sets and reps, then the weight was gradually increased by around 5 to 10% in the next training session. During both of the RT phases, the instructors registered the load (in kilograms) and repetitions performed for each of the four exercises from all the participants during each session. Meanwhile, all the participants were asked to sustain their diet like before during the study.

Experimental Approach to the Problem

In total, the study was completed in 14 weeks. Firstly, participants were familiarized with the RT training and pre-training measurements (1-2 weeks). After that, a supervised progressive RT program was done between 2 to 14 (total 12 weeks). The training was done twice per week during the morning hours (from 8 AM to 9 AM).

In this study, the authors measure the RT intensity by an indirect method aimed at measuring one repetition maximum (1 RM). Accordingly, after two introductory sessions, the training load was measured using 3 to 6 repetitions (Bechshøft et al., 2017). A 3 to 6 RM test was chosen owing to the capability to measure the maximum strength of participants with little or without former resistance training experience

(Liguori et al., 2020). According to the strength test result, 1RMs were evaluated with the Brzycki formula: 1 RM (estimated) = load (kg) / [1.0278 - (0.0278 × number of repetitions)]. After calculating the 1 RM, the participants were randomly divided into their respective experimental groups according to the different intensities of RTs performed, while those assigned to the CG were allowed to continue undertaking their daily activities (without training). The participants in the experimental groups performed the RT program twice a week for 12 weeks. The HIT group trained with 80 to 90% of 1RM, while the MIT group

trained with 65 to 75% of 1RM, followed by the LIT group that trained with 50 to 60% of 1RM. The RT was the same across the experimental groups and included Leg Press (LP), Leg Extension (LE), Leg Curl (LC), and Seated Calf Raises (CR) designed based on the recently published evidence.

All the participants were evaluated in one session. Before the testing session, the anthropometric was done. The participants performed the TUG, 5STS, and 6MWT during the testing session. During the two weeks preceding this study, four preliminary familiarization sessions were introduced to the participants to ensure that they could

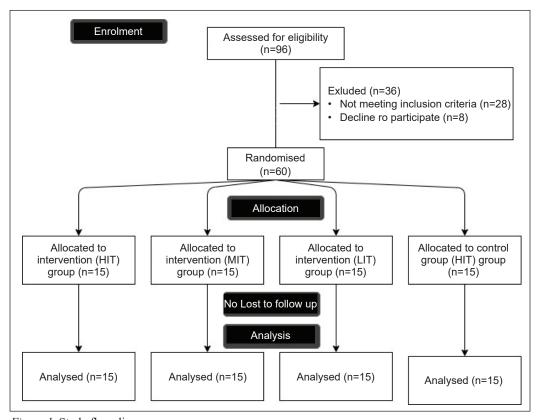


Figure 1. Study flow diagram

Note. n = Number; HIT = High Intensity Training; MIT = Moderate Intensity Training; LIT = Low Intensity Training; CG = Control Group

properly execute these techniques in all the exercises during the testing session. In order to evaluate the effectiveness of different intensity levels, the same tests were performed and repeated after the 4th, 8th, and 12th weeks of training with at least 48 hours of the recovery period. Meanwhile, the participants were asked to avoid regular exercise programs focusing on enhancing or retaining strength.

Statistical Analysis

The data normality test of the study was confirmed by using the Shapiro-Wilk test and Q-Q plots. A one-way analysis of variance (ANOVA) was used to examine possible group differences at baseline. A time (baseline, 4th, 8th, and 12 weeks) × group (HIT vs. MIT vs. LIT vs. CG) factorial ANOVA with repeated measures was done to evaluate the distinctions between the treatments, followed by the multivariate analysis of variance (ANOVA) that was performed to find the effects of two tests on one variable. A two-way analysis of covariance (ANCOVA) for repeated measures was done using the baseline scores as a covariate to omit any possible influences of initial score variances on the training results (Van Breukelen, 2006; Vickers & Altman, 2001). Data were presented for the main outcomes using the ANCOVA-adjusted results. It was followed by the appropriate Bonferroni and Tukey post hoc test when a noticeable treatment and treatment-by-time connection was shown. The variables that showed violated sphericity indicated by the Mauchly test were adjusted using a Greenhouse-Geisser correction. The effect size partial eta squared (η 2) was used for effects comparisons in the study. The interpretation of effect sizes was carried out as follows: (1) small effect: η 2 = 0.01, (2) medium effect: η 2 = 0.06, and (3) large effect: η 2 = 0.14. The statistical significance was set at P< .05. IBM SPSS (version 26, IBM) software was used to examine the collected data.

RESULTS

The overall compliance of participants to the RT program was 100%, a replacement session was planned if a participant could not attend any of the sessions. In addition, the baseline value comparison for age, body mass, height, BMI, 5STS, TUG, and 6MWT showed no significant differences between groups (P> .05). Accordingly, the anthropometric measurement and assessments were done at baseline, 4th, 8th, and 12th weeks of interventions, and the results are presented in Table 2. No adverse events were reported throughout the testing or training periods in all the groups. There were only some muscle soreness reports in the first couple of weeks.

Muscle Strength

The 5STS assessment was used to measure the lower extremity of muscular strength. The mean comparison between the groups at different time points is presented in Table 2. The effects of time in all the tested groups showed that all the pairwise comparisons between the intervention groups were statistically significant (P<.05).

Unlike the other groups, the pairwise comparisons of CG were found to be not statistically significant in the repeated times of CG (P>.05; see Figure 2). The effects of time at each treatment level illustrated a statistically significant difference between the times at each treatment level, except in the CG. The tests of treatment at each time point were performed. The results of pairwise comparisons indicated that the HIT compared with MIT at 4^{th} (p=.045), 8^{th} (p<.001), and 12^{th} weeks (p=.001) of intervention, the HIT compared with LIT at 8^{th} weeks (p=.001) and 12^{th} (p<.001) weeks of intervention, the HIT compared with CG at 4^{th} weeks (p=.012), at 8^{th} week (p<.001) and 12th weeks (p<.001) of intervention were statistically significant. The MIT compared with LIT was not statistically significant at any time points. In contrast, the MIT compared with CG at 12th weeks (p=0.015) of intervention was statistically significant (see Figure 1).

Functional Mobility

TUG. The mean comparisons between the groups at different time points are as represented in Table 2. The effects of time at each treatment level illustrated that there was a statistically significant difference between the times at each treatment level (P<.05), except in the control group (P>.05; see Figure 2). The effects of time in all the groups showed that all the pairwise comparisons between the intervention groups were statistically significant. In contrast, the pairwise comparisons analyses of the other groups were not statistically

significant in the repeated times of the CG. The tests of treatment at each time point were performed, and the results of pairwise comparisons indicated that the HIT compared with LIT at 12th weeks (p=.040) of intervention, the HIT compared with CG at 8th weeks (p=.006) and 12th weeks (p<.001) of intervention were statistically significant. Similarly, the MIT compared with the CG group at the 8th week (p<.001) and the 12th weeks (p=.003) of intervention, as well as the LIT compared with CG at the 12th weeks (p=.039) of intervention, were statistically significant.

6MWT. The mean comparisons between the groups at different time points are as shown in Table 2. The effects of time at each treatment level illustrated that there was a statistically significant difference between the times at each treatment level (P<.05), except at the time of four weeks after the intervention, as compared to the 8th week of intervention in the CG (P>.05; see Figure 2). The effects of time in all the groups showed that all the pairwise comparisons for intervention groups were statistically significant. In contrast, the pairwise comparisons analyses of the other groups detected no statistical significance in the repeated times of the CG. The tests of treatment at each time point were performed, and the results of pairwise comparisons indicated that the HIT compared with LIT group at 12th weeks (p=.004) of intervention, the HIT compared with CG group at 8th weeks (p=.009) and 12th weeks (p<.001) of after intervention were statistically significant. The MIT

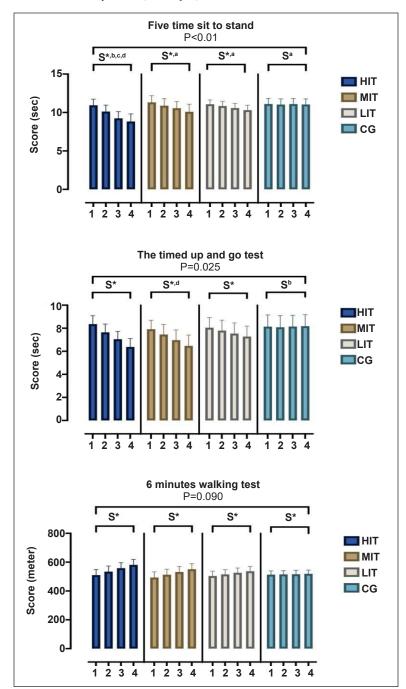


Figure 2. Comparison between groups at baseline, 4th, 8th, and 12th weeks of intervention *Note.* 1= Baseline; 2= 4th week; 3= 8th week; 4= 12th week

Abbreviations: HIT= High-Intensity Training; MIT= Moderate-Intensity Training; LIT= Low-Intensity Training; CG= Control Group.

S* Significant from Baseline to 12th week; Sa Significant compared with the HIT; Sb Significant compared with the MIT; Sc Significant compared with the LIT; Sc Significant compared with the CG

The effect of different intensity training on different variables among study participants after 4th, 8th, and 12th weeks of intervention Table 2

E		:-	÷	-	÷	7	P-valu	P-value* (partial eta square)	quare)
Iest	Int	Baseline	4" week	8" Week	12" week	Change	Time	Group	Time*group
SSTS							<.001 (.82)	<.001 (.29)	<.001 (.73)
(Sec)	HIT	10.94 (0.79)	10.11 (0.84)	9.23 (0.87)	8.83 (0.98)	-2.10 (0.74) ^{b,c,d}			
	MIT	11.31 (0.87)	10.89 (0.92)	10.56 (0.87)	10.08 (0.98)	$-1.22 (0.34)^{a}$			
	LIT	11.07 (0.55)	10.84 (0.61)	10.57 (0.60)	10.31 (0.63)	75 (0.26) ^a			
	CG	11.10 (0.73)	11.03 (0.73)	11.09 (0.72)	11.04 (0.72)	$05 (0.03)^{a}$			
TUG							<.001 (.91)	.025 (.15)	<0.001 (.85)
(Sec)	HIT	8.35 ± 0.72	7.64 ± 0.72	7.04 ± 0.66	6.37 ± 0.72	-1.97 (0.40)			
	MIT	7.91 ± 0.78	7.45 ± 0.85	6.96 ± 0.89	6.46 ± 0.94	$-1.44 (0.30)^{d}$			
	LIT	8.05 ± 0.88	7.79 ± 0.90	7.53 ± 0.92	7.27 ± 0.90	-0.77 (0.16)			
	CG	8.13 ± 1.01	8.08 ± 1.00	8.14 ± 0.98	8.17 ± 0.99	$0.04 (0.04)^{b}$			
FWW9							<.001 (.97)	.090 (.10)	<.001 (.93)
(Cm)	HIT	510.07 ± 39.20	534.20 ± 38.86	558.00 ± 38.02	581.40 ± 38.00	71.33 (6.24)			
	MIT	493.53 ± 39.15	512.67 ± 38.71	531.93 ± 39.32	550.67 ± 38.87	57.13 (4.85)			
	LIT	503.80 ± 33.91	514.93 ± 32.99	526.47 ± 32.96	537.00 ± 33.58	33.20 (3.27)			
	DO	513.60 ± 25.37	514.93 ± 25.74	516.27 ± 26.77	519.27 ± 25.58	5.66 (7.23)			

Note. *Obtain from the two-way (mixed) repeated measures (ANOVA)

Abbreviations: Int = Intervention groups; HIT = High Intensity Training; MIT = Moderate Intensity Training; LIT = Low Intensity Training; CG = Control Group; 5STS = Five Time Sit to Stand Test, TUG = The Timed Up and Go Test, 6MWT = 6 Minutes Walking Test.

^a Significant compared to HIT ^b Significant compared to MIT

^c Significant compared to LIT designificant compared to CG

compared with LIT at 4th weeks, 8th weeks, and 12th weeks of intervention were not statistically significant. Similarly, the MIT and LIT compared with CG at 4th weeks, 8th weeks, and 12th weeks of intervention were also not statistically significant.

The multivariate analysis of variance (MANOVA) was performed to understand the overall impacts of TUG and 6MWT on the functional mobility of healthy aged women. The results are presented in Table 3. The findings observed a significant effect from the different intensities training on

dynamic balance (P<.001, $\eta^2 p$ =.817) and also when the baseline values outcomes were adjusted (P<.001, $\eta^2 p$ =.824).

DISCUSSION

Muscle Strength

This 5STS approach is one of the most appropriate ways to find out about the lower body strength and draw inferences for the muscle strength in the aged population. In this study, the comparison among the groups in terms of muscle strength demonstrated

Table 3
Crude and adjusted mean changes of outcome variables throughout the trial in the HIT, MIT, LIT, and CG

Variables	Adjustment	Test	НІТ	MIT	LIT	CG	P Value	Partial eta square
Muscle Strength *	Crude	5STS	-2.10 ± 0.74	-1.22 ± 0.34	-0.75 ± 0.26	-0.05 ± 0.03	<.001	.761
	Adjusted ^b		0.74	0.34	0.20	0.03		
		5STS	-2.11 ± 0.11	-1.21 ± 0.11	-0.76 ± 0.11	-0.05 ± 0.11	<.001	.761
Functional	Crude						<.001	.817
Mobility **		TUG	$^{-1.97} \pm 0.40$	-1.44 ± 0.30	-0.77 ± 0.16	$\begin{array}{c} 0.04 \pm \\ 0.04 \end{array}$	<.001	.897
		6MWT	71.33 ± 6.24	57.13 ± 4.85	33.20 ± 3.27	5.66 ± 7.23	<.001	.955
	Adjusted ^b						<.001	.824
		TUG	-1.99 ± 0.06	-1.42 ± 0.06	-0.77 ± 0.06	$\begin{array}{c} 0.02 \pm \\ 0.06 \end{array}$	<.001	.902
		6MWT	71.29 ± 1.46	56.96 ± 1.47	33.20 ± 1.44	5.86 ± 1.45	<.001	.956

Note. Data are presented as mean \pm SE

Changes obtained through this formula: Final - Baseline

Abbreviations: HIT = High -Intensity Training; MIT = Moderate-Intensity Training; LIT = Low-Intensity Training; CG = Control Group;

5STS = Five Time Sit to Stand Test; TUG = The Timed Up and Go Test; 6MWT = 6 Minutes Walking Test

^{*} Obtained from the Univariate Analysis of Variance (ANOVA); ** Obtained from Multivariate Analysis of Variance (ANOVA)

^b Adjustment for baseline values

that the HIT was more effective than all the other groups at all the different time points tested (except on the 4th week in which the LIT showed better results). Meanwhile, the other groups showed no statistically significant difference compared to each other in all the intervals tested (except on the MIT, as compared to CG at the 12th week). The mean difference comparison between the groups showed that the MIT is showing more effects statistically than LIT, CG, and LIT (see Table 3).

A few previous types of the research reported no difference in muscle strength following various intensity levels of resistance training (Ribeiro et al., 2020; Sahin et al., 2018). However, the results of strength improvement in this study were in line with the majority of previous studies and reports on similar resistance exercise interventions in more mature people (Borde et al., 2015; Fragala et al., 2019; Liu et al., 2017; Miller et al., 2021; Peterson et al., 2010; Silva et al., 2014; Steib et al., 2010).

The findings of Ribeiro et al. (2020) surprisingly suggested that lower-intensity (3 sets*15 reps) and moderate-intensity (3 sets* 10 reps) are equally applicable for the enhancements of knee extension 1RM chest press and preacher curl in healthy older women. In addition, unexpected results were reported by Sahin et al. (2018) that showed that LI and HI exercises were equally effective for most of the factors tested in the study, such as muscle strength and daily life activity. However, the study also observed that the HI only performed better in the physical performance, as compared to LI.

Furthermore, CG was shown to maintain muscle strength in eight weeks but had lower physical performance.

In line with our study, Steib et al. (2010) concluded that high intensity reached a more substantial improvement on strength outcome than moderate or low-intensity. Moreover, Moderate had more impacts on the strength than low-intensity level. Furthermore, a randomized clinical trials meta-analysis analyzed a wider intensity range (from between 50% 1RM to 90% 1RM) and resistance training impacts in sedentary aged people, and these studies found the similarly same results as our study. The results demonstrated that the intensity levels between 70 to 79% 1RM contributed to greater strength (Borde et al., 2015).

A recent study by Miller et al. (2021) examined the effects of 40 weeks of HI and LI training (two or three times per week) on the upper- and lower-body strengths of healthy older adults. In the study, the HI group performed 80% 1RM (3*8 reps), and the LI group performed: 40% 1RM (3*16 reps). The authors concluded that HI is more effective than LI in improving the upper- and lower-body strengths, especially when training was done at least twice a week. However, there was no significant difference between HI and LI when training was carried out three times per week. Peterson et al. (2010) and Silva et al. (2014) made a comparison of the studies reporting on the RT intensity levels between 40 to 85% of 1RM. Both confirmed that substantial development in muscle strength was achieved with higher intensity training.

Moreover, in a report, Fragala et al. (2019) concluded that healthy adults who are 60 years or older showed optimal strength gains when performing the 1RM resistance training intensity of between 70 to 85%.

The results of our study support the previous findings (Borde et al., 2015; Fragala et al., 2019; Miller et al., 2021; Peterson et al., 2010; Silva et al., 2014; Steib et al., 2010). In conclusion, HIT is more effective than MIT, LIT, and CG. Subsequently, MIT is more effective than LIT and CG, followed by LIT more useful than CG in healthy older women.

Functional Mobility

The overall changes in functional mobility were induced and determined through TUG and 6MWT assessments. These approaches have been reported to address functional mobility in aged people completely. In this study, the assessments between the groups were compared one by one and also entirely. The comparisons between groups in TUG illustrated that the differences between HIT and MIT were significant after the 8th and 12th weeks of intervention compared to the differences between CG and LIT that were significant only at the 12th week of intervention. It is worth mentioning that the adjusted mean difference comparison between the groups showed that the HIT had more effects statistically than MIT, LIT, and CG. Similarly, the MIT had more effects statistically than LIT and CG, while the LIT had more effects than CG (see Table 3).

Regarding the 6MWT, the comparisons between the groups showed that the HIT at

the 12th week of intervention was statistically significant compared to LIT. Moreover, the HIT was significant with CG at the 8th and 12th weeks of interventions. The adjusted mean difference comparison between the groups showed that the HIT had more effects statistically than MIT, LIT, and CG, followed by the MIT that had more effects statistically than LIT and CG, while LIT had more effects than CG (see Table 3).

Resistance training specifically diminishes older interconnected transformations in functional mobility (Papa et al., 2017). Previous studies had reported the effects of different RT variables on functional mobility. In most of the studies, the different varieties of RTs are shown to be impressive to enhance functional mobility in senior people (Alfieri et al., 2012; Bavaresco Gambassi et al., 2020; Buckinx et al., 2018; Granacher et al., 2013; Idland et al., 2014; Lustosa et al., 2011; Moro et al., 2017; Müller et al., 2020; Nicholson et al., 2015; Nicklas et al., 2015; Sahin et al., 2018; Sylliaas et al., 2011; Watson et al., 2015; Yamada et al., 2011). In addition, some of the systematic reviews, reports, and positional statements also reported improvements in functional ability after different RT variations (Fragala et al., 2019; Lai et al., 2018; Papa et al., 2017; Steib et al., 2010). However, a few studies report no improvement in functional mobility in older adults (Coetsee & Terblanche, 2015; Liu et al., 2017).

The results of our study are comparable with most research that measures the efficacy of RT on the aged population. Some of the

studies stated a significant improvement in participants' TUG and functional mobility after 12 and 26 weeks of full-body RT (Idland et al., 2014; Nicholson et al., 2015). Interestingly, the study by Nicholson et al. (2015) tested very low intensity (between 10 to 30% of 1RM) but with high repetitions (between 70 to 100 reps). In addition, Bavaresco Gambassi et al. (2020) reported the effectiveness of RT in improving the functional factors in older adults. Regarding the different exercise intensities, Seynnes et al. (2004) made a comparison of the highintensity and low-intensity in an infirm population, and the study reported that the functional enhancement was vital for both high and low intensities training groups, and the high-intensity was noticeably more beneficial for the walking test but not in stair climbing or chair rise. Moreover, Watson et al. (2015) measured the impacts of highintensity progressive RT with low-intensity home-based exercise for eight months on the functional mobility of aged females with low bone mass. The findings of this study showed a consequential improvement in the TUG in the high-intensity group. Sahin et al. (2018) believe that although high and low-intensity training improves physical performance, higher-intensity is sufficient.

In contrast, Coetsee and Terblanche (2015) did not find any positive mutation in the functional mobility of senior citizens after 4, 8, and 12 weeks of training. However, they found significant changes after 16 weeks of training in the TUG. The improvements reported may be due to different reasons, for example, the lack of

improvement in functional mobility because of a shorter period of training time (less than 12 weeks). Firstly, they used lower body and upper body exercises compared to the other studies that only work on the lower body muscles. Secondly, they might not work until the failure occurs in the first two sets of each exercise. The study used a different intensity for each set of RT group, 50%, 75%, and 100% of 10 RM respectively for the first, second, and third set. Their results contrast with the findings of some studies that showed noticeable changes in the physical function marked after a smaller time duration. For instance, Pinto et al. (2014) found that muscle strength and physical function increase in mature females when they trained lower body for six weeks.

The meta-analysis conducted by Steib et al. (2010) made a comparison of various training intensity levels of PRT to enhance physical performance. However, they found no substantial group differences for the functional tests conducted in the studies. They concluded that RT is effective in enhancing the participant's performances in the functional activities. Although a higher intensity level is more effective than moderate or low intensity on muscle strength, this does not apply to functional performance. Previously, various research had proposed that the lower limb strength can be improved by higher training intensities (between 70 to 89% of 1RM). Meanwhile, the functional performance is likely to be improved by moderate intensity (between 50 to 69% of 1RM) or even low intensity (less than 50% of 1RM; Raymond et al.,

2013). Several possible explanations can explore the lack of functional improvement after varying the RT training intensities. There is a close relationship between strength enhancement, especially for the functional performance (e.g., stair climbing and walking) and the muscles of lower extremities of aged people (Barry & Carson, 2004; Latham et al., 2003). As mentioned above, LI and MI resulted in noticeable strength improvements. In contrast with our results, a meta-analysis published by Liu et al. (2017) found that multimodal exercise and PRT play an outstanding role in enhancing the strength of the lower extremity muscle. However, these exercises did not result in a positive effect and did not improve the functional mobility outcomes.

Limitations and Strengths

The current study consists of several strengths—first, a clear comparison between three different RT intensity prescriptions and no training. Secondly, the different time points were added and tested to confirm that the intensity levels have a faster impact on muscle strength. Thirdly, this study has a control group, which can be considered an advantage due to the ability to focus on the impacts of the determined, different RT intensities on muscle strength and functional mobility. Despite these strengths, this study also has some limitations that need to be addressed. Although the current study worked on the female participants owing to their potential to struggle with sarcopenia (Gyasi & Phillips, 2018), the findings could be more conclusive if the male participants

were added. An additional limitation is the lack of dietary surveillance throughout the study. In addition, the volume of training was a bit higher in the LIT group compared to MIT and HIT because the authors of this study compared three intensities, and it was not easy to control the volume in all groups. For future studies, authors can adjust the intensities to a level that the training volume will be the same for all groups. Finally, the reported results were specified just to untrained aged females and may not be extrapolated to the other groups of society.

CONCLUSIONS

The current results provide full supporting evidence that even though all the different intensity levels were important in enhancing muscle strength and functional mobility, the HIT demonstrated much more effectiveness than MIT and LIT. In terms of clinical importance, each training instruction led to the improvement in muscular strength. Thus, the authors suggested that any of the different intensities can be useful for enhancing muscular strength, as well as functional mobility in more mature women. However, more study is necessary to explore further on these observations, in addition, to including further details on various potential influences, like sex and training frequency, that may lead to the resistance training results in the aged population. According to the benefits of RT training for aged people (Fragala et al., 2019; Lavin et al., 2019; McLeod et al., 2019; Tavoian et al., 2020), it is important to state that our study did not expose any detrimental incident. This

observation confirmed the previous findings by demonstrating that high, moderate, and low intensities strength training is safe to perform and conceivable for older people.

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REFERENCES

- Aartolahti, E., Lönnroos, E., Hartikainen, S., & Häkkinen, A. (2020). Long-term strength and balance training in prevention of decline in muscle strength and mobility in older adults. *Aging Clinical and Experimental Research*, 32(1), 59-66. https://doi.org/10.1007/s40520-019-01155-0
- Alfieri, F. M., Riberto, M., Gatz, L. S., Ribeiro, C. P. C., Lopes, J. A. F., & Battistella, L. R. (2012). Comparison of multisensory and strength training for postural control in the elderly. *Clinical Interventions in Aging*, 7, 119-125. https://doi.org/10.2147/CIA.S27747
- Barry, B. K., & Carson, R. G. (2004). The consequences of resistance training for movement control in older adults. *Journals of Gerontology Series A Biological Sciences and Medical Sciences*, 59(7), 730-754. https://doi.org/10.1093/gerona/59.7.m730
- Bavaresco Gambassi, B., dos Santos, C. P. C., Queiroz, C., Mesquita, F., Santos, P. R., Furtado Almeida, A. E. A., Schwingel, P. A., & Furtado Almeida, F. de J. (2020). Effects of a four-exercise resistance training protocol on functional parameters in sedentary elderly women. *Sport Sciences for Health*, *16*(1), 99-104. https://doi.org/10.1007/s11332-019-00579-5
- Bechshøft, R. L., Malmgaard-Clausen, N. M., Gliese, B., Beyer, N., Mackey, A. L., Andersen,

- J. L., Kjær, M., & Holm, L. (2017). Improved skeletal muscle mass and strength after heavy strength training in very old individuals. *Experimental Gerontology*, *92*, 96-105. https://doi.org/10.1016/j.exger.2017.03.014
- Borde, R., Hortobágyi, T., & Granacher, U. (2015). Dose–Response relationships of resistance training in healthy old adults: A systematic review and meta-analysis. *Sports Medicine*, 45(12), 1693-1720. https://doi.org/10.1007/s40279-015-0385-9
- Buckinx, F., Gouspillou, G., Carvalho, L., Marcangeli, V., El Hajj Boutros, G., Dulac, M., Noirez, P., Morais, J., Gaudreau, P., & Aubertin-Leheudre, M. (2018). Effect of high-intensity interval training combined with L-Citrulline supplementation on functional capacities and muscle function in dynapenic-obese older adults. *Journal of Clinical Medicine*, 7(12), 561. https://doi.org/10.3390/jcm7120561
- Chetty, R., Stepner, M., Abraham, S., Lin, S., Scuderi, B., Turner, N., Bergeron, A., & Cutler, D. (2016). The association between income and life expectancy in the United States, 2001-2014.
 Journal of the American Medical Association, 315(16), 1750-1766. https://doi.org/10.1001/jama.2016.4226
- Cobbold, C. (2018). Battle of the sexes: Which is better for you, high- or low-intensity exercise? *Journal of Sport and Health Science*, 7(4), 429. https://doi.org/10.1016/j.jshs.2018.05.004
- Coetsee, C., & Terblanche, E. (2015). The time course of changes induced by resistance training and detraining on muscular and physical function in older adults. *European Review of Aging and Physical Activity*, 12(1), 1-8. https://doi.org/10.1186/s11556-015-0153-8
- Cruz-Jentoft, A. J., Bahat, G., Bauer, J., Boirie, Y., Bruyère, O., Cederholm, T., Cooper, C., Landi, F., Rolland, Y., Sayer, A. A., Schneider, S. M., Sieber, C. C., Topinkova, E., Vandewoude, M., Visser, M., Zamboni, M., Bautmans, I., Baeyens,

- J. P., Cesari, M., ... Schols, J. (2019). Sarcopenia: Revised European consensus on definition and diagnosis. *Age and Ageing*, 48(1), 16-31. https://doi.org/10.1093/ageing/afy169
- De Melo, T. A., Duarte, A. C. M., Bezerra, T. S., França, F., Soares, N. S., & Brito, D. (2019). The five times sit-to-stand test: Safety and reliability with older intensive care unit patients at discharge. Revista Brasileira de Terapia Intensiva, 31(1), 27-33. https://doi.org/10.5935/0103-507X.20190006
- Delmonico, M. J., Harris, T. B., Visser, M., Park, S. W., Conroy, M. B., Velasquez-Mieyer, P., Boudreau, R., Manini, T. M., Nevitt, M., Newman, A. B., & Goodpaster, B. H. (2009). Longitudinal study of muscle strength, quality, and adipose tissue infiltration. *American Journal of Clinical Nutrition*, *90*(6), 1579-1585. https://doi.org/10.3945/ajcn.2009.28047
- Dubois, A., Bihl, T., & Bresciani, J. P. (2019).
 Automatic measurement of fall risk indicators in timed up and go test. *Informatics for Health and Social Care*, 44(3), 237-245. https://doi.org/10.1080/17538157.2018.1496089
- Fragala, M. S., Cadore, E. L., Dorgo, S., Izquierdo, M., Kraemer, W. J., Peterson, M. D., & Ryan, E. D. (2019). Resistance training for older adults: Position statement from the national strength and conditioning association. *Journal of Strength* and Conditioning Research, 33(8), 2019-2052. https://doi.org/10.1519/jsc.00000000000003230
- Ghaffari, S., Pourafkari, L., Tajlil, A., Sahebihagh, M. H., Mohammadpoorasl, A., Tabrizi, J. S., Nader, N. D., & Azizi Zeinalhajlou, A. (2016). The prevalence, awareness and control rate of hypertension among elderly in northwest of Iran. *Journal of Cardiovascular and Thoracic Research*, 8(4), 176-182. https://doi.org/10.15171/jcvtr.2016.35
- Granacher, U., Lacroix, A., Muehlbauer, T., Roettger, K., & Gollhofer, A. (2013). Effects of core

- instability strength training on trunk muscle strength, spinal mobility, dynamic balance and functional mobility in older adults. *Gerontology*, 59(2), 105-113. https://doi.org/10.1159/000343152
- Gyasi, R. M., & Phillips, D. R. (2018). Gender, self-rated health and functional decline among community-dwelling older adults. Archives of Gerontology and Geriatrics, 77, 174-183. https:// doi.org/10.1016/j.archger.2018.05.010
- Iddrisu, M. A., Senadjki, A., Mohd, S., Ramendran Subramaniam, C., Yip, C. Y., & Lau, L. S. (2020). The impact of HPB on elderly diseases (Diabetes mellitus, hypertension, hypercholesterolemia, minor stroke, kidney failure and heart problem): A logistic analysis. *Ageing International*, 45(2), 149-180. https://doi.org/10.1007/s12126-020-09368-9
- Idland, G., Sylliaas, H., Mengshoel, A. M., Pettersen, R., & Bergland, A. (2014). Progressive resistance training for community-dwelling women aged 90 or older; a single-subject experimental design. *Disability and Rehabilitation*, 36(15), 1240-1248. https://doi.org/10.3109/09638288. 2013.837969
- Jaul, E., & Barron, J. (2017). Age-related diseases and clinical and public health implications for the 85 years old and over population. *Frontiers* in *Public Health*, 5, 335. https://doi.org/10.3389/ fpubh.2017.00335
- Keating, C. J., Párraga Montilla, J., Latorre Román, P., & Del Castillo, R. M. (2020). Comparison of high-intensity interval training to moderateintensity continuous training in older adults: A systematic review. *Journal of Aging and Physical Activity*, 28(5), 798-807. https://doi.org/10.1123/ JAPA.2019-0111
- Kenayathulla, H. B., Alias, N., & Siraj, S. B. (2016).
 Malaysian elderly perceptions on contribution to human capital development. *Actual Problems of Economics*, 177(3), 284-291.

- Kim, H., Park, I., Lee, H., & Lee, O. (2016). The reliability and validity of gait speed with different walking pace and distances against general health, physical function, and chronic disease in aged adults. *Journal of Exercise Nutrition* & *Biochemistry*, 20(3), 46-50. https://doi. org/10.20463/jenb.2016.09.20.3.7
- Lai, C. C., Tu, Y. K., Wang, T. G., Huang, Y. T., & Chien, K. L. (2018). Effects of resistance training, endurance training and whole-body vibration on lean body mass, muscle strength and physical performance in older people: A systematic review and network meta-analysis. Age and Ageing, 47(3), 367-373. https://doi. org/10.1093/ageing/afy009
- Latham, N., Anderson, C., Bennett, D., & Stretton, C. (2003). Progressive resistance strength training for physical disability in older people. *Physiotherapy*, 89(6), 333. https://doi.org/10.1016/s0031-9406(05)60022-3
- Lavin, K. M., Roberts, B. M., Fry, C. S., Moro, T., Rasmussen, B. B., & Bamman, M. M. (2019). The importance of resistance exercise training to combat neuromuscular aging. *Physiology*, 34(2), 112-122. https://doi.org/10.1152/physiol.00044.2018
- Lichtenberg, T., Von Stengel, S., Sieber, C., & Kemmler, W. (2019). The favorable effects of a high-intensity resistance training on sarcopenia in older community-dwelling men with osteosarcopenia: The randomized controlled frost study. *Clinical Interventions in Aging*, 14, 2173-2186. https://doi.org/10.2147/CIA. S225618
- Liguori, G., American College Sports Medicine, & others. (2020). ACSM's guidelines for exercise testing and prescription (10th ed.). Lippincott Williams & Wilkins.
- Liu, C. J., Changa, W. P., De Carvalho, I. A., Savagea, K. E. L., Radforda, L. W., & Thiyagarajan,

- J. A. (2017). Effects of physical exercise in older adults with reduced physical capacity: Meta-analysis of resistance exercise and multimodal exercise. *International Journal of Rehabilitation Research*, 40(4), 303-314. https://doi.org/10.1097/MRR.00000000000000249
- Lustosa, L. P., Silva, J. P., Coelho, F. M., Pereira, D. S. M., Parentoni, A. N., & Pereira, L. S. M. (2011). Impact of resistance exercise program on functional capacity and muscular strength of knee extensor in pre-frail community-dwelling older women: A randomized crossover trial. Revista Brasileira de Fisioterapia, 15(4), 318-324. https://doi.org/10.1590/s1413-35552011000400010
- Lyons, A. C., Grable, J. E., & Joo, S. H. (2018). A cross-country analysis of population aging and financial security. *Journal of the Economics of Ageing*, *12*, 96-117. https://doi.org/10.1016/j.jeoa.2018.03.001
- Marcos-Pardo, P. J., Orquin-Castrillón, F. J., Gea-García, G. M., Menayo-Antúnez, R., González-Gálvez, N., Vale, R. G. de S., & Martínez-Rodríguez, A. (2019). Effects of a moderate-to-high intensity resistance circuit training on fat mass, functional capacity, muscular strength, and quality of life in elderly: A randomized controlled trial. Scientific Reports, 9(1), 1-12. https://doi.org/10.1038/s41598-019-44329-6
- McLeod, J. C., Stokes, T., & Phillips, S. M. (2019). Resistance exercise training as a primary countermeasure to age-related chronic disease. *Frontiers in Physiology*, *10*(JUN), 645. https://doi.org/10.3389/fphys.2019.00645
- Miller, R. M., Bemben, D. A., & Bemben, M. G. (2021). The influence of sex, training intensity, and frequency on muscular adaptations to 40 weeks of resistance exercise in older adults. *Experimental Gerontology*, *143*, Article 111174. https://doi.org/10.1016/j.exger.2020.111174

- Moro, T., Tinsley, G., Bianco, A., Gottardi, A., Gottardi, G. B., Faggian, D., Plebani, M., Marcolin, G., & Paoli, A. (2017). High intensity interval resistance training (HIIRT) in older adults: Effects on body composition, strength, anabolic hormones and blood lipids. *Experimental Gerontology*, 98, 91-98. https://doi.org/10.1016/j.exger.2017.08.015
- Müller, D. C., Izquierdo, M., Boeno, F. P., Aagaard, P., Teodoro, J. L., Grazioli, R., Radaelli, R., Bayer, H., Neske, R., Pinto, R. S., & Cadore, E. L. (2020). Adaptations in mechanical muscle function, muscle morphology, and aerobic power to high-intensity endurance training combined with either traditional or power strength training in older adults: a randomized clinical trial. European Journal of Applied Physiology, 120(5), 1165-1177. https://doi.org/10.1007/s00421-020-04355-z
- Nascimento, C. M., Ingles, M., Salvador-Pascual, A., Cominetti, M. R., Gomez-Cabrera, M. C., & Viña, J. (2019). Sarcopenia, frailty and their prevention by exercise. *Free Radical Biology and Medicine*, 132, 42-49. https://doi.org/10.1016/j. freeradbiomed.2018.08.035
- Nicholson, V. P., McKean, M. R., & Burkett, B. J. (2015). Low-load high-repetition resistance training improves strength and gait speed in middle-aged and older adults. *Journal of Science* and Medicine in Sport, 18(5), 596-600. https:// doi.org/10.1016/j.jsams.2014.07.018
- Nicklas, B. J., Chmelo, E., Delbono, O., Carr, J. J., Lyles, M. F., & Marsh, A. P. (2015). Effects of resistance training with and without caloric restriction on physical function and mobility in overweight and obese older adults: A randomized controlled trial. *American Journal of Clinical Nutrition*, 101(5), 991-999. https://doi.org/10.3945/ajcn.114.105270
- Papa, E. V., Dong, X., & Hassan, M. (2017).
 Resistance training for activity limitations in older adults with skeletal muscle function deficits:

- A systematic review. *Clinical Interventions in Aging*, *12*, 955-961. https://doi.org/10.2147/CIA.S104674
- Park, M. J., Cho, J. H., Chang, Y., Moon, J. Y., Park, S., Park, T. S., & Lee, Y. S. (2020). Factors for predicting noninvasive ventilation failure in elderly patients with respiratory failure. *Journal* of Clinical Medicine, 9(7), 2116. https://doi. org/10.3390/jcm9072116
- Park, S. H. (2018). Tools for assessing fall risk in the elderly: a systematic review and meta-analysis. *Aging Clinical and Experimental Research*, 30(1), 1-16. https://doi.org/10.1007/s40520-017-0749-0
- Peterson, M. D., Rhea, M. R., Sen, A., & Gordon, P. M. (2010). Resistance exercise for muscular strength in older adults: A meta-analysis. *Ageing Research Reviews*, *9*(3), 226-237. https://doi.org/10.1016/j.arr.2010.03.004
- Pinto, R. S., Correa, C. S., Radaelli, R., Cadore, E. L., Brown, L. E., & Bottaro, M. (2014). Short-term strength training improves muscle quality and functional capacity of elderly women. *Age*, *36*(1), 365-372. https://doi.org/10.1007/s11357-013-9567-2
- Raymond, M. J., Bramley-Tzerefos, R. E., Jeffs, K. J., Winter, A., & Holland, A. E. (2013). Systematic review of high-intensity progressive resistance strength training of the lower limb compared with other intensities of strength training in older adults. *Archives of Physical Medicine and Rehabilitation*, *94*(8), 1458-1472. https://doi.org/10.1016/j.apmr.2013.02.022
- Reynaud, C., & Miccoli, S. (2019). Population ageing in Italy after the 2008 economic crisis: A demographic approach. *Futures*, *105*, 17-26. https://doi.org/10.1016/j.futures.2018.07.011
- Ribeiro, A. S., Picoloto, A., Nunes, J. P., Bezerra, E. S., Schoendeld, B. J., & Cyrino, E. S. (2020). Effects of different resistance training loads on the muscle quality index in older women.

- Journal of Strength and Conditioning Research. https://doi.org/10.1519/jsc.0000000000003667
- Rubenstein, L. Z. (2006). Falls in older people: Epidemiology, risk factors and strategies for prevention. Age and Ageing, 35(SUPPL.2), ii37-ii41. https://doi.org/10.1093/ageing/afl084
- Sahin, U. K., Kirdi, N., Bozoglu, E., Meric, A., Buyukturan, G., Ozturk, A., & Doruk, H. (2018). Effect of low-intensity versus highintensity resistance training on the functioning of the institutionalized frail elderly. *International Journal of Rehabilitation Research*, 41(3), 211-217. https://doi.org/10.1097/ MRR.000000000000000285
- Sebastião, E., Sandroff, B. M., Learmonth, Y. C., & Motl, R. W. (2016). Validity of the Timed Up and Go Test as a measure of functional mobility in persons with multiple sclerosis. *Archives of Physical Medicine and Rehabilitation*, 97(7), 1072-1077. https://doi.org/10.1016/j.apmr.2015.12.031
- Seynnes, O., Singh, M. A. F., Hue, O., Pras, P., Legros, P., & Bernard, P. L. (2004). Physiological and functional responses to low-moderate versus high-intensity progressive resistance training in frail elders. *Journals of Gerontology Series A Biological Sciences and Medical Sciences*, 59(5), 503-509. https://doi.org/10.1093/gerona/59.5.m503
- Silva, N. L., Oliveira, R. B., Fleck, S. J., Leon, A. C. M. P., & Farinatti, P. (2014). Influence of strength training variables on strength gains in adults over 55 years-old: A meta-analysis of dose-response relationships. *Journal of Science and Medicine in Sport*, 17(3), 337-344. https://doi.org/10.1016/j.jsams.2013.05.009
- Steib, S., Schoene, D., & Pfeifer, K. (2010). Dose-response relationship of resistance training in older adults: A meta-analysis. *Medicine and Science in Sports and Exercise*, 42(5), 902-914. https://doi.org/10.1249/MSS.0b013e3181c34465

- Sylliaas, H., Brovold, T., Wyller, T. B., & Bergland, A. (2011). Progressive strength training in older patients after hip fracture: A randomised controlled trial. *Age and Ageing*, 40(2), 221-227. https://doi.org/10.1093/ageing/afq167
- Tavoian, D., Russ, D. W., Consitt, L. A., & Clark, B. C. (2020). Perspective: Pragmatic exercise recommendations for older adults: The case for emphasizing resistance training. *Frontiers* in *Physiology*, 11, 799. https://doi.org/10.3389/ fphys.2020.00799
- Tournadre, A., Vial, G., Capel, F., Soubrier, M., & Spine, Y. B. (2019). Sarcopenia. *Elsevier*, 2019(86), 309-314. https://doi.org/10.1016/j.jbspin.2018.08.001
- United Nations. (2019). World population prospects 2019: Highlights. In *United Nations Publication*, (141), 49-78. http://www.ncbi.nlm.nih.gov/pubmed/12283219
- Van Breukelen, G. J. P. (2006). ANCOVA versus change from baseline had more power in randomized studies and more bias in nonrandomized studies. *Journal of Clinical Epidemiology*, 59(9), 920-925. https://doi.org/10.1016/j.jclinepi.2006.02.007
- Vickers, A. J., & Altman, D. G. (2001). Statistics Notes: Analysing controlled trials with baseline and follow up measurements. *BMJ*, 323(7321), 1123-1124. https://doi.org/10.1136/bmj.323.7321.1123
- Watson, S. L., Weeks, B. K., Weis, L. J., Horan, S. A., & Beck, B. R. (2015). Heavy resistance training is safe and improves bone, function, and stature in postmenopausal women with low to very low bone mass: novel early findings from the LIFTMOR trial. *Osteoporosis International*, 26(12), 2889-2894. https://doi.org/10.1007/s00198-015-3263-2
- World Health Organization. (2019). *Noncommunicable diseases*. https://www.who.int/gho/ncd/en/

- Wu, H., & Ouyang, P. (2017). Fall prevalence, time trend and its related risk factors among elderly people in China. *Archives of Gerontology and Geriatrics*, 73, 294-299. https://doi.org/10.1016/j.archger.2017.08.009
- Yamada, M., Arai, H., Uemura, K., Mori, S., Nagai, K., Tanaka, B., Terasaki, Y., Iguchi, M., & Aoyama, T. (2011). Effect of resistance training on physical performance and fear of falling in elderly with different levels of physical well-
- being. *Age and Ageing*, 40(5), 637-641. https://doi.org/10.1093/ageing/afr068
- Zamzamy Sormin, M. K., Sihombing, P., Amalia, A., Wanto, A., Hartama, D., & Chan, D. M. (2019). Predictions of world population life expectancy using cyclical order weight / bias. *Journal of Physics: Conference Series*, 1255(1), Article 012017. https://doi.org/10.1088/1742-6596/1255/1/012017



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The Construction of House and Body Spaces in Modern Indonesian Poetry

Made Oktavia Vidiyanti*, Haris Supratno, Suhartono and Tengsoe Tjahjono

Department of Language and Literature Education, Universitas Negeri Surabaya, Surabaya, 60231, Indonesia

ABSTRACT

House and body are two postcolonial spaces that poets often write in their poems. This study aims to analyze the construction of house and body spaces in three modern Indonesian poems. There is a semiotic and symbolic relationship between the spaces and the social facts in postcolonial Indonesia. Upstone's postcolonial space theory is applied in this research to reveal how the spaces represent the poets' view of postcolonial Indonesia. The data sources are poetry written by Chairil Anwar, Rendra, and Goenawan Mohamad. This qualitative descriptive research analyzes the poems' lines or stanzas containing house and body spaces. The data were collected through a literature study, namely, reading the selected poetry texts seriously and deeply. The results show that the house and body spaces in the poetry represent Indonesia in the postcolonial space that was suffered, depressed, and lonely due to migration, hybridity, and multiple identities.

Keywords: Body space, house space, modern poetry, postcolonial space

INTRODUCTION

In the constellation of a nation, the house and body spaces are not independent entities. The spaces are closely related to the

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E-mail addresses:

oktavia.vidiyanti@kemdikbud.go.id (Made Oktavia Vidiyanti) harissupratno@unesa.ac.id (Haris Supratno) suhartono@unesa.ac.id (Suhartono Suhartono) tengsoetjahjono@unesa.ac.id (Tengsoe Tjahjono)

* Corresponding author

thoughts developed by a nation. Literature as a non-neutral discourse always contains certain thoughts, including colonial and postcolonial thoughts. Therefore, research on the house and the body spaces in literary works needs to do because there is a semiotic and symbolic relationship between the house and body spaces with the social facts experienced by a nation, including the Indonesian nation.

Many Indonesian poets (e.g., Chairil Anwar, Goenawan Mohamad, and Rendra) had been inspired by the house and body spaces and extensively included them in their poems. Chairil Anwar wrote about a room and the bodies in the room, Goenawan Mohamad wrote about an inn and the bodies that inhabit the inn, and Rendra wrote about an old house that brought traumatic memories.

The three poets were prominent in their day. Chairil Anwar is known as a milestone in modern Indonesian poetry (Setyawan, 2019). On the other hand, Goenawan Mohamad is recognized as an intellectual because of his critical and radical thinking in politics, socio-economics, religion, and literature (Romala & Setiajid, 2018). Rendra is also a poet with critical thinking. He was concerned with social issues and wrote poems about social problems in Indonesia, including feminism, education, capitalism, poverty, politics, and law (Sudewa et al., 2013). In other words, the three poets had their strengths and peculiarities.

With the sound characteristics of each of these poets, the poetry they produced also has poetic power. The house and body spaces in their works can present themselves in their way and become the sources of inspiration, themes, or metaphors for other ideas to express.

The poems of the three poets can be categorized as modern Indonesian poetry. Modern Indonesian literature cannot be separated from Indonesian modernity. According to Foulcher (2001), Indonesian modernity is a product of youth, war, and revolution. These three things underpinned the birth of modern Indonesian literature. The youths at that time were intellectuals who were wounded by war, both as individuals

and as a nation. Chairil Anwar, Asrul Sani, Idrus, and Rivai Apin were young people caught in war. It was from them that the modern Indonesian literary was born, trying to escape from the shadows of the *Pujangga Baru*. It had a more dynamic format and tried to rebel against the poetry considered to shackle the freedom of expression. From the milestones they built, new writers were born who were more oriented to the modernity of expression.

Wirawan (2018) firmly explains that young men had a significant role in building national literature in the early days of independence. At that time, they lived in two periods: colonial and postcolonial. The shift from the colonial to the postcolonial era did not necessarily change them in a completely new space. Colonial biases were carried over in the literary texts they wrote.

Sara Upstone (2009) explains that the representation of a bigger space than the national one can be manifested in a journey; a motive is taken by postcolonial writers as a representation of transnational engagement. Casey (1993, as cited in Upstone, 2009) explains that travel and the concept of place are closely intertwined, where "place provides change but requires a medium of travel" (p. 57). Moreover, this part of the journey provides an example of chaotic space, showing the involvement of a 'heterogeneous' situation with an 'intermediate place' that opposes the construction of a stable place. It was experienced by Chairil Anwar when he had to move from the colonial space to the postcolonial one. The chaos and heterogeneity made Chairil's poetry wild,

rejecting the new poetry rules developed by Pujangga Baru. Goenawan Mohamad and Rendra also felt tension between colonial and postcolonial spaces, especially in the house and body spaces from the postcolonial perspective.

Based on the description, this current research focuses on the construction of the house and body spaces in Indonesian poetry. According to Upstone (2009), a discussion of house and body spaces in a postcolonial context needs to do because it is in those spaces that humans think, do activities, and 'become something.'

Some researchers have studied the house and body spaces from the colonial and postcolonial perspectives. Shang (2016), in his research on African literature, concluded that body image was the most appropriate to reveal and investigate various transformations of discourses that led to inequality of power, hegemonic relations, and political exclusion. Mercer (2017), in his research on rural landscapes in suburban spaces in Dar es Salaam Tanzania, explained that cities in Africa were becoming increasingly suburban. African suburbs can be understood as postcolonial suburbs. Postcolonial suburbs removed the center of the Anglo-American suburban model and took into account the historical coconstitutions of suburban space across colonies and metropolises. Low-density residential spaces on the outskirts of the city were starting to fill with new middle-class people with their culinary needs, big houses, and places for private cars. Architecturally, these spaces were dominated by bungalows and villas, but these buildings were selfconstructed and not part of a large, planned housing scheme. In other words, the houses were built based on the interests of certain social groups.

This current research is different from the previous studies because it does not only uncover the house and the body spaces independently but also looks at how the two spaces are intertwined in the perspective of Upstone's postcolonial space.

LITERATURE REVIEW

According to Sarkar and Haque (2018), the postcolonial era is the era of 'rewriting.' It is also the era of cultural imperialism and the search for a home and identity. Postcolonial literature developed with colonial views, imperialism, and the relationship between the colonizer and the colonized. It includes significant issues of race and home, gender and its parts, and space and identity with their conflicts and contradictions. Postcolonial studies deal with the century of cultural and existential conflict.

According to Foulcher and Day (2002), there are two main topics of discussion about postcolonial criticism in Indonesian literature, namely language and identity. The language issue is related to the influence of colonial language on the language of the colonized nation, the way of expressing postcoloniality in Indonesian literary texts, and the method used by former colonial writers in decolonizing (national awareness) the colonial language. Meanwhile, the issue of identity relates to the issue of hybridity, namely the changing national identity due

to cultural influences from the colonial nation, including mimicry (the act of imitating) colonial culture by the colonized and subaltern (marginalized or colonized people).

Complementing the study by Foulcher and Day, this current research reveals the postcolonial space from a different perspective. This study uses poetry as the object of research and implements Sara Upstone's spatial theory (i.e., travel space, city space, body space, nation space, and home space). These spaces serve as sites of possibility and resistance. Postcolonial space refuses to follow colonial space, which denies the fact that territory everywhere is always constructed and temporary. In essence, Upstone's postcolonial space is not a negation of what has been lost but rather a negotiation.

Upstone (2009) explains that the space of the colonial house carries out an ideological function. Houses, generally known as private property, are formed to perpetuate colonial values on a simpler scale. The manifestation of colonial values is carried out through the privilege of middle-class houses. Upstone further explains that a house is a space for negotiation and power to take place in the postcolonial context. Postcolonial criticism reveals that the construction of colonial houses represents a gender classification and class differences based on racism.

The house space cannot be separated from the body space because the body resides inside the house. According to Upstone (2009), the narrowest space in space movement is the body space. It is

the most prominent site of colonialization, which is the source of resistance. The body, as a representation of space, is something meaningful from a postcolonial perspective. Upstone's space always intersects with the issues and the role of the body in space construction. The body plays an important role in postcolonial texts, especially in building awareness of various spatial experiences.

Heckmann (2006) argues that a house has an important function in life. House has always been associated with the idea of a place to live and comfort when one comes home, wanting to feel safe and welcome. It is certainly not easy for migrants to obtain because migration is always a process that implies a struggle for identity. McLeod argues that "being 'at home' means occupying a location where he is welcomed, where he feels he can be with others like himself" (2000, p. 210).

According to Brah (1997), a house is a mythical place of desire in the diaspora imagination. In other words, a house is a mental image. It is in line with the opinion of McLeod (2000) that a house is a mental construction that is built from incomplete opportunities and memories to survive from the past. It is in a severed and disjointed relationship with the present. House is also important in nationalist representation. McLeod (2000) describes the house as a relevant concept of nationalist representation, as an entity belonging to a nation.

The issue of body space is not much different from that of the house space. In fact, they overlap. The colonial body is a representation of the ideal body, while

the postcolonial body is a body that is in the process of 'building the form.' For this reason, there is an asymmetry between the colonial body and the colonized body, which has undergone a transformation in the postcolonial period (Shang, 2016). The body itself shapes the perception of various experiences through spaces experienced by the body. Colonization becomes the center of the manipulation and appropriation of the body as a territory and key to control. It is classified by vision, recorded, and defined in an extended mix of races and specific types. Foucault (1979) states that power relations are instilled in the body. The postcolonial context emphasizes that body control is not only exercised through violence but also a set of subtle regulations through writing, education, and administrative practices.

So, the body in the perspective of postcolonial space is not an autonomous entity because the colonial past has constructed it. Meanwhile, the body in the colonial perspective is seen as an area that is not different from other physical areas that must be conquered. The colonial government exercised control over the body of every individual in the space they controlled through the production of stereotypes and moral hygiene. The colonized body is positioned lower than the colonizer's body.

METHOD

This qualitative descriptive research analyzes poetry texts carefully, intimately, and intensively to reveal the things or events (George, 2008). The poetry texts analyzed

were *«Pada Sebuah Kamar»* (In a Room) by Chairil Anwar (1959), *«Kenangan dan Kesepian»* (Memories and Loneliness) by Rendra (2004), and *«Di Penginapan El Duque»* (At the El Duque Inn) by Goenawan Mohamad (2018). The poems were chosen because, as a text, they explicitly and implicitly contain the house and body issues. In addition, the three poems were written in postcolonial Indonesia so that they well represent the poets' comparative views on the conditions in the colonial and postcolonial periods.

Chairil Anwar, Rendra, and Goenawan Mohamad were prominent Indonesian poets. They lived in two periods: colonial and post-colonial periods. Chairil Anwar was born in Medan on 26 July 1922. «The Bitchy Beast» had produced 96 works, 70 of which were poetry. After the divorce of his parents, Chairil Anwar moved to Batavia with his mother when he was 19 years old. It was there that he became acquainted with the world of literature. Even though he could not finish his studies, Chairil Anwar could master foreign languages such as English, Dutch, and German. He enjoyed reading the works of world poets, such as Rainer Maria Rilke, W.H. Auden, Archibald MacLeish, Hendrik Marsman, J. Slaurhoff, and Edgar du Perron. These poets greatly influenced Chairil Anwar's writing style. He died on April 28, 1949, at a very young age, 27 years, due to illness. However, his poetic works inspired many poets in the later era, including Rendra and Goenawan Mohamad.

Rendra, known as W.S. Rendra, was born in Solo, Dutch East Indies, on

November 7, 1935. Since he was young, he has written poetry, screenplays, short stories, and literary essays in various mass media. Rendra has been known as the avant-garde poet and playwright in Indonesia since the 1950s. For him, creating poetry is a process that requires poets to be sensitive to the calls of nature, humans, and animals or all of God's creations and the problems of their lives. The poet, known as the Peacock, died on August 6, 2009, in Depok.

Meanwhile, Goenawan Mohamad was born in Batang on July 29, 1941. Besides being known as a poet, he was also known as one of the founders of Tempo Magazine, a weekly magazine that carried the journalistic character of Time magazine. Goenawan Mohamad was a critical and broad-minded journalist and writer. His writings deal with the themes of human rights, religion, democracy, corruption, and so on.

Data, the lines or stanzas containing the expressions of the house and body spaces, were collected through literature study, namely reading carefully and deeply the selected poetry texts. The collected data were studied from the perspective of Upstone's postcolonial space, more specifically the house and body spaces, applying content analysis. Content analysis is a flexible research method for analyzing text and describing and interpreting written artifacts from a society (White & Marsh, 2006). In this case, the written artifact is poetry. The data were interpreted through impressionistic, intuitive, and interpretive analysis (Hsieh & Shannon, 2005). The content analysis was applied in reading

and interpreting the data to change the «imagination» into «insight,» as is usually done in the literature study process (George, 2008).

In short, the data analysis steps were: (1) reading the selected poetry text in depth, (2) collecting the data in the form of lines or stanzas containing the house and body spaces and the associated elements, (3) giving meaning based on text interpretation, and (4) drawing conclusions.

RESULTS

Postcolonial criticism shows that the colonial houses were built based on gender classifications and descriptions of class differences. Chairil Anwar wrote the following poetry.

SEBUAH KAMAR A ROOM

Sebuah jendela menyerahkan kamar ini

A window is giving this room

Pada dunia. Bulan yang menyinar ke dalam

To the world. The inward shining moon

Mau lebih banyak tahu

Wants to know more

"Sudah lima anak bernyawa di sini «Five children are alive here

Aku salah satu!"

I'm one of them!»

Ibuku tertidur dalam tersendu My mother is falling asleep sadly

Keramaian penjara sepi selalu The prison crowd is always deserted Bapakku sendiri terbaring jemu My father is lying bored.

Matanya menatap orang tersalib di batu!

His eyes are staring at the crucified person in stone!

Sekeliling dunia bunuh diri!
All around the world are committing suicide!

Aku minta adik lagi pada I ask for another younger brother to

Ibu dan Bapakku, karena mereka berada

My mother and father, because they are

Di luar hitungan: Kamar begini, Beyond the count: A room like this,

3 x 4 m, terlalu sempit buat meniup 3 x 4 m, is too narrow to blow

nyawa! a life!

The lines of «measuring 3x4 meters in size, five children are living here, and when «I» in the lyric asked his parents for another younger brother (to bear another child),» indicate that the house was very small, even too small to blow another life. Chairil Anwar's poetry shows a very sharp contrast between the colonial and postcolonial periods. In the postcolonial period, the former colony was depicted as having slumped economically. It is described as a house measuring 3 x 4 meters with five people living in it; the house is, of course, not ideal for a decent living. In fact, it is ironic when the poet wrote: Sebuah jendela menyerahkan kamar ini/Pada dunia. Bulan yang menyinar ke dalam/Mau lebih banyak tahu (A window gives this room/

To the world. Inward shining moon/Wants to know more). «A window» is a medium that gives the world a «narrow room» as part of the «nation's home.» If the «narrow room» were postcolonial Indonesia, the poet would report the bad condition of this former colony to the world. It means that Chairil Anwar could not escape the colonial bias in his poetry.

In Upstone's (2009) thought, the house space in Chairil Anwar's poetry expresses the colonial ideology, which shows that life in the colonial time was even more joyful. The house, in this case, a room that is private property, was formed to perpetuate colonial values on a narrower scale.

In Upston's (2009) perspective, the cramped room as an element of the house captures the colonial spirit in a different way. This paradoxical expression indicates that the colonial period was not a bad time compared to the postcolonial one. In this way, Chairil Anwar showed that the middle-class or the upper-class houses were much more stable in life compared to the narrow room that represented the former colony.

However, in Upstone's (2009) perspective, the house in Chairil Anwar's poem does not show a description of gender classification and class differences. All the occupants in the room are represented on the same level as persons: *Ibuku tertidur dalam tersendu, bapakku sendiri terbaring jemu,* dan mereka semua berada dalam *keramaian penjara sepi selalu* (My mother is sniffling asleep,/my father is lying bored,/and they are all in the crowd of the always lonely prison). It means that the house was not built based on colonial ideology.

It confirms that Chairil Anwar is in an ambiguous inner situation, a continuum of colonial and postcolonial spaces. Chairil Anwar's opinion about a house was different from that of Rendra, even though both presented a house that was equally not ideal. Chairil Anwar presents a house with a narrow room area, while Rendra presents a quiet old house. Rendra wrote the following poetry.

KENANGAN DAN KESEPIAN MEMORIES AND LONELINESS

Rumah tua Old house

dan pagar batu. and stone fences.

Langit di desa Village sky

sawah dan bambu. rice fields and bamboo.

Berkenalan dengan sepi Get acquainted with the lonely

pada kejemuan disandarkan dirinya. on boredom, he leaned on himself.

Cinta yang datang
The love that comes

burung tak tergenggam. birds can't be grasped.

Batang baja waktu lengang a steel rod in quiet time

dari belakang menikam. stabbed from behind.

Rumah tua Old house

dan pagar batu. and stone fences.

Kenangan lama
Old memories
dan sepi yang syahdu.

and quiet serene.

«Old house» can be interpreted as a house from the past that looks sturdy and strong. It can also be interpreted as a house that has rotted with age. Whatever happens, the household's memories. The colonial house looks impressive, especially when the house stands in the middle of an agrarian society, as depicted through stone fences, village skies, rice fields, and bamboo. Ironically, this gallant colonial house left a trauma for the former colony.

Trauma to the house of the past is a form of the poet's resistance to the colonial house. It confirms Upstone's opinion that home as a political and ideological space will turn trauma into resistance.

Goenawan Mohamad had a slightly different view from the two poets. Mohamad wrote about lodging. The house in this context is a halfway house for travelers. He wrote the following poetry.

DI PENGINAPAN EL DUQUE IN «EL DUQUE» INN

Mereka katakan tak ada mimpi & berahi

They say there is no dream & lust

di kamar ksatria. in the knight's room.

Tapi aku bukan besi tua, kau bukan pualam.

But I am not scrap metal, you are not alabaster.

Di dekat jendela, tubuh kita merah padam.

By the window, our bodies were dark red.

Di pantatmu yang membiru, kuterakan gigit

On your blue ass, I took a bite

dan tattoo itu menghitam. and the tattoo was blackened.

Pada klimaks ke-1.000 At the 1,000th climax

aku dengar jerit: aku dengar diam. I heard a scream: I heard silence.

In Upstone's (2009) view, a house is a more intimate spatial experience, which the travel and city need. The house space in the centrality of life experience, as a physical location rather than a metaphor, can fulfill this function. A house is 'permanent, rooted stably,' very different from a journey. As a former colony, the Indonesian nation also traveled from the colonial period to independence. On that journey, it turned out that a halfway house was not a stable house, not an ideal home for a place to live. Mohamad (2002) pointed out the problem this nation is currently facing, namely the availability of a stable and stable nation house.

From this description, a house in Indonesian poetry implies several things, namely: (1) showing an ambiguity of national identity between colonial and postcolonial, (2) showing a socio-psychological trauma caused by the colonial space in the past, and (3) represent dreams and aspirations, which are less developed and realized.

In addition to the house space, Upstone also talks about the body space. The human body in Chairil's poetry is seen from the following lines: «Already five children are alive here/I am one of them!» The body is presented not as a person but as a creature of God like other animate beings. The choice of the word «bernyawa (living)» seems to indicate that human death and life are marked by life. In fact, life can die, but humans are immortal. Chairil is in a dilemma when faced with his nation being a former colony. Chairil, who lived in two different spaces, colonial and postcolonial, ultimately had to be in a divided personal state.

The representation of the body in the poetry text shows how people think about the postcolonial nation. It is tragic to read Chairil's description of the body of the Indonesian nation: My mother is sleeping sadly,/My father is lying bored,/all are imprisoned lonely, all around the world are committing suicide. The body of this nation is described as suffering terribly. It is very ironic and paradoxical considering that this nation had fought hard for independence, finally becoming independent. Chairil's voice seemed very painful, but so it is when a poet is torn between two spaces.

On the other hand, Rendra (2004) wrote: Getting acquainted with the lonely/On boredom, he leaned on himself. Traumatized by colonial pressure, the body of this nation is described as lonely and bored. This description strengthens the fact that this nation is in the space of disintegration, which makes the body powerless.

It can be seen from the lines written by Mohamad (2018): "By the window, our bodies are bright red." A red body can mean sick. The window is a means to see the world or be seen by the world, almost the same as Chairil's "window." The pain experienced by the body of this nation is consciously shown to the outside world, or conversely, the outside world is welcome to see it.

For Upstone, the body was the greatest site of colonialization as a source of expression of resistance. Viewing the Indonesian nation as a unity that was suffering and living in misery (poverty, ignorance, and vanity) is the adoption and adaptation of the colonial perspective of the former colony. Indonesian writers shared this view with multiple identities. The multiplicity of identities actually occurred due to the poet's intention to resist the chaos of the state as an independent nation.

So, the body in the perspective of postcolonial space is not an autonomous entity because the colonial past has constructed it. Meanwhile, in a colonial view, the body was seen as an area not much different from other physical areas that had to be conquered. The colonial government exercised control over each individual's body in the space they controlled through the production of stereotypes and moral hygiene. The colonized body is positioned lower than the invader's body.

In short, in the perspective of postcolonial space, the body in Indonesian poetry is seen as (1) the body that was in great pain, (2) an ironic and paradoxical body, and (3) A representation of a poet

who has a dual or hybrid identity, as a way of resistance.

DISCUSSION

Chairil Anwar, Rendra, and Goenawan Mohamad were born with different backgrounds, although there are some similarities between them. What they have in common is the fact that they lived in the postcolonial era, albeit in different times. The similarity resulted in similar themes and dictions in the poetry they created. For example, in the poem "Sebuah Kamar" there is the word 'kamar (room)', in the poem "Kenangan dan Kesepian" there exists the word 'rumah (house)', and in the poem "Di Penginapan El Duque" there is the word 'kamar (room)'. The facts show that in intertextuality, a spatial relation is found in the three poems.

Similarly, in the poem "Sebuah Kamar" there is a line 'Ibuku tertidur dalam tersendu (My mother is falling asleep sadly)', in the poem "Kenangan dan Kesepian" there is a line 'Berkenalan dengan sepi/pada kejemuan disandarkan dirinya (Get acquainted with the lonely/ on boredom he leaned on himself.)', and in the poem "Di Penginapan El Duque" there is a line 'Di dekat jendela, tubuh kita merah padam (By the window, our bodies were dark red)'. These lines reveal how the condition of this nation's body. The body is described as 'sad,' 'lonely,' and 'deep red.' It shows that the three poets have the same voice in viewing the body intertextually. The body of the postcolonial nation is depicted as suffering and lonely.

The house space in the poetry of the three poets represents an ambiguity of national identity between the colonial and postcolonial. It proves Mills and Misoczky's (2014) statement that colonialism survives in other forms, apart from open foreign rules. Hence, the neocolonial expression, not postcolonial, fits into the current old colonialist practice in its new fashion and form. Neocolonial practices allow the birth of geo-economic, geopolitical, and geocultural hegemony that grows effectively due to the active contribution of individuals and organizations within the state and community, including the contributions of academics. As a poet, Chairil Anwar seems to confirm the continuity of colonialism in another form. At least, he shows a clear difference between a colonized and a post-colonized nation. In Chairil Anwar's perspective, the house is described as a not ideal house for an independent nation, a house that creates a traumatic feeling.

Visser (2011) asserts that trauma is very likely to exist in postcolonial literature. It relates to fundamental issues, i.e., psychological issues, the power of the Eurocentric orientation, inherent contradictions, and its tendency to blur the lines of distinction between stasis and melancholy as an acceptance of an emphatic and responsible narrative of trauma. The old house makes the occupants psychologically deserted, which results in feelings of melancholy or depression. Rendra wrote that «their life became a dusty street with no heart/through fate staring at it.» So, the colonial traces represented by the old house

are still alive, which disturbs the nation's life both socially and psychologically.

It is in line with McLeod's (2000) opinion, stating that in this formulation, the house is primarily a mental construction built from opportunities and vague memories to endure the past. It is in a severed and disjointed relationship with the present. So, the house that Rendra imagines as a lonely old house in an agricultural landscape actually represents a nation stretching between the past (i.e., the colonial period) and the present (i.e., the era of independence, the postcolonial era). In the old house, the mental construction of its inhabitants can be imagined: lonely, bored, suffering.

According to Painter and Philo (1995), there is tension between old and new politics, colonial traces, and postcolonial consciousness. In such a condition, when this nation did not have an ideal home as a nation's house, Mohamad wrote: They said there was no dream & lust/in the knight's room. «They,» which refers to other national entities outside the Indonesian nation, believe that this nation has no dreams, no aspirations, no hope for its future. Without a home, humans will not be able to write the story of their life.

It is in line with Heckmann's (2006) opinion, which states that a house has an essential function in life. Home has always been associated with the idea of a place to live and comfort; when someone comes home, wanting to feel safe and be welcomed. For migrants, it is not easy to get because migration is always a process that implies a struggle for identity. In fact, the migration from the colonial period to the postcolonial

period continued made the construction of identity not yet achieved fully.

Ruiz (2012) describes that the process of migration, adaptation, and transformation from colonial spaces inhabited by outsiders (racial) to postcolonial spaces inhabited by insiders (bicultural) is not easy. There is a cultural shock, including treating and interpreting the body.

Gilbert (2003) states that a body is a surface of events that is encrypted (traced by language and destroyed by ideas), is a locus of self that separates (adopting the illusion of substantial unity), and is a space of disintegration. The powerlessness of the body in the postcolonial space depicted in literary works shows that postcolonial writing is dual or hybrid. Barry (2010) explains that there are stages in hybridity, namely: (1) adopting, because the writers aim to adopt the form as a foothold, (2) adapting because the writers aim to adapt the form of the colony, and (3) possessing proficiency because the writers assume that colonial writers are 'adept' independently. It shows that removing biases and traces of colonialism is not an easy thing to do. In fact, Indonesian writers also migrated, adopted, adapted, and believed in colonial skills.

Upstone spaces always intersect with the issues and the role of the body in the construction of the spaces. The body plays a vital role in postcolonial texts, especially in building awareness of various spatial experiences (Upstone, 2009). Body space is a space intended to reconfigure the significance of the body, which marks the final reduction of the spatial scale. The body becomes a postcolonial space because the awareness of the world involves the body. The body is a more intimate and personal space where everyone is finally connected to the body. With this statement, it can be understood that the space of the house and the body are always intertwined.

In Chairil Anwar's (1959) poetry, there is a reciprocal relationship between the house space (the narrow room) and its bodies. The cramped room occupied by five lives is a description of hyperbole and an expression of irony and criticism. In the dramaturgy of life context, the five lives are positioned in the foreground to become the center of attention. The same thing happens in Rendra's poetry, a traumatic body that suffers from the memory of an old house as a representation of a deserted colonial space. The two poems share the same attitude about home and body. The state of the house forms the characteristics of the body.

Mohamad (2018) had different ways of writing the house and body spaces. He highlighted the absence of a national home which resulted in this nation not having a clear identity. It was always in endless changing conditions from colonial space to postcolonial space. A house that is only a halfway house also gives birth to the concept of an imperfect body, always changing, either through adoption, adaptation, and mimicry.

The views of colonialism and colonial imperialism and the relationship between colonial and colonialism underlie the development of postcolonial literature. Colonialism and cultural imperialism gave birth to dislocation and diaspora even

though colonialism mixed two cultures: the native and foreign cultures. Because of this, a hybrid culture was created. Diasporic writers create their own homes and identities. They live between the two, commonly referred to as the house of hybridity.

The colonial period was a period of oppression and domination, while the postcolonial era was an era of cultural imperialism and the search for a home and identity. Therefore, postcolonial studies are concerned with the centuries of cultural conflict and existential conflict. Its major issues include race and home, gender and its parts, space and identity, and conflict and contradiction. Postcolonial studies relate to housing and identity in terms of dislocation and migration.

Indonesian poetry written by Indonesian poets is also under tension between colonial and postcolonial spaces. This tension causes cultural conflict and existential conflict. The following Table 1 illustrates this.

In Table 1, it is clear that cultural conflict exists in the three Indonesian poems. Chairil Anwar implicitly said it is impossible for the occupants to carry out cultural functions normally and optimally in a narrow room. On the other hand, Rendra shows an inner conflict with the accentuation of the contrast between the old house and the village sky, between cultural products and natural harmony, between the modern colonial space and the undeveloped postcolonial space. Furthermore, Goenawan Mohamad shows the irony about the helplessness of a nation inhabiting a house because the house is not ideal, a nation's house in the process of "becoming."

On the other hand, existential conflict is only found in the poetry of Chairil Anwar and Goenawan Mohamad. The existence of the body in Chairil's poetry describes a body that is not independent, confined, and suffering. It is a metaphoric form of the nation's existence as a whole. Mohamad emphasizes the presence of each

Table 1
Cultural and existential conflicts in three Indonesian poems

No.	Type of conflict	Chairil Anwar	Rendra	Goenawan Mohamad
1	Cultural conflict	Kamar begini, 3 x 4 m terlalu sempit buat meniup nyawa! (A room like this, 3 x 4 m is too narrow to blow a life!)	Rumah tua dan pagar batu. Langit di desa sawah dan bambu. (Old house and stone fences. Village sky rice fields and bamboo)	Mereka katakan tak ada mimpi & berahi di kamar ksatria. (They say there is no dream & lust in the knight's room.)
2	Existential "Sudah lima anak bernyawa conflict di sini Aku salah satu!" ("Five children are alive here I'm one of them!")			Tapi aku bukan besi tua, kau bukan pualam. (But I am not scrap metal, you are not alabaster)

person who is in a different space. As part of the postcolonial space, «I» in the lyric explains that he is not scrap metal, not worthless iron. On the other hand, Mohamad emphasized that those in the colonial room were not alabaster, not something of value. In essence, Mohamad stressed that the former colonizer and the colonized were not really different. It is actually Goenawam Mohamad's utopian dream.

A home is a more intimate spatial experience than travel and a city need. As a physical location rather than a metaphor, the space of the house can fulfill this function. The house is 'fixed, of steady roots—in stark contrast to travel.' Houses, commonly known as private property, were formed to perpetuate colonial values on a simpler scale. However, Upstone (2009) explains that in the postcolonial context, the house is where negotiations and power occur. The house detaches itself from its metaphorical function is open to a variety of different meanings and possibilities (Upstone, 2009).

Colonial houses were laid out in such a way for the purposes of gender classification and the domestication of women. In this case, men are constructed to be tasked with caring for political practice and public order. On the other hand, women maintain this order through domestic work. The house in the colonial space seemed to be separated from the political realm. In the three poems, the issue of gender classification and the domestication of women do not appear because the poems raised the issue of the contrast and tension between the former colonizer and the colonized nation.

Therefore, these poems position the house in many meanings and messages. The house is presented as a place to live but also as a manifestation of identity and a space for negotiation. It also applies to the space of the body. Table 2 shows the representation of the house and body space in the three poems.

By presenting the house and body spaces in the three poems, the identities of the owners of the bodies and their conditions can be identified. Chairil Anwar and Rendra highlighted the identity of the suffering nation, but Goenawan Mohamad showed an equal national identity between the colonizer and the colonized. However, in the manifestation of the negotiation space, Rendra did not really highlight this.

Chairil wrote about «I» in the lyric, who asked his parents to bear another child. In fact, this is a poet's dream of the birth of a young generation who will be tasked with holding the reins of the nation's struggle in the future. This negotiation is necessary because the nation's future depends very much on the quality of its young generation. What is interesting is precisely the negotiation carried out by Mohamad. «I» in the lyric establishes a negotiation with those in the colonial space. «I» in the lyric gives an eternal sign to the former colonialist nation, which basically means that as a newly independent nation, it is capable of taking creative and innovative actions to build the nation.

It is in line with Brah's (1997) idea that through the home, imagination as a great nation can be developed. Based on this idea, the house is a mental image. In that case, McLeod (2000) argues that the house is a

Table 2
The representation of house and body spaces in three Indonesian poems

No.	Manifestation	Chairil Anwar	Rendra	Goenawan Mohamad
1	Identity	Di luar hitungan: Kamar begini, 3 x 4 m terlalu sempit buat meniup nyawa! (beyond the count: A room like this, 3 x 4 m, is too narrow to blow a life!)	Rumah tua dan pagar batu. Langit di desa sawah dan bambu. (Old house and stone fences. Village sky rice fields and bamboo)	Tapi aku bukan besi tua, kau bukan pualam (But I am not scrap metal, you are not alabaster)
2	Negotiation room	Aku minta adik lagi pada Ibu dan Bapakku, karena mereka berada (I ask for another younger brother to my mother and father because they are)		Di pantatmu yang membiru, kuterakan gigit dan tattoo itu menghitam (On your blue ass, I took a bite and the tattoo was blackened)

mental construction built from opportunities and incomplete memories to endure the past. It is in a severed and disjointed relationship with the present.

A house is also important in nationalist representation. McLeod (2000) describes a house as a relevant concept of nationalist representation: «Community, ownership, a feeling rooted in the homeland, every house is relevant to the construction and purpose of nationalist representation.» Thus, a house, as a nationalist representation and ownership, is defined as belonging to a nation. According to McLeod (2000), a country is a community that is imagined and evokes a feeling of belonging, home, and community for many people.

What the poet writes about the house and body in his poetry is an imagined community or entity, which is not only ideal but also less than ideal. The tension between ideal and non-ideal reinforces the fact that this nation is on a journey towards a 'becoming' process.

In sum, the social background and life of the three poets affected their viewpoints of the postcolonial house and body spaces. Chairil Anwar lived during the Japanese colonial period and the independence revolution. On the other hand, Rendra and Goenawam Mohamad experienced their adulthood during Indonesia's independence. In postcolonial space, Chairil Anwar's space is certainly very different from that of Rendra and Goenawan Mohamad. For Chairil Anwar, postcolonial houses were not ideal spaces, rather spaces that contextually must be accepted. It is certainly different from Rendra's and Mohamad's views, although there are similarities in some parts. Rendra, who came from a teacher family, an aristocratic group at that time, felt traces of colonialism in his house and body spaces; there was hybridity or mimicry in these spaces. On the other hand, Goenawan Mohamad criticized the house and body spaces which were very dependent on colonial traces.

CONCLUSION

Based on the discussion above, it can be concluded that the house and body spaces represent the state of the Indonesian nation in the postcolonial space. The poets who experienced life in two periods, the colonial and postcolonial periods, were divided persons. The hybrid nature and dual identity of these poets, as a way of resistance, influenced their view of the Indonesian nation in the postcolonial space.

Chairil Anwar and Rendra thought that this former colony was living in a lack of standard of living. The house and body spaces in their poetry indicate that the Indonesian nation in the postcolonial era was suffering, oppressed, and lonely as a result of migration, hybridity, and multiple identities. However, Goenawan Mohamad had a bit different view. The house and body spaces in his poetry indicate that this nation was in the process of "becoming," which brought an unfavorable condition that had to be accepted by a newly independent nation.

One certain thing is that the house and body spaces found in the three poems illustrate that the migration process from colonial to postcolonial times was not easy. In Sara Upstone's concept of thinking, a trauma in the migration may make poets resist. In other words, the poems which seem very paradoxical contain a text of resistance in them.

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REFERENCES

- Anwar, C. (1959). *Deru campur debu* [The roar of dust]. PT Pembangunan.
- Barry, P. (2010). Beginning theory-Pengantar komprehensif teori dan budaya [Beginning theory-Comprehensive introduction to theory and culture] (H. Widiawati & E. Setyarini, Trans.). Jalasutra.
- Brah, A. (1997). *Cartograhies of diaspora: Contesting identities*. Routledge
- Foucault, M. (1979). *Discipline and punish* (A. Sherridan, Trans.). Penguin.
- Foulcher, K. (2001). Rivai Apin and the modernist aesthetic in Indonesian poetry. *Bijdragen tot de Taal-, Land- en Volkenkunde, 157*(4), 771-797. https://doi.org/10.1163/22134379-90003792
- Foulcher, K., & Day, T. (2002). Postcolonial readings of modern Indonesian literature introductory remarks. In *Clearing Space Poscolonial Reading of Modern Indonesian Literature* (pp. 4-9). KITLV Press.
- George, M. W. (2008). The elements of library research: What every student needs to know. Princeton University Press.
- Gilbert, P. (2003). Evolution, social roles, and the differences in shame and guilt. *Social Research*, 70(4), 1205-1230. https://www.jstor.org/stable/40971967
- Heckmann, C. (2006). Concepts of home and belonging in postcolonial literature compared in the novels "Small Island" by Zadie Smith. GRIN Academic Publishing.

- Hsieh, H., & Shannon, S. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research*, 15(9), 1277-1288. https://doi.org/10.1177/1049732305276687
- McLeod, J. (2000). *Beginning postcolonialism*. Manchester University Press.
- Mercer, C. (2017). Landscapes of extended ruralisation: Postcolonial suburbs in Dar es Salaam, Tanzania. *Transactions of the Institute of British Geographers*, 42(1), 72-83. https://doi.org/10.1111/tran.12150
- Mills, A. J., & Misoczky, M. C. (Eds.). (2014).

 Organization: Postcolonialism and voices
 from the south. https://www.academia.
 edu/9597412/86_Mills_Albert_J_and_
 Misocsky_M_Ceci_2014_Editors_Picks_
 Postcolonialism_and_Voices_from_the_South_
 Organization posted December 2014
- Mohamad, G. (2002). Forgetting poetry the nation in Indonesian literary modernism after 1945. In
 K. Foulcher & T. Day (Eds.), Clearing space poscolonial reading of modern Indonesian literature (p. 183). KITLV Press.
- Mohamad, G. (2018). Don quixote. Tempo.
- Painter, J., & Philo, C. (1995). Spaces of citizenship: An introduction. *Political Geograpy*, 2(14), 107-120.
- Rendra, W. S. (2004). *Empat kumpulan sajak Rendra* [Four collections of Rendra's poems]. Surya Multi Grafika.
- Romala, A. G. S., & Setiajid, H. H. S. (2018). The English translation of Goenawan Mohamad's on God and other unfinished things with special reference to poem No. 15: Reiss' method application. *E-Structural*, *I*(2). 192-206. https://doi.org/10.33633/es.v1i2.2137
- Ruiz, M. I. R. (Ed.). (2012). Women's identities and bodies in colonial and postcolonial history and literature. *Miscelánea: A Journal of*

- English and American Sudies, 48(2013), 151-164. https://www.academia.edu/5675580/Miscel%C3%Alnea_A_Journal_of_English_and_American_Studies_Vol_48_2013_Literature_Film_and_Cultural_Studies
- Sarkar, S., & Haque, A. (2018). The home and identity: A postcolonial journey in the poems of Meena Alexander. *International Journal of Language and Linguistics*, 5(3). https://doi.org/10.30845/ijll.v5n3p23
- Setyawan, A. (2019). Chairil Anwar service literature practices, 1942-1949. *AKSIS: Jurnal Pendidikan Bahasa dan Sastra Indonesia*, *3*(2), 347-357. https://doi.org/10.21009/AKSIS.0302011
- Shang, N. G. (2016). A question of the body: Colonial legacies and postcolonial imaginaries of power in African literary texts. *International Journal of English and Literature*, 7(9), 143-151. https://doi.org/10.5897/IJEL2016.0929
- Sudewa. I. K., Putra, I. N. D., & Ratna, I. N. K. (2013). social criticism in the poems and dramas created by W.S. Rendra from Nineteen Seventies to Nineteen Nineties. *e-Journal of Linguistics*, 7(1). https://ojs.unud.ac.id/index.php/eol/article/view/11190/9611
- Upstone, S. (2009). *Spatial politics in the postcolonial novel*. Ashgate Publishing Limited.
- Visser, I. (2011). Trauma theory and postcolonial literary studies. *Journal of Postcolonial Writing*, 47(3), 270-282. https://doi.org/10.1080/174498 55.2011.569378
- White, M., & Marsh, E. (2006). Content analysis: A flexible methodology. *Library Trends*, 55(1), 22-45. https://www.ideals.illinois.edu/bitstream/handle/2142/3670/whitemarch551. pdf?sequence=2
- Wirawan, Y. (2018). Independent woman in postcolonial Indonesia: Rereading the works of Rukiah. *Southeast Asian Studies*, 7(1), 85-101. https://doi.org/10.20495/seas.7.1 85





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Determination in Leadership: A Study on Women's Leadership in Indian Government Services and Armed Forces

Hemlata Vivek Gaikwad^{1,2*} and Suruchi Pandey³

¹Management Studies, Faculty of Management, Symbiosis International (Deemed University) (SIU), Lavale, Pune, 411057, Maharashtra, India

²Department of Management Studies, Rajarambapu Institute of Technology, Islampur 415414, Maharashtra, India ³Management Studies, Faculty of Management, Symbiosis Institute of Management Studies, Symbiosis International (Deemed University) (SIU), Lavale Pune, 411057, Maharashtra, India

ABSTRACT

This article describes lived experiences of successful women leaders in government administration organizations in India. The analysis of women's experiences revealed the enablers and deterrents faced by these women in their leadership trajectories. These factors are categorized as an individual: family background and childhood experiences, self-aspiration and leadership development and work-life balance and familial support or organizational viz. workplace and sociocultural challenges and success mantras. A combination of them has influenced the progression of these women. The results present the need for a massive social change initiated by human service organizations to shift the so-called patriarchal social system. The paper has identified various dimensions like prioritizing promoting diversity, mentoring, and redesign of human resource policies which need to be focused. Also, the organizations and government can use these findings to design development programs for realistically promoting more women to higher positions.

Keywords: Armed forces, government services, India, intersectionality, leadership, women

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E-mail addresses: hemlata.vivek@gmail.com (Hemlata Vivek Gaikwad) suruchi.p@sims.edu (Suruchi Pandey) * Corresponding author

INTRODUCTION

Women leadership has been a topic of immense interest among researchers bringing out constraints like glass ceiling (Bell et al., 2015; Sakshi Sharma & Kaur, 2019), tokenism (Flores, 2011; Watkins et al., 2019), backlash effect (Phelan & Rudman, 2010), lack of fit perception (Heilman & Martell, 1986; Horvath &

ISSN: 0128-7702 e-ISSN: 2231-8534 Sczesny, 2016) and gender stereotyping or orthodoxy (Asgari & Dasgupta, 2004; Senior et al., 2014). Women are considered less competent and ambitious, more sentimental (Billing & Alvesson, 2000) than men, and are generally neglected while considering leadership positions (Phelan & Rudman, 2010). In their study, Gipson et al. (2017) confirm that women are discriminated against in the leadership selection process worldwide. These constraints and discriminations pose dire consequences for gender equality1 and undermine women's leadership competence at every stage in their career (Eagly & Carli, 2007; Eagly & Karau, 2002; Player et al., 2019). At the same time, it impacts organizational effectiveness also, as organizations with gender-diverse leadership see significant business benefits (Turban et al., 2019).

Leadership studies on Indian women have also reflected these constraints apart from the prevalence of stereotyped notions of women roles, preference towards masculine hegemony, and patriarchal attitudes in Indian society (Gandhi & Sen, 2020; Gupta & Saran, 2013; Mythili, 2017). Alsharif (2018), in his study, has identified four major factors affecting women's career advancement, viz. cultural, individual, organizational, and family. Similar challenges are reported by researchers across the globe (Kapur, 2019; Posholi, 2013; Raja, 2016). Indian Government services and Armed forces are

no exception to this. There are still some positions like cabinet secretary, chief of air, naval and army staff, governor of Reserve bank of India, Chairman of Securities and Exchange Board of India, etc. Women have still not been able to break the glass ceilings. The composition of the leader boards is at greater odds with the gender makeup of the society. The personal, sociocultural, or organizational factors that affect women's rise to upper echelons are alike for all women; however, few successfully break these barriers and advance to higher leadership positions. The present study intends to analyze the enablers and impediments experienced by these successful women. Studies on women's leadership in the Indian Government services and Armed forces are limited (Beniwal & James, 2019; Kabir, 2013; Misra and Singh, 2018). They also lack the application of intersectionality theory in explaining the constraints and opportunities involving discourses of opportunity, privilege, and identity. Generic studies on Indian women leaders, too, lack the application of intersectionality in analyzing their performance, perceptions, challenges, and strategies (Bhattacharya et al., 2018; Duflo & Topalova, 2004; Gupta & Saran, 2013; Vasavada, 2012).

India is a multi-cultural, multi-lingual, multi-religious country. This research posits that the lack of women leadership in the Indian Government services and Armed forces cannot be analyzed without considering the country's multifaceted social structure—an amalgamation of ethnic groups, castes, race, languages, cultures, and

¹ The country's Gender Inequality Index (GII) at 0.563 is worse than the world average of 0.450, further affirming the societal discrimination towards a gender-based leadership role.

religions. This structure defines and nurtures the identities of its women, who are not 'stable' or 'homogenous' beings (Menon, 2015). Therefore, understanding the success stories of these women leaders requires an analysis of complex social structure through the application of intersectionality theory. The intersectionality theory emphasizes the ideas and social practices of "gender, race, multiple identities and the intersection of multiple identities" (Sanchez-Hucles & Davis, 2010, p. 171). The theory is still at its nascent stage, primarily applied in building gender and feminist narrative, which were, until now, majorly understood as homogenous accounts (see Haq, 2013; Mangubhai & Capraro, 2015; Menon, 2015; Mirza, 2018; Purkayastha, 2012; Raman, 2020; Sanchez-Hucles & Davis, 2010). Therefore, the primary thrust of the study was to use an intersectional lens to throw light on the process, which enabled the successful few to move up the ladder. The study argued that the upbringing, exposures during early childhood years, the social background and familial and organizational support, and self-aspiration at various stages of their career played a critical role in the women's success as leaders.

Women in Leadership in a Global Context

Across the globe, countries have faced challenges related not only to the leadership of women, but the roots go to the challenges with the education of women. Despite an increase in the gross enrolment ratio of women and the percentage of women in

higher education, only 36% of women occupy leadership roles across the globe (World Economic Forum, 2020). From 1960 till 2021, only 75 countries have reached and held the highest positions of executive power ("Number of countries where the de facto highest position," n.d.). Christie et al. (2017), in their study, have pointed out that women leaders are less acceptable as compared to male leaders. Naff (2001) and Guy and Newman (2004), in their studies, have found that women's representation is concentrated at lower levels in civil services. Researchers across the globe have confirmed the underrepresentation of women in leadership (Bowling et al., 2006; Maphunye, 2007). The report by the guardian (Dudman, 2016) showed that there is not a single country in G20 where 50% of women occupy top government positions.

Indian Government services, Armed forces, and Women Leadership

The present study focuses on all Indian civil services and military services. In India, the government services are categorized into All India level, Central level, and state-level services. All India services are—Indian Administrative services (IAS), Indian Police Service (IPS), and Indian Forest Services (IFS)². The first dispatch of the Indian Government on the Indian Constitutional Reforms on 5 March 1919 marks the origin of the Public Service Commission in India. It referred to the requirement for setting up a permanent office for the regulation of service

² For details see https://web.archive.org/web/20150925101556/http://knowindia.gov.in/myindia/myindia frame.php?id=6

matters. With some further changes year on year, the Government of India Act, 1935, envisioned a Public Service Commission for the Federation. For handling provinces and groups of provinces, a provincial Public Service Commission was put in place. On 1 April 1937, the Public Service Commission has renamed the Federal Public Service Commission. In the inauguration of the Indian Constitution on 26 January 1950, the Federal Public Service Commission was renamed again to the Union Public Service Commission. UPSC has conducted the recruitment and selection process of all India-level civil services since then.

The civil services have continued to remain a male preserve, with the percentage of women being very low due to a complex interplay between various sociocultural, ideological, and personal factors. It was exclusively for men during the preindependence era. Post- Independence, there was a provision for women to enter civil services. Still, rule 5(3) of IAS (1954) (Department of Personnel and Training) empowered the Government to demand resignation from women officers after marriage on the grounds of efficiency. After lots of protests, the government scrapped this rule in 1972. However, the number of women in civil services is not improving.

The male-to-female ratio is at great odds comparing the gender composition of Indian society. It is not surprising that even after seven decades of independence, we do not have any women reaching the post of cabinet secretary, the top post in Indian bureaucracy (Shantanu Sharma, 2020). The scene is improving slowly, but still, there is a long way to go.

Indian armed forces consist of three professional uniformed services: the Indian Army, Indian Navy, and Indian Airforce. The first women officer was commissioned in the Indian army on 6 March 1993. The composition of the Indian armed forces is also at odds considering the gender makeup of the society they represent, showing the silence of women's voices. The current number of women in the three-armed forces in March 2020 is as under:

The answers to these inequalities are complex and deep-rooted in the complex labyrinth of India's sociocultural and economic systems. Indian society is male-dominated, with women being the primary caregivers in the family. In the Indian sociocultural milieu, the societal expectations for 3C's (Cooking, Caring, and Cleaning) are very high, and 48% of the women quit their work midway to attend family commitments (Viewport,

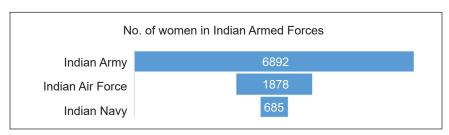


Figure 1. Number of women in armed forces

2019). Though the Indian constitution (Article 16) provides equal rights to men and women, strong patriarchal traditions prevail nationwide. Women are considered a liability since they are born and discriminated against during each life cycle stage—daughter, sister, and wife (Mohapatra, 2015). Despite all these challenges, few women have proved themselves in breaking all barriers and raising themselves to the top leadership positions they have always dreamed of. The present study contributes by identifying the enablers of their success using an intersectional lens.

Purpose

This study investigates the journey and success stories of selected women occupying top leadership positions in Indian Government Services within the Indian society. The research study focuses on the following specific research questions:

What are the major challenges women face in Government services in India, and what strategies have they used to overcome them?

What are the factors contributing positively to the career advancement of these women?

METHODS

The purpose of the present study was to explore the lived experiences of Indian women leaders at the top positions in Indian Civil Services and armed forces in their journeys of navigation to the top. As the study examined the key competencies and strategies that helped these women ascend,

the qualitative approach was necessary (Weick, 2007). The study allowed the researcher to gain insights from their experiences and understand how they overcame the challenges and rose above. This study used a descriptive qualitative approach to conduct in-depth interviews using semi-structured and open-ended research instruments and understand their experiences (García-González et al., 2019). The open-ended interview questions helped capture the maximum possible unexpected themes to emerge. A protocol to guide the interview was prepared (Yin, 2013), focusing on only the psychosocial and demographic factors and organizational contexts to have a deeper understanding of the constraints and opportunities faced, contributing altogether to their success as leaders. Purposive sampling (Guest et al., 2006; Patton, 2002) was used to select the study participants. Besides, insights on success stories and associated constraints experienced by women leaders from different countries' intersections needed to be gathered.

This study took care to select the sampled population as representatives of caste (backward and general caste), race (tribals and non-tribals), region (rural and urban areas of South and North India), language, and class (lower, middle, and upper-income group). Eighteen women belonging to the top leadership positions for the study were invited, but only eight agreed to participate. The establishment of trustworthiness created a good rapport between the participants and the researchers, resulting in a frank and open exchange of

information and honesty in data sharing (Shenton, 2004). Besides, considering the cultural dimensions associated with the participants, the questions were tested with experienced peers and shared an interview guide with the participants before conducting the actual interview. At the same time, the testing of the questionnaire enabled us to take cognizance of the difficult questions which might affect the intersectional sensitivity (primarily cultural). The interview guide enabled the participants to be prepared with the nature of questions to be asked in the interview (Birt et al., 2016; Sinkovics et al., 2008).

The single broad question guiding the complete interview was "What are the lived experiences of women leaders in Indian Civil Services and Armed Forces?" The interview protocol consisted of six open-ended phenomenological questions. The questions dealt with topics of childhood trivia like school education, parental role and role of friends and society in developing their leadership skills, familial support—both of parents and in-laws towards the educational aspiration and skill-related efficacies. The further discussion involved their perception of successful leadership, ambition, role model, attitude towards society and social norms, discrimination, and emotional stability. The last part of the discussion involved organizational facilitators in career development and leadership success, the attitude of co-workers and mentors, and growth opportunities. Through these elements of discussion, the researchers gathered insights on the barriers and challenges the participants experienced and

the strategies they developed to overcome the barriers and ensure effective leadership in their organizations. As per each interview's requirements, additional questions were asked. This study conducted the interviews using SKYPE and personal visits as per the convenience of the participants. The interviews were audio-recorded with prior permission from the participants.

However, two participants did not permit the recording and only took written notes. This capturing of data was the first step called Horizontalization as per Moustakas's (1994) gap method of inductive research data analysis. The interviews were transcribed to associate the meanings with the non-verbal signs and block personal bias and judgments. Considering the nuances of the intersectional identities of the participants and maintaining the trustworthiness of the data, we collected the participants' validation of the data by debriefing the analytical results with them for agreement (Creswell, 2013; McGrath et al., 2019). We funneled the data to avoid redundancy and repetition and the emergence of post-epoch themes. Coding was completed in four phases. Initial codes were developed by identifying fascinating features across the entire dataset. The constant comparative method (Glaser & Strauss, 1967) was used wherein a new dataset was compared with previous data and coded. Potential themes were developed by collating codes and collecting all data relevant to each potential theme. The entire dataset and themes were then reviewed to confirm that themes reflect the richness of data address the research question accurately (Braun & Clarke, 2006).

The data saturation occurred after the sixth interview, but all eight interviews were completed to ensure richness of data. The demographic profile of the participants is presented in Table 1.

RESULTS

An analysis of the data gathered from the interviews (Table 2) was categorized into five themes viz Family Background and Childhood Experiences, Self-aspiration and leadership development, Work-life balance and Familial support, Workplace and Sociocultural Challenges, and strategies adopted for overcoming barriers. The

themes represent the lived experiences of these women leaders from childhood to the professional roles they currently fill.

Family Background and Childhood Experiences

This theme reflected that the family background and childhood experiences played an important role in developing confidence and leadership qualities. All participants revealed that their parents and their grandparents were educated. It provided them with a supportive environment for education at home. The experiences were similar irrespective of the regions (rural and

Table 1
Participant's profile

Participant ID	Age	Marital Status	Service Sector**	Location (till education)	Position*
1	31-40	Married	Civil Service	Semi-Rural	Тор
2	41 - 50	Married	Civil Service	Semi-Urban	Middle
3	51-60	Married	Armed Forces	Urban	Top
4	41-50	Married	Armed Forces	Rural	Top
5	31-40	Single	Civil Service	Semi-Urban	Middle
6	61-70	Married	Civil Service	Urban	Top
7	51-60	Married	Civil Service (Retired)	Urban	Top
8	51-60	Married	Civil Service	Rural	Middle

^{*}Top refers to the higher-level leadership positions, Middle refers to the middle-level leadership positions.

Table 2
Analysis of the interviews

Themes	Themes Example Quotes	
Family	My parents and grandparents were highly educated. Great people like	24
Background	Jyotiba Phule used to come to our house to meet my grandfather (P8).	
and Childhood	I belong to a well-educated family with high ethical values. My parents	
Experiences	always encouraged me to do something for society (P7).	

^{**}The civil service and armed forces sector are not specified as IPS, IAS or IFS / Army, Airforce, Navy to avoid identification of the participants.

Table 2 (continue)

Themes	Example Quotes	No. of Instances
Self-aspiration and leadership development	I always wanted to lead, and I did the same from my school days, taking initiatives in my classroom in my school events, and it continued in my college days too. You don't need a position to be a leader, you know (P2). To enter the armed forces, you need to clear an SSB interview, a five-day-long process, which tests your leadership qualities. I had always prepared myself for it. I kept reading lots of articles on leadership development, and I continue to do so. And yes, I could do it, because I always wanted to become a leader (P3). I played badminton during my school and college days and represented my state at the national level. I was house captain in the school for many years. I also participated in dance and other cultural activities during school. All of these allowed me to taste the leadership skills throughout my school days (P6).	21
Work-life balance and Familial support	I must go on training often. Many times, emergencies come when I must go early in the morning or at night. It gets very late to come back. Also, my family members support me during such times. I have a small daughter, and during such times my family members cooperate a lot (P4). The biggest hurdle that women face is juggling between managing kids and careers. Though men also must balance between career and personal life, women shoulder the major portion of managing the house and children, but I am really lucky to have Ashish (Pseudo Name); he always supported me (P3).	26
Workplace and Sociocultural Challenges	Today women possess higher educational qualifications. Together with it, we observe they have simultaneously developed self-confidence and sometimes arrogance; Few men have learned to accept the educated woman and voluntarily lend the required support as a part of your team. However, not men have changed, and society has not changed its expectations from women (P8). Police Services is a Man's world. People at first instance never believe that a woman can handle this job effectively. She must prove herself to win the trust (P6).	23
Success Mantras	Women usually focus on administrative tasks as they believe doing is more important, whereas men spend more time networking and skill upgrades. They do all the talk and women do a lot of walks. Women should also get into perception building, be abreast with current affairs and technology, keep upgrading skills. I always focused on developing my network (P8). I always felt that every challenge has hidden an opportunity. I have developed a habit not to see the challenge but the hidden opportunity. And I could avail the same with the help of my mentor. P2 Since women need to manage work and personal lives, they need to be confident not feel guilty when they need to leave the office early—Voice out their opinions. Like men ask for their promotions, be more responsible for their careers and not expect their bosses to build their careers (P5).	29

^{*}All participants had mentioned each theme at least 2-3 times during their interview.

urban areas of Deccan, North or South³) or religion or caste. Eccles' expectancy-value theory also emphasizes that parents play an important role in providing achievement experiences during childhood. It further states that parents' values and genderrelated stereotypes influence children's self-perception about their abilities and motivation levels (Eccles, 1987). Six of the seven participants iterated that their parents never discriminated among them and their brothers. One participant attributed the same to her grandparents. They shared that their parents made sure that they faced no gender discrimination from relatives or anyone else in society. It made a big impact on increasing their confidence level and helped them develop leadership qualities.

To quote:

"Whatever I am today is because of my family's support. Without that, I would not have reached the position where I am today. My parents were the mentors and role models for me. They always supported me whenever I had any up or down."

Another experience:

"My parents always encouraged me to play outdoor games like football and volleyball ...my favorites, unlike my friends, who had to struggle even for coming out of their home for playing. These games helped develop my team spirit. I was the best runner hence I used to take part in relay also. I strongly feel that it was the time qualities like team building and conflict handling started developing in me." (P3)

Other participants' views also supported the same by indicating that they had the full support of their parents, and they were always promoted to take part in all events, including sports. These findings indicate a strong impact of their childhood and upbringing on the women's self-confidence and leadership development.

Participant P3 affectionately shared,

"My father was a school principal. At various events, he used to invite eminent motivational speakers. As I was also studying in the same school, I used to get a lucky chance to meet them in person. I used to get so inspired that I used to get on with my studies with double the efforts to become like them one day."

Self-Aspiration and Leadership Development

Women in the workforce have lower aspirations to secure top positions and less confidence in their leadership qualities than men. A survey conducted by Deloitte (2015) found that only 57% of millennial women have ambitions to reach senior management positions. Only 21% rated themselves "Strong" on their leadership skills. Contrarily, all participants perceived that their strong aspiration for acquiring

³ While South India here meant the four southern states of Andhra Pradesh, Tamil Nadu, Kerala, and Karnataka, North India was represented by the rest of the Indian states, including the Deccan and North-Eastern States.

senior positions played a very important role in their leadership journey. Participant P4 expressed,

"Since my school days, I aspired to lead all activities and did my best to get such opportunities. I always wanted to be a leader, and thus I prepared well for the public service commission examination and came out in flying colors."

Participant P5 endorsed the same:

"An important aspect of leadership is believing in that you can be a leader. I strongly believed in my capabilities and kept on seeing myself as a leader and retained my aspirations in adverse times also."

Participant P7 stressed,

"People talk about glass ceilings, but I say it is a sticky floor; women have self-doubts on their capabilities and hence hesitate to take the step forward. They lack the aspirations to engage in senior leadership roles."

The participants expressed that they should develop their leadership skills formally or informally with a strong belief in themselves, a high aspiration.

Participant P1 mentioned,

"I was fortunate that the Government organizes leadership development programs for the successful civil aspirants. It allowed me to sharpen my leadership skills."

Participant P7 shared,

"I had completed a Bachelor of Technology in Computer Science). I believe the soft skills programs and my active participation in extracurricular during these four years taught me critical thinking and decision making, which were crucial in my first leadership position. Early on, I learned effective habits from Steven Covey's Book." which has helped me progress to date.

I feel my communication skills are good (laughs - praising myself). I had worked hard to develop them during my initial college days. It always helped me in building good teams and rapport". (P4)

It shows that gender, socioeconomic status, parents' occupation, level of education, and expectations impact career aspirations (Khallad, 2000). The participants also endorsed and reflected self-aspiration and belief in their competence proved to be the keys to success in achieving the leadership positions.

Work-Life Balance and Familial Support

In Indian society, a woman is expected to wear multiple hats of a mother, daughter, wife, daughter-in-law, and her role at the workplace. Hence, it is often challenging for them to balance their work lives. Six of the seven participants mentioned facing challenges balancing their personal and work life, while one could do it easily because of her joint family. Participant P2 commented.

"My husband and I are in the same profession, and it was hardly a few years when we were posted together. I stayed at my station with my kids, taking their school assignments, running alone during their illnesses, and performing my duties. But I enjoyed my personal life and work-life too. Though my husband was posted at a different place, his support always motivated me to move ahead in my career."

She happily added,

"I have realized the importance of teamwork, both at home and workplace. I need to be replaced by "WE" to step from "Illness" to "Wellness." We must dedicate time to building a team and giving due credit to each member. Collective competency should support Individual intelligence. Moreover, focus, balance, and time management are essential."

On a similar note, Participant P6 shared,

"I have to move out on duty ant time. There is no day and night. Thanks to my husband and my parents, they are there with my daughter, so I can do my work without tension. Today, I had left home at 4 a.m. because of a critical incident in a nearby village. I returned around 10 a.m. and immediately changed and went to my kid's parent-teacher's meeting, which was possible only because someone was there at home for the kids."

All participants mentioned having a supporting spouse and mother-in-law. Interestingly one of the participants had a lot of mental support from her kids also, which she mentioned very emphatically,

"I asked my kids that if you want, I can resign and stay back. But they said (satisfactory laugh), we do not want a full-time mom." (P3)

Participant P7 expressed,

"Due to my career requirements, I've moved my family; this was probably my fourth move, and each time I talked to my spouse, and he agreed, though he had to start developing his clients every time all over again. One must have the spousal support specifically to handle the work-life balance effectively."

Participant P1 staying in a joint family said,

"I never faced any challenge balancing my work and personal life. Family members were always there at home to take care of my spouse and my kids. My sister-inlaw also works, so we help each other, you know that's how it is..."

Although it was tough balancing the work and personal life, all the participants did justice at both places; as participant P3 mentioned.

"Any person who needs to wear multiple hats should be tough to scale the heights of success."

Workplace and Sociocultural Challenges

All the participants stated that navigating higher was difficult in this field due to the gendered outlook and resistance they faced from men in their fields. The participants perceived a lack of women in their fields, especially at the higher ranks. Five of them personally experienced a negative attitude towards women, three of them being the first movers in their areas. They unanimously agreed that it is not easy to be a woman in the Men's world. The majority of participants faced negative remarks from their society also.

Relating to this participant, P6 added,

"Police Services is a Man's world. People at first instance never believe that a woman can handle this job effectively. She must prove herself to win the trust. However, it is the opposite for men. They are being trusted first, and if maybe if they are unable to handle some issue, then people talk about their incapability. My male subordinates

didn't even want to salute me, Though I was their boss. They used to find shortcuts like coming to my cabin without putting on a cap, as to salute, you must have your cap on. They used to think, what does she know about the police?"

Participant P4 commented,

"My biggest challenge was being a woman in a male-dominated society. Each move was monitored with a lens. At every posting I went, I used to be the first woman there. This posed all the more challenges that I had to prove my worth every time."

She added,

"Most of the time, I used to be the only woman in the board room. The field is not women-friendly."

Participant P3 smilingly expressed,

"The challenges were phenomenal. Every place I started performing well, these male officers used to feel insecure, and the results were 'Transfers.' This time also, I had brought immense changes at my unit. Suddenly my superior called me and said, you are being transferred. He was expecting me to resist as the place of posting was a very tough place. But I said yes, I am fine. You know, I took this also an opportunity."

She added,

"At my new posting also, men were not ready to accept a woman in combat uniform and that she is intelligent enough to give solutions to big problems and will always relegate you. Usually, people do not accept females in leadership positions and try to counter the decisions simply because they come from a lady. But slowly, that trend is changing for good."

At the societal front also, she expressed, that

"when I joined army one of my aunts said-oh! I had thought she is a very intelligent girl; didn't she get any other job?"

A similar view was expressed by participant P1,

"My parents were very supportive. I changed my field of education many times, but they always encouraged me by saying, do whatever interests you. But the neighbors and my relatives were always nagging and giving advice to them; that it is high time, she is not stable anywhere. You should get her married now."

Participant P7 had something different to add, she said,

"The intake of civil services itself is very skewed with around 10-15% of women in every batch, and though a lot of women officers are qualified, they are side-lined in promotions."

Participant P6 expressed,

"For earning promotions, your informal network should be very good. At the same time, you need to promote yourself. Though I have a good network, a male prefers a male when it comes to having a boss. You know it is like this everywhere, and civil services are no exception."

An article in a national daily also reported such biases against women officers (Dhingra, 2019). It mentioned the voices of some senior women civil servants saying that they had seen many competent women being side-lined for the post of cabinet secretary even when they were adequately qualified.

The experiences of these women are only a few examples in their fields. The government offices are all male-dominated posing immense challenges to women working there, even more if the boss is a male.

Success Mantras

Many participants mentioned having a mentor in their personal or professional lives. At the personal level, six participants had their mother or father as the mentor, whereas the seventh participant had her grandfather. On the organizational front also, five of them agreed to have a mentor. At the same time, all of them believed that two

things are very important for advancing in their career, one networking and the second voicing out opinions. They all had varied experiences of mentoring, networking, and voicing opinions. The views expressed by the participants are as follows:

Participant P1 Mentioned,

"My mother always mentored me. She advised and hand holded me whenever I was stuck up. Though she was a primary school teacher, her suggestions for my field were remarkable. One more thing I want to stress is that networking is essential. I used to think that going to various events as a guest, giving bytes on media is just a show-off. But later, I realized that people listen to your advice if they know you and that you are an authority."

She added,

"Also, learn to ask things for yourself- be it promotion or postings, or staying at the same post. If you will not speak, how do you expect them to understand what you want?"

Participant P4 expressed,

"I had a mentor in the initial stages of my career. She truly guided, mentored, and honed my leadership skills. She had taught me leadership in difficult times. In our field, there is a huge impact on politicians. I used to observe her leadership skills and tried to emulate them many times." As far as networking is concerned, it is very important in our field. For implementing our ideas, we need to garner political and budgetary support, which I could get because of the support of my network.

Participant P7 also added a similar experience,

"I had my senior as my mentor. He did not mentor me directly, but he used to support me and my strategies and suggestions whenever we had senior management meetings. He used to say that we will try this also, which was a piece of indirect advice to me. Also, for you to advance, networking is a must. You must develop your network to make people speak for you."

Participant P4 shared an experience of voicing out opinion,

"In my first posting, during an important meeting, where I was the only woman (which was so most of the time), the chairman took opinion from everyone except me. When he was announcing his final decision, I interrupted him, saying that I want to put forth my point of view, which is very different from what others have presented. Although he looked a little annoyed, he asked me to go ahead. After listening to me, he agreed to discuss the same

with higher authorities, which was finally implemented. Believe me; if I had kept quiet that day, it would have become the routine."

These experiences reveal that the success mantras for the progression consist of networking, mentoring, and voicing opinions for these women.

DISCUSSION

There is a vast disparity of women compared to men in the government sector in India, specifically in leadership roles. Seven decades after independence, there are positions where women have not been able to break the glass ceilings yet like cabinet secretary, chairman of Indian Space Research Organization, Chairperson of Securities exchange board of India, Governor of Reserve bank of India, to name a few. Although owing to their position and power, women leaders are privileged yet, they experience marginalization (Poltera & Schreiner, 2019). While several factors influence the progression of women in Indian government organizations, most of them can be attributed to the social norms prevalent in Indian society (Chapman & Mishra, 2019). However, the participants' narratives revealed that though difficult, it is not impossible to break these barriers. The study concludes that Indian women leaders face unique challenges in their leadership trajectory due to the social structure of Indian society and the orthodox patriarchal mindset. However, if women have aspirations and are backed by familial

support, they cannot be stopped from achieving their dreams.

The intersectional perspective of this study highlights the fact that if women are supported at the personal and organizational fronts, complemented with their selfaspiration for achieving leadership roles, they can break any barrier and rise higher. The participants faced many challenges like workplace stereotyping and sociocultural challenges prevalent in the discussion. They also juggled to take due care of their work and home responsibilities, but they emphasized that these also could not stop them from moving ahead. Now and then, the participants emphasized that the challenges were phenomenal, but their determination, commitment, and spirit to perform paved the way for advancement; the same is in confirmation with the findings of Grady et al. (2008), Stam et al. (2018) and Javadi et al. (2016). Most of them perceived that their childhood experiences and upbringing played a major role in shaping their leadership aspirations and skills in conformity with the study carried out by Jodl et al. (2001). The same is lacking in the extant literature on Indian women's leadership research. Brought up in different locations (rural /urban), religions (Hindu/ Christian), caste (Brahmin/Maratha/Shudra), and race (Tribal/Non-tribal), the participants commonly identified their parents support (privilege) in childhood years, safeguarding them from societal pressures of gender discrimination (oppression). The study has shown that the self-aspiration of women and their efforts in developing their leadership

skills acted as the most important enabler in their leadership journeys. It contradicts the findings of Chaturvedi and Sahai (2019). They found that women belonging to periurban areas realize their aspirations more confidently than those in rural areas and that educational outcomes are low in tribal compared to non-tribal. Research also suggests that women belonging to lower caste face a higher level of discrimination than upper-caste women (Anne et al., 2013; Patel et al., 2020). This study has highlighted that such discriminations have not influenced the leadership trajectories of the participants indicating the necessity of using an intersectional lens than a unitary lens. The participants agreed to hear negative remarks from their male counterparts, seniors, and society. In common parlance, they reflected that it was difficult to perform in men's world. Being women, they had to prove themselves to earn trust and respect (Challenge). Irrespective of the locations, the challenges were similar. Such challenges have continued to stymie women's progress to higher positions (Akpinar-Sposito, 2013; Saadin et al., 2016).

Nonetheless, the participants utilized various strategies like networking, support from their mentors, and voicing out their opinions to overcome them. Networking is argued as an important tool for career progression (Yukl, 2006) and that formal networks are more important for overcoming obstacles and advancing professionally (Helmer et al., 2010). Helmer et al. (2010) further emphasize that having a mentor is crucial at higher positions for garnering

support and enhancing information sharing (Bushee et al., 2010; Hart, 2009; Pinto, 2007). In their study, Smith and Wrynn (2010) also noted that mentoring is an opportunity for the professional development of women to support their career advancement. Concerning work-life balance, the participants again had similar experiences. Most of them considered themselves lucky to have familial support, especially spousal (Privilege). They agreed that their jobs are harsh with their presence required any time irrespective of day/night (see. Experience of P4 quoted) (Challenge); however, their families always stood by them and their kids. The present study supports the importance of a supportive spouse and in-laws in the leadership trajectories of women. Valk and Srinivasan (2011) and Quesenberry et al. 2006) also found that a supportive husband plays a crucial role in achieving work-life balance. The women in India continue to struggle wearing multiple hats. Often, they feel guilt for their inability to spend time with their kids and families (Slaughter, 2012), in contrast to the women in western countries, where they get organizational support in terms of womenfriendly policies (Straub, 2007).

CONCLUSION

In conclusion, this qualitative study focusing on women leaders in Indian government organizations contributes significantly to the existing literature by identifying the themes that impact the leadership trajectory of successful women leaders irrespective of their race, caste, location, or religion.

While their parents were educated, they were privileged to be brought up in a gender-neutral environment and access to education. Despite the challenges they faced from their male colleagues, bosses or subordinates, and society, they could overcome them through their networks and mentors. They were strong enough to speak up wherever they felt neglected or discriminated. They also thought that this was possible because of the familial support they received consistently. An implication is that men (at home, spouses) must change their mindset and work for women's advancement. At the same time, it sends a message to aspiring women that if their aspirations are strong and they take efforts to develop their leadership skills, they can move up the career ladder. An implication for organizations is to design women-friendly policies like flextime, unpaid family leaves, onsite childcare facilities, etc., as in western countries to make the work for women easier.

The participants' experiences raised brainstorming issues at the family, society, and governmental levels. Indian Government should think about redesigning HR policies to make more and more women enter the workforce and rise higher to leadership positions. The identified dimensions can work as a platform for the redesign.

Practice Implications

Lived experiences of successful women leaders were studied using thematic analysis to identify the factors influencing their career advancement. The study found that irrespective of their intersectional identities, the women can shatter the barriers and rise above with their determination, selfaspiration, and familial support. These findings may help policymakers in the Indian Government and armed forces design women-friendly policies and make armed forces and civil services more attractive to women. This research has shown that though the constitution gives equal opportunity to all with rules and regulations related to it in organizations, the real picture is different. It indicates that Government needs to place more priority on promoting diversity. Civil Services and armed forces do not have reservations or quotas for women or any caste. Hence, only changing mindset and making the organizational environment more friendly could be the solutions. Also, women should be mentored by senior leaders for career advancement. It can be planned strategically to monitor, evaluate and mentor aspiring women leaders.

Familial support and upbringing are other vital aspects requiring a change in societal mindset. Bringing reform from the perspective of families and social groups can be a long-term goal for human service organizations. To be successful in their career and for a consistent rise in the leadership roles, younger aspiring women should remember that if their self-aspiration is high, they will be able to overcome the challenges as these women had done. They can start by heading small committees whenever opportunities are available and should practice metacognition while dealing with a difficult situation. They should

evaluate the pitfalls as well as the victories and can use that information in building their self-confidence and go on to head larger committees and lead bigger events.

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REFERENCES

- Akpinar-Sposito, C. (2013). Career barriers for women executives and the glass ceiling syndrome: The case study comparison between French and Turkish women executives. *Procedia Social and Behavioral Sciences*, 75, 488-497. https://doi.org/10.1016/j.sbspro.2013.04.053
- Alsharif, S. A. (2018). The challenges associated with women career development at the state universities in Saudi Arabia: A ground theory approach. *International Journal of Gender and Women's Studies*, 6(2), 18-30. http://doi.org/10.15640/ijgws.v6n2a3
- Anne, M., Callahan, J., & Kang, H. (2013). Gender and caste intersectionality in the Indian context. Human Resource Management, 2013(6), 31-48. https://researchportal.northumbria.ac.uk/en/ publications/gender-and-caste-intersectionalityin-the-indian-context
- Bell, M. P., Girdauskiene, L., & Eyvazzade, F. (2015). The profile of an effective female leadership in multicultural context peer-review under responsibility of 4th International Conference on Leadership, Technology, Innovation and Business Management. *Procedia-Social and Behavioral Sciences*, 210, 11-20. https://doi.org/10.1016/j.sbspro.2015.11.323
- Beniwal, V. S., & James, B. D. (2019). Women in Indian public administration: Prospects and challenges. *Journal of Public Administration and*

- *Governance*, 9(3), 210-224. https://ideas.repec.org/a/mth/jpag88/v9y2019i3p210-224.html
- Bhattacharya, S., Mohapatra, S., & Bhattacharya, S. (2018). Women advancing to leadership positions: A qualitative study of women leaders in IT and ITES sector in India. *South Asian Journal of Human Resources Management*, 5(2), 150-172.
- Billing, Y. D., & Alvesson, M. (2000). Questioning the notion of feminine leadership: A critical perspective on the gender labelling of leadership. *Gender, Work and Organization*, 7(3), 144-157. https://doi.org/10.1111/1468-0432.00103
- 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.
- Bowling, C. J., Kelleher, C. A., Jones, J., & Wright, D. S. (2006). Cracked ceilings, firmer floors, and weakening walls: Trends and patterns in gender representation among executives leading American State Agencies, 1970–2000. *Public Administration Review*, 66(6), 823-836. https://doi.org/10.1111/J.1540-6210.2006.00651.X
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77-101.
- Bushee, B. J., Core, J. E., Guay, W., & Hamm, S. J. W. (2010). The role of the business press as an information intermediary. *Journal of Accounting Research*, 48(1), 1-19. https://doi.org/10.1111/j.1475-679X.2009.00357.x
- Chapman, T., & Mishra, V. (2019). Rewriting the rules: Women and work in India (ORF Special Report No. 80). Observer Research Foundation.
- Chaturvedi, G., & Sahai, G. (2019). Understanding women's aspirations: A study in three Indian states. *ANTYAJAA: Indian Journal of Women and Social Change*, 4(1), 70-91. https://doi.org/10.1177/2455632719831828

- Christie, M., O'Neill, M., Rutter, K., Young, G., & Medland, A. (2017). Understanding why women are under-represented in Science, Technology, Engineering and Mathematics (STEM) within higher education: A regional case study. *Production*, 27(Special issue). https://doi.org/10.1590/0103-6513.220516
- Creswell, J. W. (2013). Qualitative inquiry and research design: Choosing among five approaches. SAGE Publications.
- Dasgupta, N., & Asgari, S. (2004). Seeing is believing: Exposure to counterstereotypic women leaders and its effect on the malleability of automatic gender stereotyping. *Journal of Experimental Social Psychology*, 40(5), 642-658.
- Deloitte. (2015). Mind the gaps: The 2015 Deloitte Millennial survey Executive summary. https://www2.deloitte.com/content/dam/Deloitte/global/Documents/About-Deloitte/gx-wef-2015-millennial-survey-executivesummary.pdf
- Department of Personnel and Training. (n.d.).

 Revised AIS Rule. Ministry of Personnel, Public
 Grievances and Pensions, Government of India.
 https://dopt.gov.in/sites/default/files/Revised_
 AIS_Rule_Vol_II_IAS_Rule_01_0.pdf
- Dhingra, S. (2019, October 18). How the Indian civil services continue to remain a boys' club. *The Print*. https://theprint.in/india/governance/how-the-indian-civil-services-continue-to-remain-a-boys-club/307370/
- Dudman, J. (2016, January 26). Women still denied fair share of top jobs in civil service worldwide. *The Guardian*. https://www.theguardian.com/ society/2016/jan/26/women-still-denied-fairshare-top-jobs-civil-service
- Duflo, E., & Topalova, P. (2004). Unappreciated service: Performance, perceptions, and women. Framed Field Experiments. http://www. fieldexperiments.com/paper/2264/
- Eagly, A. H., & Carli, L. L. (2007). Through the labyrinth: The truth about how women become

- *leaders (Center for Public Leadership)*. Harvard Business Review Press.
- Eagly, A. H., & Karau, S. J. (2002). Role congruity theory of prejudice toward female leaders. *Psychological Review*, 109(3), 573-598. https://doi.org/10.1037/0033-295X.109.3.573
- Eccles, J. S. (1987). Gender roles and women's achievement-related decisions. *Psychology of Women Quarterly*, *11*(2), 135-172. https://doi.org/10.1111/j.1471-6402.1987.tb00781.x
- Flores, G. M. (2011). Racialized tokens: Latina teachers negotiating, surviving and thriving in a White Woman's profession. *Qualitative Sociology*, 34(2), 313-335. https://doi.org/10.1007/S11133-011-9189-X
- Gandhi, M., & Sen, K. (2020). Missing women in Indian university leadership: Barriers and facilitators. *Educational Management Administration & Leadership*, 49(2), 352-369. https://doi.org/10.1177/1741143219896048
- García-González, J., Forcén, P., & Jimenez-Sanchez, M. (2019). Men and women differ in their perception of gender bias in research institutions. *PLOS ONE*, *14*(2), Article e0225763. https://doi.org/10.1371/journal.pone.0225763
- Gipson, A. N., Pfaff, D. L., Mendelsohn, D. B., Catenacci, L. T., & Burke, W. W. (2017). Women and leadership: Selection, Development, leadership style, and performance. *Journal of Applied Behavioral Science*, 53(1). https://doi. org/10.1177/0021886316687247
- Glaser, B., & Strauss, A. (1967). *The discovery of grounded theory*. Aldine.
- Grady, M. L., Russell Curley, V., LaCost, B., & Russell, V. (2008). Women leaders tell their stories. *Journal of Women in Educational Leadership*, 6(4), 65. https://digitalcommons.unl.edu/jwel/65/
- Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough? An experiment

- with data saturation and variability. *Field Methods*, 18(1), 59-82. https://doi.org/10.1177/1525822X05279903
- Gupta, V., & Saran, A. (2013). Making of the trendsetter generation of women leaders in India: Dimensionalizing the impact of economic liberation. *The IUP Journal of Business Strategy*, 10(2), 7-21.
- Guy, M. E., & Newman, M. A. (2004). Women's jobs, men's jobs: Sex segregation and emotional labor. *Public Administration Review*, 64, 289-298. https://doi.org/10.1111/j.1540-6210.2004.00373.x
- Haq, R. (2013). Intersectionality of gender and other forms of identity: Dilemmas and challenges facing women in India. *Gender in Management*, 28(3), 171-184. https://doi.org/10.1108/GM-01-2013-0010
- Hart, E. W. (2009). In focus/ mentoring -Nurturing relationships provide many benefits. *Leadership in Action*, *29*(1), 17-20. https://doi.org/10.1002/LIA.1279/ABSTRACT
- Heilman, M. E., & Martell, R. F. (1986). Exposure to successful women: Antidote to sex discrimination in applicant screening decisions? *Organizational Behaviour and Human Decision Processes*, 37(3), 376-390. https://doi.org/10.1016/0749-5978(86)90036-1
- Helmer, E., Hjlmner, T., & Stener, F. (2010).
 Female career development. Lambert Acadeic Publishing.
- Horvath, L. K., & Sczesny, S. (2016). Reducing women's lack of fit with leadership positions? Effects of the wording of job advertisements. European Journal of Work and Organisational Psychology, 25(2), 316-328. https://doi.org/10. 1080/1359432X.2015.1067611
- Javadi, D., Vega, J., Etienne, C., Wandira, S., Doyle, Y., & Nishtar, S. (2016). Women who lead: Successes and challenges of five health leaders.

- Health Systems & Reform, 2(3), 229-240. https://doi.org/10.1080/23288604.2016.1225471
- Jodl, K. M., Michael, A., Malanchuk, O., Eccles, J. S., & Sameroff, A. (2001). Parents' roles in shaping early adolescents' occupational aspirations. *Child Development*, 72(4), 1247-1265. http://www.jstor.org/stable/1132440
- Kabir, S. L. (2013). Key issues in women's representation in bureaucracy: Lessons from South Asia. *Public Organization Review*, *13*(4), 427-442. https://doi.org/10.1007/s11115-013-0261-8
- Kapur, R. (2019). Challenges experienced by women employees in career development in India. *ACTA Scientific Women's Health*, *1*(4), 26-36. https://actascientific.com/ASWH/pdf/ASWH-01-0024. pdf
- Khallad, Y. (2000). Education and career aspirations of Palestinian and U.S. youth. *The Journal of Social Psychology*, *140*(6), 78-791. https://doi.org/10.1080/00224540009600517
- Mangubhai, J. P., & Capraro, C. (2015). 'Leave no one behind' and the challenge of intersectionality: Christian aid's experience of working with single and Dalit women in India. *Gender & Development*, 23(2), 261-277. https://doi.org/10.1080/13552074.2015.1054206
- Maphunye, K. (2007). Towards redressing historical inequities? *Public Management Review*, 8(2), 297-311. https://doi.org/10.1080/14719030600587646
- McGrath, C., Palmgren, P. J., & Liljedahl, M. (2019). Twelve tips for conducting qualitative research interviews. *Medical Teacher*, 41(9), 1002-1006. https://doi.org/10.1080/014215 9X.2018.1497149
- Menon, N. (2015). A critical view on intersectionality from India is feminism about "women"? *Economic & Political Weekly*, 50(17). https://www.epw.in/journal/2015/17/perspectives/feminism-about-women.html

- Mirza, H. S. (2018). Decolonizing higher education: Black feminism and the intersectionality of race and gender. *Journal of Feminist Scholarship*, 7(Fall), 1-12. https://digitalcommons.uri.edu/ jfs/vol7/iss7/3
- Misra, P. K., & Singh, G. (2018). Indian women's leadership in the government sector. In R. Ghosh & G. N. McLean, *Indian women in leadership* (pp. 171-189). Springer International Publishing. https://doi.org/10.1007/978-3-319-68816-9 10
- Mohapatra, H. (2015). Status of women in Indian society. *Quest Journals Journal of Research in Humanities and Social Science*, 3(6), 33-36.
- Moustakas, C. (1994). *Phenomenological research methods*. Sage Publications.
- Mythili, N. (2017). Representation of women in school leadership positions in India (NUEPA Occasional Paper 51). National University of Educational Planning and Administration. http://niepa.ac.in/New/download/Publications/Occassional Paper 51 N Mythili.pdf
- Naff, K. C. (2001). To look like America: Dismantling barriers for women and minorities in government.

 Westview Press.
- Number of countries where the de facto highest position of executive power was held by a woman from 1960 to 2022*. (n.d.). *Statista*. https://www.statista.com/statistics/1058345/countries-with-women-highest-position-executive-power-since-1960/
- Patel, P. C., Lenka, S., & Parida, V. (2020). Caste-based discrimination, Microfinance credit scores, and microfinance loan approvals among females in India. *Business & Society*, 000765032098260. https://doi.org/10.1177/0007650320982609
- Patton, M. Q. (2002). Two decades of developments in qualitative inquiry: A personal, experiential perspective. *Qualitative Social Work*, 1(3), 261-283. https://doi.org/10.1177/1473325002001003636

- Phelan, J., & Rudman, L. (2010). Prejudice toward female leaders: Backlash effects and women's impression management dilemma. Social and Personality Psychology Compass, 4, 807-820. https://doi.org/10.1111/j.1751-9004.2010.00306.x
- Pinto, J. (2007). Women in engineering. *PACE Process and Control Engineering*, 60(7), 10.
- Player, A., Randsley de Moura, G., Leite, A. C., Abrams, D., & Tresh, F. (2019). Overlooked leadership potential: The preference for leadership potential in job candidates who are men vs. women. Frontiers in Psychology, 10, Article 755. https://doi.org/10.3389/ FPSYG.2019.00755
- Poltera, J., & Schreiner, J. (2019). Problematising women's leadership in the African context. *Agenda*, 33(1), 9-20. https://doi.org/10.1080/10 130950.2019.1613057
- Posholi, M. R. (2013). An examination of factors affecting career advancement of women into senior positions in selected parastatals in Lesotho. *African Journal of Business Management*, 7(35), 3343-3357. https://doi.org/10.5897/AJBM12.521
- Purkayastha, B. (2012). Intersectionality in a transnational world. *Gender & Society*, 26(1), 55-66. https://doi.org/10.1177/0891243211426725
- Quesenberry, J. L., Trauth, E. M., & Morgan, A. J. (2006). Understanding the "mommy tracks": A framework for analyzing work-family balance in the IT workforce. *Information Resources Management Journal*, 19(2), 37-53. https://doi.org/10.4018/irmj.2006040103
- Raja, B. I. (2016). Social factors and women's career advancement to senior management position in Pakistan. Asia Pacific Journal of Contemporary Education and Communication Technology, 2(1), 134-145.
- Raman, K. R. (2020). Can the Dalit woman speak? How 'intersectionality' helps advance postcolonial

- organization studies. *Organization*, 27(2), 272-290. https://doi.org/10.1177/1350508419888899
- Saadin, I., Ramli, K., Johari, H., & Harin, N. (2016). Women and barriers for upward career advancement – A survey at Perak State Secretariat, Ipoh, Perak. *Procedia Economics and Finance*, 35, 574-581. https://doi.org/10.1016/ S2212-5671(16)00070-8
- Sanchez-Hucles, J. V., & Davis, D. D. (2010). Women and women of color in leadership: Complexity, identity and intersectionality. *American Psychologist*, 65(3), 171-181. https://doi.apa.org/doi/10.1037/a0017459
- Senior, C., Howard, C., & Senior, R. (2014). The future and the female academic leader: Advancing student engagement. *Frontiers in Psychology*, *5*, 377. https://doi.org/10.3389/fpsyg.2014.00377
- Sharma, S. [Sakshi], & Kaur, R. (2019). Glass ceiling for women and work engagement: The moderating effect of marital status: *FIIB Business Review*, 8(2), 132-146. https://doi.org/10.1177/2319714519845770
- Sharma, S. [Shantanu]. (2020). Missing at the top: Why aren't there more women bureaucrats at the top? *The Economics Times*. https://economictimes.indiatimes.com/news/politics-and-nation/missing-at-the-top-why-arent-there-more-women-bureaucrats-at-the-top/articleshow/74530959.cms
- Shenton, A. K. (2004). Strategies for ensuring trustworthiness in qualitative research projects. *Education for Information*, 22, 63-75. http://doi. org/10.3233/EFI-2004-22201
- Sinkovics, R. R., Penz, E., & Ghauri, P. N. (2008). Enhancing the trustworthiness of qualitative research in international business. *Management International Review*, 48, 689-714. https://doi. org/10.1007/s11575-008-0103-z
- Slaughter, A.-M. (2012, July). Why women still can't have it all. *The Atlantic*. https://www.theatlantic.

- com/magazine/archive/2012/07/why-womenstill-cant-have-it-all/309020/
- Smith, M., & Wrynn, A. M. (2010). Women in the 2002, 2006 and 2010 Winter Olympic and Paralympic Games: An Analysis of Participation and Leadership Opportunities (A Women's Sports Foundation Research Report). Women's Sports Foundation. https://www.womenssportsfoundation.org/wp-content/uploads/2016/08/2010 olympic report.pdf
- Stam, D., van Knippenberg, D., Wisse, B., & Nederveen Pieterse, A. (2018). Motivation in words: Promotion- and prevention-oriented leader communication in times of crisis. *Journal of Management*, 44(7), 2859-2887. https://doi.org/10.1177/0149206316654543
- Straub, C. (2007). A comparative analysis of the use of work-life balance practices in Europe Do practices enhance females' career advancement? *Women in Management Review*, 22(4), 289-304. https://doi.org/10.1108/09649420710754246
- Turban, S., Wu, D., & Zhang, L. (2019, February 11).

 Research: When gender diversity makes firms more productive. *Harward Business Review*. https://hbr.org/2019/02/research-when-gender-diversity-makes-firms-more-productive
- Valk, R., & Srinivasan, V. (2011). Work-family balance of Indian women software professionals: A qualitative study. *IIMB Management Review*, 23(1), 39-50. https://doi.org/10.1016/j.iimb.2010.10.010
- Vasavada, T. (2012). A cultural feminist perspective on leadership in non-profit organisations: A case of women leaders in India. *Public Administration Quarterly*, 36(4), 462-503.
- Viewport. (2019). Second careers of women professionals. *Avtar*. https://avtarinc.com/resources/reports/second-careers-of-women-professionals/#
- Watkins, M. B., Simmons, A., & Umphress, E. (2019). It's not black and white: Toward a

- contingency perspective on the consequences of being a token. *Academy of Management Perspectives*, 33(3), 334-365. https://doi.org/10.5465/AMP.2015.0154
- Weick, K. E. (2007). The generative properties of richness. *Academy of Management Journal*, 50(1), 14-19. https://doi.org/10.5465/AMJ.2007.24160637
- World Economic Forum. (2020). *Insight Report Global Gender Gap Report 2020*. https://www3.weforum.org/docs/WEF_GGGR_2020.pdf
- Yin, R. K. (2013). *Case study research: Design and methods.* SAGE Publications.
- Yukl, G. A. (2006). *Leadership in organizations*. Pearson Prentice Hall.





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Kemelut Ketaksamaan: Kesan ke atas Pembentukan Identiti Remaja Bandar

Rosila Bee Mohd Hussain* dan Haslina Muhamad

Jabatan Antropologi dan Sosiologi, Fakulti Sastera dan Sains Sosial, Universiti Malaya, 50603 Kuala Lumpur, Malaysia

ABSTRAK

Isu ketaksamaan sering diperkatakan dalam masyarakat khususnya dari aspek kedudukan ekonomi seseorang. Walaupun begitu, kalangan remaja mungkin berhadapan dengan isu ketaksamaan ini dari sisi yang lain iaitu pengaruh dalam pembentukan identiti mereka. Tujuan artikel ini adalah untuk melihat isu-isu ketaksamaan remaja, khususya di bandar, yang mewujudkan ketidaksamaan dalam kehidupan dan mempengaruhi pembentukan identiti mereka. Kajian ini menerangkan pandangan remaja bandar mengenai isu ketaksamaan berdasarkan keadaan sebenar dan cara mereka menghadapinya. Kajian menggunakan kaedah kuantitatif dan kualitatif untuk pengumpulan data. Soal selidik telah dijalankan ke atas 720 responden yang terdiri daripada pelajar-pelajar di tiga universiti iaitu UM, UTM dan USM. Tiga sesi Perbincangan Kumpulan Fokus telah dijalankan di setiap lokasi dan 10 responden dipilih untuk setiap lokasi. Data yang diperoleh daripada soal selidik dianalisis untuk maklumat deskriptif dan analisis pemeringkatan (ranking analysis) menggunakan SPSS. Kajian mendapati bahawa 23% responden berpendapat bahawa kuasa dan kedudukan dalam masyarakat adalah faktor penyumbang utama seseorang berada dalam ketaksamaan diikuti dengan tahap pendidikan dan jenis pekerjaan. Manakala, 41% responden berpendapat pengangguran adalah isu utama yang dapat mempengaruhi pembentukan identiti. Para responden turut mencadangkan saranan supaya menjadikan seseorang sebagai role model untuk menjadi motivasi dalam menghadapi kemelut ketaksamaan. Oleh itu, pemahaman

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E-mail addresses:
rosila_bee@um.edu.my (Rosila Bee Mohd Hussain)
haslina_m@um.edu.my (Haslina Muhamad)
* Corresponding author

tentang cara identiti remaja bandar terkesan dengan isu-isu ketaksamaan ini adalah perlu untuk masyarakat supaya dapat membantu mereka berfungsi dengan baik di bawah keadaan hidup yang mungkin tertekan pada masa hadapan.

Kata kunci: Identiti, ketaksamaan, pembentukan identiti, remaja, remaja bandar

Challenges of Inequality: Effects on Urban Youth Identity Formation

ABSTRACT

The topic of inequality especially economic disparity often receives higher attention of discourse in society. Even so, youth may face the issue of inequality from a different angle, that is, its influence on their identity formation. This article aims to see how urban youth view the issues of inequality platforms that exist in their lives and how these issues affect their identity formation. This study discusses views of urban youth on issues of inequality based on their actual situation and how they are dealing with it. The study uses quantitative and qualitative methods for data collection. A survey was conducted on 720 respondents consisting of students in three universities that are UM, UTM and USM. Three Focus Group Discussion was held in each location with ten respondents in each session. Data obtained from the survey were analysed for descriptive information and ranking analysis using SPSS. The study found that 23 per cent of respondents thought that power and position in society is the main contributing factor for someone to be in an inequality state, followed by the level of education and type of occupation. Meanwhile, 41 per cent of respondents believed that unemployment is a major issue affecting identity formation. Respondents also suggested that having a role model is seen as motivation when facing the crisis of inequality. Therefore, understanding how urban youth identities are affected by issues of inequality is vital for society to assist them in functioning well under possible stressful conditions in the future.

Keywords: Identity, inequality, identity formation, youth, urban youth

PENGENALAN

Isu ketidaksamaan telah berkembang dengan kadar yang membimbangkan semenjak beberapa dekad yang lalu. Pada masa yang sama, golongan remaja terus bertenaga, bersifat kreatif dan ghairah untuk menangani masalah yang tidak dapat di atasi, yang diwarisi daripada generasi sebelumnya (Oxfam, 2016). Remaja mewakili masa yang kritikal dalam proses pembentukan identiti. Ini merujuk kepada aspek peralihan mereka terhadap konsep hak dan tanggungjawab selaku orang dewasa. Peralihan yang perlu

dibuat ini tentu sukar bagi kebanyakan golongan remaja terutama apabila mereka perlu berhadapan dengan masyarakat yang sentiasa bersifat dinamik dan tidak sama rata. Dalam kalangan masyarakat moden, identiti tidak lagi boleh dianggap sebagai sesuatu yang diberikan, malah ia sesuatu yang harus dipilih dan dikembangkan sendiri. Fasa remaja sering dilihat sebagai fasa kehidupan yang dikaitkan dengan pembinaan identiti. Penyelidikan mengenai remaja oleh ahli sosiologi boleh dianggap masih baharu. Ahli sosiologi kini lebih

berminat untuk meneroka banyak aspek yang mempengaruhi pembentukan identiti remaja seperti tahap keyakinan dengan identiti mereka.

Dalam kebanyakan kajian terdahulu berkaitan kajian remaja bandar mahupun pelajar di universiti, lebih banyak tumpuan diberikan kepada kesan kemiskinan terhadap pendidikan, pencapaian akademik, masalah devian, buli dan sebagainya. Walau bagaimanapun, kajian tersebut tidak menyentuh secara khusus tentang pandangan remaja sendiri mengenai isu yang sebenar yanga memberikan kesan kepada diri mereka. Dalam aspek sosiologikal, artikel ini meninjau aspek remaja dalam konteks 'being' dan 'becoming' (Uprichard, 2008). Karya terawal Stanley Hall (1904) dilihat sebagai salah satu kajian saintifik yang memasukkan unsur sosiologi dalam kajian remaja. Jelas terdapat banyak kegelisahan dan kebimbangan yang wujud berkaitan dengan kemampuan remaja untuk mengenal diri dan persekitaran mereka. Remaja dianggap sebagai seseorang yang terlibat dalam proses membina jati diri dalam dunia yang sentiasa bergolak dengan pelbagai isu dan mungkin menimbulkan ketegangan dan kegusaran dalam pengalaman harian mereka. Antara yang paling ketara apabila melibatkan aspek ketaksamaan yang wujud dalam masyarakat. Ketaksamaan memperlihatkan situasi mereka yang berada di tangga paling bawah dalam masyarakat yang mengalami kekurangan atau berada dalam kemiskinan. Mereka yang miskin seringkali kehilangan peluang mendapat pendidikan berkualiti dan gagal mencapai potensi sepenuhnya dalam hidup mereka (Siti Masayu Rosliah Abdul Rashid & Narimah Samat, 2018).

Tempoh masa pembentukan identiti seorang remaja adalah subjektif dan tidak ada satu jangka masa yang khusus dapat ditetapkan. Namun, harus diingat bahawa pembentukan identiti ialah satu proses yang berterusan dan akan berubah sepanjang hayat. Identiti seseorang individu biasanya tidak pernah lengkap dan seringkali akan memasukkan elemen aspirasi dan fantasi dalam proses pembentukannya. Artikel ini akan memperincikan perbincangan dalam kalangan remaja daripada universiti awam bandar (UM, USM, UTM) dalam melihat persepsi mereka terhadap isu ketaksamaan dalam usaha membentuk identiti diri. Oleh itu, artikel ini akan mengenal pasti isu-isu yang dilihat sebagai menyumbang kepada ketaksamaan dan turut mempengaruh pembentukan identiti remaja. Memandangkan identiti adalah mengenai hak milik, artikel ini memperincikan perbincangan tentang remaja daripada universiti awam bandar membina persepsi mereka terhadap isu ketaksamaan dalam usaha membentuk identiti diri.

TINJAUAN LITERATUR DAN PENDEKATAN TEORITIKAL

Di Malaysia, menurut Kementerian Belia dan Sukan Malaysia (2019), polisi had umur remaja atau belia baharu ditakrifkan sebagai mereka yang berumur 15 hingga 30 tahun (Arfa Yunus & Esther Landau, 2019). Rasional had umur remaja ini antaranya adalah untuk memastikan

kesinambungan kepemimpinan masa depan negara, mengurangkan jurang generasi dalam kalangan remaja, mempercepatkan proses kematangan remaja, mengurangkan tingkah laku berisiko dalam kalangan remaja dan menstabilkan identiti diri mereka dalam memperkuatkan proses pembangunan belia (Siti Aisyah Ramli et al., 2017). Bagi perbincangan artikel ini, 'remaja bandar' merujuk kepada remaja yang tinggal di ruang 'bandar'. Bandar di sini akan merujuk kepada "kawasan tempat tinggal manusia yang padat yang juga menunjukkan kepadatan ruang binaan yang lebih tinggi (dan yang mencerminkan kepekatan perkhidmatan, infrastruktur dan aktiviti sosioekonomi yang tinggi) daripada penempatan kawasan luar bandar" (Gupte, 2013, hlm. 13).

Aspek identiti pula dijelaskan oleh Bauman (1988) yang menekankan bahawa identiti terbentuk dalam lingkungan sosial dan kedudukannya dalam hubungan yang bersifat sementara; perasaan yang wujud pada masa lalu, kini dan masa depan akan berlegar dalam menjayakan identiti. Hubungan antara masa lalu, masa kini dan masa depan dalam proses pengembangan identiti yang berterusan menunjukkan keperibadian kita, perkara yang kita lakukan dan yang berubah di sepanjang perjalanan hidup kita kelak. Pada asasnya, ia memberikan gambaran tentang lokasi peribadi remaja, iaitu teras yang stabil bagi keperibadian seseorang.

Isu ketaksaam atau kelas sosial dalam kalangan pelajar khususnya dikaji dari pelbagai aspek. Nur Hannan Lokman dan Zanariah Ismail (2020) dalam kajian mereka telah melihat perkaitan antara kemurungan dengan keamatan sokongan sosial (keluarga, kawan, orang yang penting) dengan kepuasan hidup dalam kalangan pelajar universiti awam. Apa yang cuba ditonjolkan dalam artikel ini adalah lebih khusus kepada mengenal pasti aspek isu-isu ketaksamaan yang mungkin juga adalah salah satu pendorong kepada isu kemurungan para pelajar. Sekiranya kita tidak dapat mengenal pasti dengan khusus isu-isu ini, maka sukar untuk kita membantu para remaja membentuk identiti yang kukuh dalam hidup mereka.

Menurut Syazwana Aziz et al. (2019), faktor kurangnya pemantauan ibu bapa yang tidak mengambil tahu pergerakan aktiviti harian anak, tidak mengenali rakan anak dan terlalu memberi kebebasan kepada anak antara sebab remaja bebas terlibat dalam tingkah laku devian. Walaupun artikel ini tidak melihat aspek tingkah laku devian tetapi aspek persekitaran yang wujud dalam hubungan keluarga dan rakan-rakan memberikan impak yang bersar kepada perasaan remaja tentang perbezaan yang mereka rasai dalam proses interaksi ini. Jadi, secara tidak langsung dengan mengenal pasti isu-isu ketaksamaan yang wujud di persekitaran mereka akan dapat membantu mencegah tingkah laku devian remaja dengan cara mengukuhkan identiti.

Selaras dengan penjelasan oleh Wilkinson dan Pickett (2009) yang menunjukkan bahawa tahap ketidaksamaan yang tinggi akan mempengaruhi semua orang melalui 'sikap buruk' masyarakat

termasuklah kadar jenayah yang tinggi dan mereka yang dipenjarakan atas pelbagai kesalahan, penggunaan dadah, masalah kesihatan mental dan kesejahteraan anak yang terabai. Mereka turut mencadangkan bahawa perbezaan pendapatan yang besar akan mempengaruhi cara masyarakat menghubungkaitkan antara satu sama lain dan akan mewujudkan 'masyarakat yang punah' (broken society).

Ketidaksamaan juga tidak dapat dipisahkan antara kumpulan sosial. Ia akan mewujudkan hubungan penguasaan dan subordinat yang mengakibatkan remaja khususnya membuat penilaian sendiri mengenai nilai golongan berbeza dalam masyarakat. Bagi golongan remaja yang berjaya mencapai pendidikan tinggi, cabarannya bukan hanya dari segi kos, tetapi juga kualiti. Secara umumnya, kadar pengangguran belia yang tinggi menyebabkan peningkatan dan kecenderungan mempercayai demokrasi adalah buruk bagi ekonomi, bahawa demokrasi tidak tegas dan tidak cekap, dan pemimpin yang kurang berprinsip (rogue leader) akan dapat memerintah dengan lebih baik (Altindag & Mocan, 2010; Giuliano & Spilimbergo, 2009).

Golongan remaja bandar di institusi pengajian tinggi khususnya kini sedang memainkan peranan penting dalam mencipta masa depan supaya mereka dapat berjaya dan menjalani kehidupan yang bermakna. Dalam pada itu, diharapkan agar golongan pemerintah akan lebih bertanggungjawab bagi memastikan para remaja dapat memanfaatkan kekuatan

mereka sepenuhnya dan juga sentiasa peka tentang perkara yang dapat mereka lakukan bagi memastikan kelangsungan kesejahteraan remaja. Golongan remaja juga perlu terus mengatur langkah dan bertanggungjawab mengembangkan agenda bersama badan-badan kerajaan untuk mengatasi ketaksamaan dan mengukuhkan pembententukan identiti mereka.

Pandangan Teoritikal

Kerpelman et al. (1997) mencadangkan perspektif mikroproses pembentukan identiti remaja dalam menggambarkan ciri interpersonal dan intrapersonal yang wujud dalam proses pembentukan identiti (Rajah 1). Identiti, jika dilihat dalam istilah ini, dapat dianggap sebagai sistem kawalan yang berfungsi mengurangkan percanggahan antara persepsi maklum balas dan definisi diri yang relevan secara peribadi. Sistem kawalan identiti terdiri daripada dua komponen interpersonal dan tiga komponen intrapersonal (Kerpelman et al., 1997). Dua komponen interpersonal merujuk kepada tingkah laku sosial dan maklum balas interpersonal, manakala tiga komponen intrapersonal pula merujuk kepada persepsi diri, standard identiti dan pembandingan. Persepsi diri timbul melalui transformasi maklum balas interpersonal dan hasil daripada pembanding diri dan standard yang ditetapkan akan menentukan jenis identiti yang bersesuaian yang akan terbentuk.

Perspektif ini dapat diterangkan dengan ringkas melalui lima komponen yang ditunjukkan dalam Rajah 1. Komunikasi

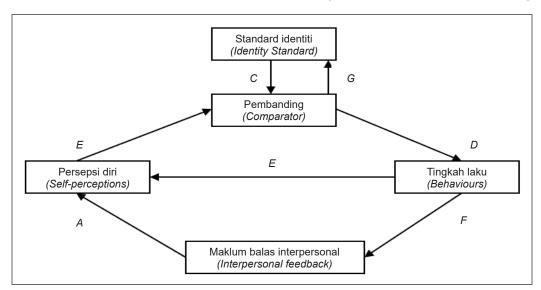
interpersonal diterima oleh (A) yang diinterpretasikan menjadi persepsi diri (B) dan dipadankan menerusi pembandingan dengan input daripada standard identiti (C). Apabila standard dan persepsi diri tidak serasi, akan berlaku gangguan yang membawa kepada (D) iaitu enakmen tingkah laku yang bertujuan memulihkan identiti yang terganggu ini. Untuk proses pemulihan ini berlaku, tingkah laku kognitif mungkin akan membentuk terus (E) persepsi diri seseorang atau tingkah laku sosial akan mengubah situasi interpersonal (F) yang mengarah kembali kepada maklum balas sosial yang baharu (A). Walau bagaimanapun, sekiranya masih gagal untuk memulihkan keserasian antara persepsi diri dan standard identiti, maka cara alternatif yang boleh diambil adalah menyelaraskan standard identiti itu sendiri (G) (Kerpelman et al., 1997).

Sistem kawalan identiti, seperti yang dibincangkan oleh Kerpelman et al. (1997),

telah dibincangkan dengan lebih ringkas oleh Berzonsky (1997). Menurut Berzonsky (1997), tingkah laku awam menghasilkan maklum balas sosial yang dikodkan sebagai persepsi yang berkaitan dengan diri dan kemudian dibandingkan dengan standard identiti dalaman. Perbezaan antara persepsi diri dan piawaian identiti mendorong tingkah laku dan usaha kognitif yang dirancang untuk mengurangkan keadaan yang tidak bertanggungjawab. Usaha ini adalah berujuan memberikan maklum balas alternatif, yang akan mewujudkan tingkah laku baharu dalam mendapatkan maklum balas sosial yang berbeza bagi membentuk standard identiti yang lebih berkesan (Berzonsky, 1997).

KAEDAH KAJIAN

Kajian ini merupakan kajian penerokaan yang dilakukan menggunakan pendekatan kualitatif dan kuantitatif untuk mengumpul data. Kajian ini tidak melibatkan sebarang



Rajah 1. Komponen dalam proses kawalan identiti (Kerpelman et al., 1997)

pengujian hipotesis. Kajian penerokaan adalah untuk mengenal pasti isu-isu sebenar yang wujud dalam sesuatu aspek (ketaksamaan) yang dikaji dan mampu menghasilkan kajian yang berkualiti (Robinson, 1998). Pengumpulan kedua-dua data kuantitatif dan kualitatif telah dijalankan secara serentak dengan menjalankaan soal selidik diselangi dengan sesi Perbincangan Kumpulan Fokus (Bernard, 2013).

Persampelan rawak telah digunakan untuk mendapatkan responden yang ditetapkan di tiga universiti awam di kawasan bandar di Semenanjung Malayia iaitu Universiti Sains Malaysia (wilayah utara), Universiti Malaya (wilayah negeri pusat) dan Universiti Teknologi Malaysia (wilayah selatan). Seramai 720 responden terlibat dalam kajian ini. Kesemua responden yang dipilih telah berada di universiti sekurang-kurangnya setahun dan mereka dibesarkan di kawasan pekan atau bandar, terdiri daripada pelajar lelaki ataupun perempuan dan dari pelbagai bangsa. Soal selidik dijalankan bertujuan mendapatkan maklumat latar belakang responden dan keluarga mereka serta mengenal pasti isu-isu yang menyumbang kepada ketaksamaan dan isu yang paling mempengaruhi pembentukan identiti mereka. Data yang diperoleh daripada soal selidik dianalisis untuk maklumat deskriptif dan analisis pemeringkatan (ranking analysis) menggunakan SPSS. Analisis pemeringkatan digunakan kerana ia salah satu teknik pengumpulan data yan mudah dan efisien untuk memahami persepsi dan pilihan individu (Yu et al., 2019).

Latar Belakang Responden

Responden yang terlibat dalam kajian ini terdiri daripada pelajar tempatan, lelaki (181) dan perempuan (531) dan dari pelbagai kumpulan etnik. Penyelidikan ini cuba memperoleh keseimbangan responden bagi kedua-dua jantina. Walau bagaimanapun, bilangan responden wanita lebih banyak berbanding lelaki di semua universiti yang terlibat. Terdapat seramai 531 (73.75%) responden perempuan dan 181 (25.14%) responden lelaki seperti yang ditunjukkan dalam Jadual 1. Memandangkan kajian ini melibatkan golongan remaja, majoriti responden iaitu 428 (59.44%) berumur dalam lingkungan usia 21-23 tahun. Jumlah ini diikuti oleh 246 (34.16%) orang responden dalam lingkungan usia antara 18-20 tahun seperti yang ditunjukkan dalam Jadual 2.

Jadual 1 *Jantina*

Jantina	Kekerapan	Peratusan (%)
Lelaki	181	25.14
Perempuan	531	73.75
Tidak dinyatakan	8	1.11
JUMLAH	720	100%

Nota. Sumber daripada soal selidik.

Jadual 2 Umur

Umur (Tahun)	Kekerapan	Peratusan (%)
18–20	246	34.16
21–23	428	59.44
24–26	41	5.69
27–32	5	0.69
JUMLAH	720	100%

Nota. Sumber daripada soal selidik.

Responden yang terlibat dalam kajian ini juga terdiri daripada pelbagai latar belakang etnik (Jadual 3). Majoriti responden terdiri daripada etnik Melayu (61.11%), diikuti etnik Cina (24.42%) dan lain-lain (7.63%). Keadaan ini disebabkan segelintir responden telah mengkategorikan diri mereka sebagai lain-lain khususnya bagi responden yang berasal dari Sabah dan Sarawak yang mengkategorikan diri mereka sebagai Bumiputera, Dusun, Kadazan, Iban, Murut atau Melayu-Cina.

Merujuk kepada hasil kajian tentang pendapatan isi rumah (Jadual 4), kategori pendapatan dibahagikan secara tidak langsung kepada tangga B40, M40 atau T20. Dalam kumpulan pendapatan di Malaysia, B40 mewakili 40% bagi pendapatan

Jadual 3 *Kumpulan etnik*

Kumpulan etnik	Kekerapan	Peratusan (%)		
Melayu	440	61.11		
Cina	176	24.44		
India	43	5.97		
Lain-lain	55	7.63		
Tidak dinyatakan	6	0.83		
JUMLAH	720	100		

Jadual 4 Pendapatan isi rumah

isi rumah dengan pendapatan di bawah RM4,850 sebulan, M40 mewakili 40% pendapatan isi rumah pertengahan iaitu pendapatan antara RM4,850–RM10,959 sebulan dan T20 mewakili 20% pendapatan isi rumah atasan iaitu pendapatan lebih daripada RM10,959 sebulan (Jabatan Perangkaan Malaysia, 2020). Hasil kajian menunjukkan bahawa seramai 459 (63.75%) atau lebih daripada separuh responden di kategorikan sebagai B40 (pendapatan bulanan kurang daripada RM3,000).

ANALISIS DAN PERBINCANGAN

Penemuan hasil kajian memfokuskan isu-isu ketaksamaan dan pengaruhnya dalam pembentukan identiti remaja. Walau bagaimanapun, para responden telah dikemukakan dengan persoalan asas tentang ketaksamaan iaitu kefahaman mereka tentang ketaksamaan. Ini diikuti oleh hasil kajian yang mengetengahkan faktor-faktor yang dikenal pasti oleh para responden sebagai penyumbang kepada ketaksamaan. Seperti kebanyakan fakta sosial, idea ketaksamaan ini mungkin terbina daripada pelbagai wacana yang wujud dalam masyarakat dan persekitaran sekeliling serta menyumbang kepada

Pendapatan bulanan isi rumah (RM)	Kekerapan	Peratusan (%)
Kurang daripada 2000	199	27.63
2001–3000	148	20.55
3001–4000	112	15.55
4001–5000	67	9.30
5001-6000	63	8.75
Lebih daripada 6000	129	17.91
Tidak dinyatakan	2	0.27
JUMLAH	720	100

pemahaman komulatif remaja mengenai isu ketaksamaan.

Hasil kajian menunjukkan bahawa hampir kesemua responden, 90% (648 responden), menjawab 'Ýa' apabila ditanya sama ada mereka tahu maksud ketaksamaan. Manakala selebihnya tidak begitu pasti maksud ketaksamaan. Responden yang menjawab 'Tidak' berkemungkinan mempunyai cara yang berbeza antara satu sama lain dalam memahami idea ketaksamaan kerana hampir 40% daripada responden adalah daripada kumpulan M40 dan ke atas. Jadi, persoalan yang mengaitkan mereka dengan status terkini mungkin menyebabkan jawapan 'Tidak' pada soalan yang diajukan.

Bagi soalan mengenai kefahaman konsep ketaksamaan dalam sesi Perbincangan Kumpulan Fokus, antaranya jawapan yang diperoleh adalah seperti berikut (nama responden telah diubah atas sebab kerahsiaan):

"...Status dan kedudukan seseorang tidak sama dalam keadaan budaya, ekonomi, sosial dan politik yang berbeza-beza." – Jenny

"...Ketaksamaan adalah satu konstruk sosial dan berlaku kepada sekumpulan orang tertentu yang menggunakan penampilan fizikal mereka atau mungkin kes mereka. Ini sebenarnya dipelajari melalui pengalaman dan proses sosial, jadi itulah sebabnya ketidaksamaan wujud kerana ia dilaksanakan dengan cara kita." – Mimi

"...Saya rasa kita tidak dapat mendefinisikan ketaksamaan tanpa adanya persamaan....persamaan itu sendiri adalah istilah subjektif kerana orang yang berbeza akan menentukan apakah persamaan dengan cara yang berbeza. Oleh itu, saya rasa ketaksamaan berlaku ketika beberapa orang atau beberapa masalah dibangkitkan mengenai ketidaksamaan apabila segelintir orang dipengaruhi secara negatif." – Shamil

Melalui soal selidik, kajian turut mengemukakan persoalan kepada responden untuk mengetahui pendapat mereka mengenai faktor-faktor yang boleh menyumbang kepada ketaksamaan. Sepuluh faktor telah disenaraikan seperti yang ditunjukkan dalam Jadual 5. Antara faktorfaktor yang disenaraikan adalah tahap pendidikan (C3A), agihan pendapatan (C3B), status individu atau kategori seperti kurang upaya, penyakit tertentu dll. (C3C), jantina (C3D), saiz dan sokongan keluarga (C3E), jenis pekerjaan (C3F), golongan minoriti (C3G), tinggal di kawasan luar bandar atau pendalaman (C3H), kuasa dan kedudukan dalam masyarakat (C3I) dan sikap individu itu sendiri (C3J).

Menerusi penggunaan analisis pemeringkatan (ranking analysis), hasil kajian mendapati faktor utama yang dilihat menyumbang kepada ketaksamaan adalah kuasa dan kedudukan dalam masyarakat (169 responden). Selain daripada faktor kuasa dan kedudukan dalam masyarakat, tahap pendidikan (348 responden) turut

menjadi penyumbang. Walaupun jumlah responden adalah lebih ramai bagi faktor pendidikan, tetapi kesemua responden terlibat meletakkan tahap pendidikan dalam skala dua hingga empat. Selain itu, jenis pekerjaan (213 responden), tinggal di kawasan luar bandar atau pendalaman (212 responden), saiz dan sokongan keluarga (124 responden) dan sikap individu sendiri (237 responden) turut dilihat sebagai faktor yang menyebabkan berlakunya ketaksamaan.

Sementara itu, hasil kajian mendapati faktor jantina dan faktor menjadi golongan minoriti adalah faktor yang dilihat sebagai paling kurang menyumbang kepada isu ketaksamaan yang wujud. Konsep kedudukan sosial yang dianggap faktor paling berkaitan dalam menentukan ketaksamaan ini mempunyai dua penggunaan utama dalam konteks sosiologi kontemporari. Pertama, status seseorang merujuk kepada kedudukan seseorang dalam corak hubungan sosial seseorang dengan anggota lain dalam satu-satu sistem sosial. Kedua, status seseorang adalah pangkat seseorang dalam

lapisan anggota yang berkaitan dengan aspek kedudukan atau prestij (Fararo, 2017).

Menurut Fararo (2017), konsep status sosial yang digunakan setakat ini berbeza dengan idea kelas yang sering kali dikaitkan dengan konotasi ekonomi. Weber (1968) menjelaskan gagasan kumpulan status adalah cara yang dapat digunakan untuk membezakan asas kekuatan yang berbeza dalam masyarakat terutama yang berkaitan dengan pemilikan harta atau sumber pendapatan yang berbeza. Kumpulan status mungkin ataupun tidak mungkin mempunyai asas bagi sesuatu kelas. Menurut Weber lagi, wang dengan sendirinya tidak menjamin status seseorang dalam mendapat kedudukan. Walaupun begitu, para sarjana moden yang mengkaji stratifikasi sosial sering menggabungkan kedua-dua konsep ini iaitu kelas dan wang. Mereka juga membentuk indeks status sosioekonomi yang menggabungkan aspek prestij pekerjaan, pendapatan, dan pendidikan.

Antara jawapan yang diberikan oleh responden dalam sesi Perbincangan

Jadual 5
Faktor-faktor yang menyumbang kepada ketaksamaan

	1	2	3	4	5	6	7	8	9	10
C31	169									
C3A		147								
C3A			108							
C3A				93						
C3F					108					
C3F						105				
СЗН							90			
СЗН								122		
C3E									124	
СЗЈ										237

Nota: Sumber daripada soal selidik.

Kumpulan Fokus mengenai pula antaranya adalah seperti berikut:

"...Saya rasa ketaksamaan wujud kerana masyarakat memilih untuk menilai lebih daripada satu individu atau satu kumpulan berbanding yang lain seperti kepentingan, kekayaan atau pengaruh apa yang mereka ada terhadap masyarakat. Cuma orang yang lebih dihargai adalah orang yang kaya kerana bagi masyarakat mereka inilah orang yang berusaha menjadi orang yang berjaya. Sama ada mereka mempunyai sokongan atau lahir dari dalam keluarga pertengahan atau atasan. Sangat mudah, senang untuk menilai satu daripada yang lain terutama apabila masyarakat meletakkan nilai pada sesuatu seperti kekayaan, jadi jika orang ini mempunyai banyak kekayaan maka orang ini tinggi nilai mereka. Sekiranya orang miskin tidak mempunyai kekayaan, mereka tidak mempunyai nilai dalam masyarakat." – Nash)

"...Saya rasa faktor ketidaksamaan, saya fikir sejak lahir misalnya sebab kasta yang mana mereka dilahirkan dalam kasta tertentu. Mereka merasakan apabila mereka dilahirkan dalam kasta tertentu, mereka akan dipandang rendah dan ia masih berlaku di Malaysia." – Dev

Berdasarkan faktor-faktor yang dikenal pasti itu, jelas menunjukkan bahawa para responden memahami ketaksamaan yang dikaitkan dengan kuasa dan kedudukan masyarakat. Ini secara tidak langsung menjelaskan bahawa kuasa dan kedudukan seseorang itu akan menentukan peluang pendidikan yang berbeza-beza. Bagi yang berkuasa dan berkedudukan, peluang untuk remaja mendapat pendidikan yang lebih baik adalah lebih tinggi berbanding remaja yang berada dalam lingkungi ekonomi bawahan. Sekiranya ini berlaku, tentu remaja yang terlibat akan berhadapan dengan faktorfaktor lain seperti kesukaran mendapat pekerjaan dan terpaksa hidup di kawasan luar bandar. Jadi, sekiranya remaja ingin membentuk identiti yang kukuh, mereka perlu berusaha memperbaiki kedudukan terutama menerusi pendidikan supaya remaja dapat membina keyakinan diri yang lebih mantap.

Hasil analisis seterusnya menunjukkan hasil kajian yang mengenal pasti isuisu ketaksamaan yang dikaitkan dengan ketaksamaan pada pandangan responden. Sepuluh isu ketaksamaan telah disenaraikan dalam Jadual 6. Isu-isu yang disenaraikan adalah berisiko lebih tinggi untuk dibuang kerja (C4A), layanan buruk daripada orang sekeliling (C4B), hidup dalam kemiskinan (C4C), tidak mendapat peluang sama rata dalam pendidikan (C4D), rasa diketepikan (C4E), pengangguran (C4F), hidup dalam serba kekurangan dan di kawasan bahaya (C4G), tidak ada kuasa dan tidak mampu bersuara (C4H), melakukan apa-apa sahaja walaupun ingin dielakkan demi kelangsungan hidup (C4I) dan perubahan dalam sikap seseorang (C4J).

Hasil kajian telah menunjukkan bahawa seramai 296 responden atau 41.1% berpendapat bahawa pengangguran adalah isu utama yang berkait rapat dengan kewujudan ketaksamaan. Selain isu pengangguran, isu tidak mendapat peluang sama rata dalam pendidikan (193 responden) juga dilihat sebagai isu penting dalam ketaksamaan. Selain itu, isu-isu lain yang dikenal pasti adalah hidup dalam kemiskinan, layanan buruk daripada orang sekeliling, rasa diketepikan dan hidup dalam serba kekurangan dan di kawasan bahaya. Sejak sekian lama, hubungan antara aspek pengangguran dan kemiskinan masih belum kelihatan jelas, kerana pengangguran biasanya dikaitkan dengan taraf hidup seseorang disebabkan oleh ketiadaan pendapatan, dan adakalanya lebih baik seseorang itu dapat bekerja walaupun masih miskin. Walaupun sehingga kini pelbagai dasar diperkenalkan dalam usaha mengurangkan pengangguran dan membasmi kemiskinan di banyak negara membangun, tetapi untuk mencapai objektif ini relatifnya adalah sukar kerana kita masih kalah dengan situasi kemiskinan dan pengangguran yang tinggi (Agenor, 2004). Hubungan antara kemiskinan dengan pencapaian akaemik juga dapat dikaitkan dengan kesan negatif terhadap perkembangan minda justeru pembentukan identiti positif remaja (Faridah Abu Hassan et al., 2005). Hal ini adalah kerana isu kemiskinan keluarga mempunyai pengaruh yang kuat terhadap tahap pendidikan anakanak (Siti Masayu Rosliah Abdul Rashid & Narimah Samat, 2018).

Walaupun keperluan asas cenderung digunakan untuk dijadikan ukuran bagi kemiskinan mutlak, tetapi tidak ada alasan yang kukuh bahawa keperluan asas seseorang mungkin tidak berkaitan dengan apa-apa yang dimiliki oleh anggota masyarakat lain. Keperluan seseorang cenderung menjadi semakin relatif apabila pendapatan purata meningkat dan keperluan sosial semakin bersifat pelbagai dimensi (Watson,

Jadual 6 Isu-isu yang dikaitkan dengan ketaksamaan

	1	2	3	4	5	6	7	8	9	10
C4F	154									
C4F		142								
C4C/D			90							
C4D				103						
C4B					95					
C4E						86				
C4G							109			
C4G/I								95		
C4I									117	
C4J										265

Nota: Sumber daripada soal selidik.

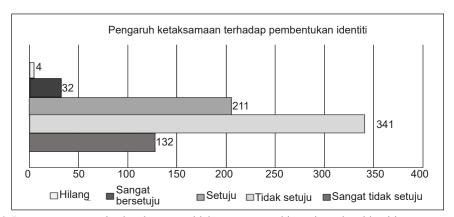
2014). Bagi sebilangan remaja, peralihan ke alam dewasa merupakan cabaran dalam memenuhi keperluan asas. Mereka mungkin tidak dapat mencari pekerjaan yang menawarkan gaji yang mencukupi yang membolehkan mereka memenuhi keperluan asas. Dengan bertambahnya bilangan remaja yang miskin, mereka juga turut cenderung gagal dalam pendidikan dan ini akan meneruskan kitaran kemiskinan dan pembangunan yang tidak setara dalam masyarakat (Chilton et al, 2007).

Kesan Kemiskinan Terhadap Pembentukan Identiti Remaja

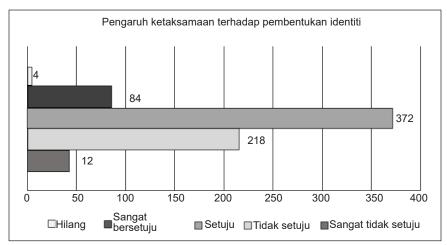
Hasil penemuan seterusnya ditunjukkan dalam Rajah 2 dan Rajah 3, yang melihat penjelasan deskriptif tentang sama ada isu-isu ketaksamaan yang dikenal pasti dalam perbincangan tersebut mempengaruhi ataupun tidak pembentukan identiti responden. Hasil kajian menunjukkan bahawa majoriti responden iaitu seramai 341 responden atau 47.4% tidak bersetuju bahawa isu ketaksamaan sosial tidak mempengaruhi pembentukan identiti mereka. Ini diikuti oleh 132 responden yang

sangat tidak bersetuju dengan penyataan tersebut. Hasil kajian jelas menunjukkan bahawa lebih daripada 65.7% responden merasakan bahawa isu ketaksamaan sosial yang mereka terpaksa lalui dalam kehidupan harian mereka sememangnya mempunyai pengaruh kepada pembentukan identiti mereka.

Kita tidak dapat nafikan bahawa perkembangan dan pembentukan identiti remaja sememangnya dipengaruhi oleh aspek perhubungan sosial dalam masyarakat termasuklah dalam keluarga, kawan-kawan dan persekitaran di mana mereka tinggal dan dibesarkan seperti di bandar mahupun luar bandar (Azizi Yahaya, 2008). Situasi yang hampir sama dikemukakan oleh Gangadharan et al. (2018) menunjukkan bahawa identiti sosial remaja yang dikongsi ini akan dapat mengurangkan tingkah laku antisosial bagi yang berada dalam golongan berpendapatan rendah. Walau bagaimanapun perubahan yang berlaku dalam masyarakat sekelilig mungkin akan menimbulkan rasa kurang senang atau kebimbangan dalam kalangan diri remaja.



Rajah 2. Penyataan tentang isu ketaksamaan tidak mempengaruhi pembentukan identiti saya



Rajah 3. Penyataan tentang saya percaya bahawa saya mempunyai identiti yang kuat dan tidak mudah dipengaruhi oleh isu ketaksamaan

Seterusnya hasil kajian yang ditunjukkan dalam Rajah 3 merupakan jawapan responden ketika ditanya sama ada mereka percaya mereka mempunyai identiti yang kuat dan tidak mudah dipengaruhi oleh isu ketaksamaan. Hasil menunjukkan bahawa seramai 372 responden atau 51.6 bersetuju dengan penyataan tersebut. Walaupun hasil kajian menunjukkan bahawa lebih daripada separuh responden iaitu 63.3% merasakan mereka mempunyai identiti yang kuat, tetapi kita juga dapat melihat bahawa sejumlah yang lain (hampir 40%) merasakan bahawa mereka tidak mempunyai identiti yang kuat dan identiti mereka mungkin goyah sekiranya berhadapan dengan isu ketaksamaan dalam kehidupan harian.

Menerusi sesi Perbincangan Kumpulan Fokus yang diadakan, antara pendapat responden mengenai sama ada isu ketaksamaan mempengaruhi pembentukan identiti mereka adalah seperti berikut:

"...Ketidaksamaan bagi saya, mempengaruhi saya dan ada cara ia mempengaruhi saya, yang mana saya merasa sukar untuk mempercayai seseorang terutama mereka yang mempunyai kuasa. Ia membuat saya berfikir adakah saya harus mempercayai mereka atau tidak?" – Alif

"...Apabila adanya ketaksamaan, ia akan membentuk orang yang menindas dan orang yang ditindas. Apa yang berlaku seterusnya ialah ia akan membentuk bagaimana sistem berfungsi. Jadi, bukan sahaja ketidaksamaan menentukan identiti seseorang, tetapi ia juga akan terus menentukan identiti seluruh masyarakat, keseluruhan sistem. Dan dengan cara ini, dalam jangka masa panjang, ini akan memberi kita kerugian besar jika tidak ada orang yang ingin berjuang untuk menangganinya—ini adalah ketaksamaan." – Nabila

Berdasarkan penemuan tersebut, dapat dirumuskan bahawa isu-isu ketaksamaan yang telah dikenal pasti sebenarnya turut memberi kesan negatif kepada perkembangan remaja. Keadaan mungkin menjadi bertambah sukar sekiranya mereka hidup dalam kemiskinan apabila tahap perkembangan kognitif, sosial dan emosi mereka adalah pada peringkat yang sangat kritikal. Jelas bahawa sebenarnya isuisu ketaksamaan yang dikenal pasti ini boleh mempengaruhi pembentukan identiti remaja dalam pelbagai cara. DeHaan dan MacDemid (1996) mendapati bahawa kesukaran ekonomi dan hasil tingkah laku memberi kesan psikologi tidak langsung kepada remaja khususnya remaja bandar.

Sementara itu, dalam mengaitkan penemuan hasil kajian ini dengan model teori kawalan identiti oleh Kerpelman et al. (1997), intipati model telah menggambarkan aspek teori kawalan identiti sebagai suatu mikro pemprosesan identiti. Berdasarkan kepada faktor-faktor yang telah dikemukakan oleh responden mengenai faktor yang boleh menyebabkan ketaksamaan, kedua-dua aspek interpersonal dan intrapersonal remaja terlibat dalam proses kawalan dan pembentukan identiti. Ini termasuklah maklumat berkaitan diri remaja yang diperoleh daripada isu ketaksamaan sosial yang telah dikenal pasti dan cara isuisu ini membentuk peluang dan tekanan terhadap diri mereka. Isu-isu ketaksamaan ini berkemungkinan akan mempengaruhi remaja secara interpersonal mahupun intrapersonal dalam kehidupan mereka yang tidak langsung akan mempengaruhi pembentukan identiti.

Menurut Phillips dan Pittman (2017), faktor pertama yang perlu dipertimbangkan adalah sifat standard identiti yang dimiliki oleh remaja di peringkat awal penerokaan identiti mereka. Ini disebabkan adalah mustahil bagi remaja memulakan eksplorasi identiti dahulu kerana seseorang individu tidak dilahirkan dengan penetapan identiti yang khusus. Sebaliknya ia akan terbentuk dengan pendedahan kepada persekitaran dan masyarakat sekeliling. Hasil pendedahan kepada masyarakat sekitar dalam pelbagai isu ketaksamaan yang wujud akan secara tidak langsung dijadikan sebagai piawai kepada pembentukan identiti remaja. Isu ketaksamaan akan mendedahkan remaja kepada maklumat tentang diri mereka sendiri dan dalam lingkungi mana mereka berada.

Para responden yang terlibat turut menyuarakan beberapa saranan dan pandangan dalam membantu menghadapi isu ketaksamaan dalam masyarakat. Antaranya adalah dengan mempunyai seorang 'role model' dalam kehidupan yang membolehkan remaja mendapat motivasi dalam menghadapi isu-isu ketaksamaan dalam hidup mereka. Ini diikuti oleh sikap yang tidak selalu membandingkan diri dengan orang yang mempunyai lebih daripada diri sendiri sebaliknya melihat orang yang serba kekurangan daripada diri sendiri. Ada juga dalam kalangan responden berpendapat remaja perlu bersedia berdepan dengan apa-apa sahaja situasi yang wujud dalam kalangan masyarakat dan berusaha mencari jalan alternatif dalam menghadapi isu-isu yang wujud dan mempunyai

keyakinan mengubah diri menjadi lebih baik.

Jadi di sini pengkaji turut menyarankan bahawa dalam usaha menghasilkan dan membina remaja yang lebih kuat pada masa depan adalah wajar masyarakat memikirkan cara untuk menolong mereka mengatasi rasa gentar terhadap isu-isu ketidaksamaan. Ini termasuklah memberi sokongan berterusan terhadap remaja dalam meniti pendakian (dalam pelbagai dimensi) proses pembelajaran berterusan dalam hidup mereka dan melindungi remaja-remaja yang berada dalam kategori sosioekonomi bawahan. Remaja yang mempunyai banyak keinginan yang tidak dapat dipenuhi selalunya akan lebih cenderung terlibat dalam tingkah laku yang berisiko tinggi (Robertson, 1994).

KESIMPULAN

Daripada keseluruhan perbincangan, kajian ini telah menunjukkan bahawa faktorfaktor dan isu ketaksamaan yang wujud dalam masyarakat adalah didasarkan kepada situasi sebenar yang berlaku dalam kehidupan remaja. Kebanyakan remaja menganggap faktor kuasa dan kedudukan dalam masyarakat adalah faktor utama berlakunya ketaksamaan diikuti oleh faktor pendidikan dan pekerjaan. Manakala isu pengangguran dilihat sebagai isu utama dalam aspek ketaksamaan diikuti oleh isu tidak mendapat peluang sama rata dalam pendidikan dan hidup dalam kemiskinan.

Dengan mengenal pasti faktor-faktor dan isu-isu berkaitan ketaksamaan ini, kita dapat melihat dengan jelas cara remaja menilai sama ada pembentukan identiti mereka turut dipengaruhi oleh isu ketaksamaan. Hasil kajian dengan juga telah menilai perkaitan antara aspek ketaksamaan dengan pembentukan identiti remaja bandar di tiga insitusi pengajian tinggi awam yang terlibat. Dapat dikatakan disini bahawa remaja bandar khususnya memerlukan pelbagai bentuk pengalaman bagi memperoleh kesejahteraan dan kelancaran dalam proses peralihan menjadi dewasa menerusi rasa jati diri yang kuat. Masyarakat juga harus sentiasa memberi sokongan kepada para remaja ketika mereka berhadapan dengan pelbagai isu ketaksamaan supaya mereka dapat membentuk identiti yang lebih kuat.

Akhirnya, penyelidikan ini berpotensi untuk diterokai lebih jauh dengan melihat pengaruh isu ketaksamaan dalam pembentukan identiti remaja luar bandar, remaja marginal mahupun remaja kurang upaya. Semua kumpulan remaja ini harus diterokai dalam konteks mereka sendiri dan kajian perbandingan akan menjadikan penyelidikan ini lebih kuat dan menjadi panduan kepada semua pihak dalam membangun masa depan yang lebih baik bagi generasi akan datang. Semua pihak harus berganding bahu untuk menyokong golongan remaja yang menjadi harapan negara. Apabila golongan remaja ini berjaya membentuk identiti yang kukuh, maka secara tidak langsung mereka akan dapat berfungsi dengan baik di bawah keadaan tertekan pada masa hadapan dan belajar membina hubungan baik dengan persekitaran dan terbuka untuk idea-idea baharu dalam membina masa hadapan yang lebih baik.

PENGHARGAAN

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RUJUKAN

- Agenor, P.-R. (2004). *Unemployment-poverty trade-ons* (Policy Research Working Paper No. WPS 3297). World Bank Group. http://hdl.handle.net/10986/14028
- Altindag D., & Mocan N. (2010). Joblessness and perceptions about the effectiveness of democracy. *Journal of Labor Research*, 31(2), 99-123. https://doi.org/10.1007/s12122-010-9089-y
- Arfa Yunus, & Landau, E. (2019, July 3). 'Youth' now defined as those between 15 and 30. *New Straits Times*. https://www.nst.com.my/news/nation/2019/07/501288/youth-now-defined-those-between-15-and-30
- Azizi Yahaya. (2008). Pembentukan personaliti remaja. *Journal of Science & Mathematics Education*. http://eprints.utm.my/id/eprint/6034
- Bauman, Z. (1988). Freedom. Open University Press.
- Bernard, H. R. (2013). Social research methods: Qualitative and quantitative approaches. Sage Publications Inc.
- Berzonsky, M. D. (1997). Identity development, control theory, and self-regulation: An individual differences perspective. *Journal of Adolescent Research*, *12*(3), 347-353. https://doi.org/10.1177/0743554897123006
- Chilton, M., Chyatte, M., & Breaux J. (2007). The negative effects of poverty & food insecurity on child development. *The Indian Journal of Medical Research*, 126(4), 262-272.
- DeHaan, L., & MacDemid, S. (1996). *Identity and Poverty*. Garland.

- Fararo, T. J. (2017). Social status. Dlm D. S. Clark, Encyclopaedia of Law & Society: American and Global Perspectives (hlm. 1397-1398). Sage Publications.
- Faridah Abu Hassan, Naimah Ishak, Hamidah Yusof, & Habibah Abdul Rahim. (2005). Kemiskinan dan pendidikan: Perubahan minda orang melayu ke arah kecemerlangan pendidikan akademik. *Jurnal Penyelidikan Pendidikan*, 7, 25-56. https://www.moe.gov.my/muat-turun/penerbitan-dan-jurnal/penyelidikan/1360-jurnal7/file
- Gangadharan, L., Grossman P. J., Komai, M., & Vecci, J. (2018). Impact of Social Identity and Inequality on Antisocial Behaviour (Discussion number 1/18). Department of Economics, Monash University.
- Giuliano P., & Spilimbergo A. (2009). Growing up in a recession: Beliefs and the macroeconomy (NBER Working Paper 15321). National Bureau of Economic Research. https://doi.org/10.3386/ w15321
- Gupte, J. (2013). Urban settings as an opportunity for realizing all child rights. *South-South Cooperation for Child Rights* (Working Paper 4). UNICEF ROSA/UNICEF EAPRO. https://www.ids.ac.uk/download.php?file=files/dmfile/Unicef urban.pdf
- Hall, G. S. (1904). Adolescence: Its psychology and its relations to physiology, anthropology, sociology, sex, crime, religion and education (Vol. 2). Classics in the History of Psychology. https://web.archive.org/web/20160318152438/http://psychclassics.asu.edu/Hall/Adolescence/chap17.htm
- Jabatan Perangkaan Malaysia. (2020). Laporan survei pendapatan isi rumah & kemudahan asas 2019. https://www.dosm.gov.my/v1/index.php?r=column/pdfPrev&id=cE13dXFSRFVQL 2IrTUhJNE5vRXRXZz09

- Kerpelman, J. L., Pittman J. F., & Lamke L. K. (1997). Toward a microprocess perspective of adolescent identity development: An identity control theory approach. *Journal of Adolescent Research*, 12(3), 325-346.
- Nur Hannan Lokman, & Zanariah Ismail. (2020). Kemurungan dan keamatan sokongan sosial dengan kepuasan hidup dalam kalangan pelajar universiti di Malaysia. *Malaysian Journal of Social Sciences and Humanities*, 5(6),68-78. https://doi.org/10.47405/mjssh.v5i6.426
- Oxfam. (2016). Youth and inequality: Time to support youth as agents of their own future. Oxfam Briefing Paper. https://www-cdn.oxfam.org/s3fs-public/file_attachments/bp-youth-inequality-global-120816-en 0.pdf
- Phillips, T. M., & Pittman, J. F. (2017). Identity processes in poor adolescents: Exploring the linkages between economic disadvantage and the primary task of adolescence. *Identity: An International Journal of Theory and Research*, 3(2),115-129.
- Robertson, R. (1994). Globalization or glocalization? *The Journal of International Communication*, 1(1), 33-52.
- Robinson, G. M. (1998). *Methods and techniques in human geography*. JohnWiley & Sons.
- Siti Aisyah Ramli, Bahaman Abu Samah, Asnarulkhadi Abu Samah, Khairuddin Idris, & Hayrol Azril Mohammed Shaffril. (2017). Urban youth subjective well-being in Malaysia: Potential factors. International Journal of Academic Research in Business and Social Sciences, 7(4),

- 538-543. http://doi.org/10.6007/IJARBSS/v7-i4/2827
- Siti Masayu Rosliah Abdul Rashid, & Narimah Samat. (2018). Kemiskinan keluarga dan pengaruhnya terhadap tahap pendidikan rendah masyarakat luar bandar: Kajian kes di Jajahan Bachok, Kelantan. *E-Bangi Journal of Social Sciences and Humanities*, 13(2), 11-23.
- Syazwana Aziz, Salina Nen, Suzana Mohd Hoesni, & Jamiah Manap. (2019). Tingkah laku devian dalam kalangan remaja di Semenanjung Malaysia berdasarkan faktor pemantauan ibu bapa, komunikasi ibu bapa dan religiositi. *Malaysian Journal of Social Science*, 4(1), 93-101.
- Uprichard, E. (2008). Children as 'being and becomings': Children, childhood and temporality. *Children & Society, 22*(4), 303-313. https://doi.org/10.1111/j.1099-0860.2007.00110.x
- Watson, D. (2014). Poverty and basic needs. Dlm D. M. Kaplan, *Encyclopedia of Food and Agricultural Ethics* (hlm. 1529-1535). Sage Publications. https://doi.org/10.1007/978-94-007-6167-4 442-1
- Weber, M. (1968). *Economy and society: An outline of interpretive sociology*. Bedminster Press.
- Wilkinson, R., & Pickett, K. (2009). The spirit level: Why more equal societies almost always do better. Allen Lane.
- Yu, P. L. H., Gu, J., & Xu, H. (2019). Analysis of ranking data. Wiley Interdisciplinary Reviews: Computational Statistics, 11(6), Article e1483. https://doi.org/10.1002/wics.1483



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Spillover-Crossover Effects of Work-Life Conflict Among Married Academicians in Private University

Zhooriyati Sehu Mohamad* and Daren Yannick Despois

Department of Psychology, Faculty of Social Sciences and Liberal Arts, UCSI University Kuala Lumpur, Malaysia

ABSTRACT

Work and personal life are usually perceived as mutually incompatible domains, needing to be maintained in clear segregation for the experience of stress-free living. However, with evolving occupational demands, advancements in communication technology, and the threat of career obsolescence, dictating the norms of organisational cultures, the boundary separating the work domain from the home domain is nowadays indistinct. Thus, this study has been conducted using the qualitative phenomenological study to explore the influence of organisational culture on the work-life balance of academics. Thus, five married fulltime academicians at Kuala Lumpur, employed for a minimum of one academic semester, were involved in a semi-structured interview. The present study found that work demands would usually lead to reduced involvement with the family. Academicians would mostly compensate by negotiating with their family members for quality time in the future. Mostly, the experience of work-life conflict would occur in the direction of work to family, rather than the other way around. Thus, academicians also revealed occasionally externalising their stress toward family members as a result of work-related emotions impinging on their emotional state at home. The findings of this study highlight the importance of implementing work-life balance strategies and fostering an organisational culture focused on the satisfaction of employees rather than strictly organisational objectives.

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 $\hbox{$E$-mail addresses:}$

zhooriyati@ucsiuniversity.edu.my (Zhooriyati Sehu Mohamad) daren.despois@gmail.com (Daren Yannick Despois)

* Corresponding author

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INTRODUCTION

Accelerating advancements in communication technology, progressively more challenging occupational demands, and the threat of career obsolescence dictate

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the need for the seamless integration of work and private domains. Work-life balance stands as the degree to which individuals are involved in and satisfied equally with their job and personal roles (Alhazemi & Ali, 2016). However, it is rather important to make distinction and to ensure balance of both domains to accelerate success. Therefore, work-life conflict should be understood as a form of inter-role conflict in which family demands are mutually incompatible, meeting demands of both the domains is difficult" (Lyon, 2001, pp. 335-336). The work and private domains are inherent dimensions of the employee's existence, assumingly mutually exclusive. Technological progress and increasing occupational demands have contributed to the possibility of engaging in workrelated affairs from the home domain. The escalating competition requires the further engagement of employees. Home-based employment signifies the potential for more challenging occupational demands; the assumption of flexibility in working hours is mitigated with the potential for the increased workload (Currie & Eveline, 2011). The assumption of manageability of workload not affecting the private domain is important to understanding work-life conflict. Intensifying occupational demands dictate more engagement and forgoing of private domain-related demands.

General Factors Affecting Work-Life Balance

Occupational demands stand as an important factor influencing the experience of work-

life balance. Managerial and professional hierarchical positions are usually more conducive to work-life conflict due to the inherent demands of the occupation (Duxbury & Higgins, 2003). Occupational requirements with high psychological demands and low decision latitude are the main encompassing factors likely to cause greater strain on the employee (Karasek et al., 1998). Furthermore, increased job commitment, with longer time spent at work and the inflexibility of work hours, would eventually lead to role overload, and thus, work-life conflict (Casey & Chase, 2004). On the other hand, factors related to the home domain may include inflexible obligations at home, such as the necessity to assume the role of caregiver to elderly family members or children (Carnicer et al., 2004). Working parents with children aged less than three were noted to experience conflict the most, as opposed to parents with children above three (Ahmad, 2007). The dependency of younger children or children afflicted with disease, especially on mothers, would arguably generate more family-to-work conflict as opposed to older children (Ahmad, 2008).

Personal values may also dictate the outcome of work-life balance or conflict, whereby centrality and priority would help to determine the degree of the interplay between values and conflict (Carlson & Kacmar, 2000); centrality refers to the significance attributed to family or work by the employee, as a foundation to his or her life; priority implies the importance given to either domain, to the extent of

compromising one for the other. The combination of both perspectives would indicate the inclination of the employee toward either domain and, consequently, which of the home or work domain would be jeopardised for the preservation of the other. Furthermore, personality traits, such as neuroticism and conscientiousness, also lead to the intermingling of both domains (Rantanen et al., 2005; Wayne et al., 2002). Similarly, employees with lower self-esteem, inferior self-efficacy, and lower level of perfectionism were more likely to experience interference of the work and life domains (Fride & Ryan, 2005).

Organisational Culture

Organisational culture can be defined in terms of the values shared and adhered to by an organisation (Chatman & Jehn, 1994). According to Callan (2007), organisational culture is progressively evolving into an important subject of consideration as to its relation to work-life balance. Beauregard and Henry (2009) discovered that considerations for work-life balance practices have a positive influence on the recruitment and retention of employees, as well as having an important impact on productivity. A company prioritising the wellbeing of its personnel is expected to experience increased loyalty and satisfaction, thereby leading to increased productivity in obligation to the company's consideration (Beauregard & Henry, 2009). Delobbe and Vandenberghe (2000) identified four common aspects of organisational culture, namely: Peopleorientation, whereby concern is attributed

to cooperation, support and respect among members of the organisation; innovation, or the openness of the organisation to change and calculated risks; control, relating to autonomy or regimentation of workplace policies; and lastly, outcome orientation, which is concerned with the company's emphasis on procedures or customer satisfaction.

As detailed by Zeqiri and Alija (2016), the conceptualisation of organisational culture from the stance of Hofstede's cultural dimensions (1997, cited in Zegiri & Alija, 2016) relates to the following: The first dimension relates to the company's preference for process-oriented approach; thus, bureaucracy and routines, or resultoriented, focusing on outcomes. Moreover, the second dimension is concerned with the company's orientation toward either the employee's wellbeing or the prioritisation of job requirements. In addition, the third dimension of organisational culture highlights the identification of its employees toward the profession, rather than promoting cultural norms encompassing both the work and private domains. In regards to the fourth dimension of organisational culture, the company and its members may either feel open or closed to newcomers and outsiders. Tight or loose control illustrates the fifth dimension, wherein departments are either regimented or independent. Lastly, the sixth dimension relates to whether the organisation is more concerned with respect to standard operating procedures or results.

Arguably, the investigation of any connection between organisational culture

and job satisfaction is sensible because the wellbeing of an organisation is intrinsically related to the wellbeing of its employees (Grant et al., 2007). Hackman and Oldham (1975) theorised that job satisfaction was closely related to the experience of meaningfulness about the occupation, the feeling of responsibility because of fulfilling tasks and lastly, knowing the outcomes of work. Furthermore, Spector (1997, as cited in Belias & Koustelios, 2014) highlighted appreciation, personal and professional development, and salary, amongst other factors, as highly conducive to understanding job satisfaction.

Hence, the understanding of job satisfaction is complex and subjective, whereby employees may have differing expectations of what constitutes satisfaction prior to accepting a particular position. Therefore, the intricate connection between organisational culture and job satisfaction could indicate the influence of the former on the latter construct (Hutcheson, 1996). Similarly, the subjective aspects of job satisfaction, as perceived by employees, can be an important indication of the type of culture reigning in an organisation (Sempane et al., 2002). Such aspects may also include leadership, values, and worklife balance policies (Emery & Barker, 2007; Schein, 1992).

The Present Study

There are many studies related to the workplace that has been conducted in Malaysia. However, the contextual relevance has often been ignored, which makes the findings of some previous studies questionable. For instance, reviewed studies conducted in Malaysia focused on government higher education institutions, wherein the organisational culture might not only differ across institutions but is also arguably different from their private university counterparts (Badri & Panatik, 2015; Long et al., 2014; Noor, 2011; Shahid et al., 2016). Hence, the findings of these studies are limited to their specific institutions, and the generalisation of these results is thus questionable due to inherent differences in organisational culture. Similarly, the broader context of the society within which the universities evolve needed to be considered. For example, extrinsic influences, in the form of political and cultural context, limit the external validity of the research (Bakker et al., 2009). Likewise, factors such as hierarchical position, tenure and academic field could be relevant. Therefore, the generalisation of findings across societies would be inappropriate.

Another concern was the almost exclusive emphasis of spillover-crossover-based studies on the negative dimensions of either phenomenon (Amstad & Semmer, 2011; Schmidt, 2011). Spillover refers to the impact of work-related emotions on the intra-emotional state of the employee at home and vice-versa (Amstad & Semmer, 2011). On the other hand, crossover examines how these emotions impact those interacting with the individual in question regularly (Westman, 2001). Spillover and crossover effects are experienced from either work-to-family or family-to-work domains. However, limited studies focus

on the positive spillover-crossover effects, to the exception of research conducted by Lawson and colleagues (2014), in regard to the effect of working mothers' moods on the youth. Still, positive spillover-crossover effects on the work-life balance of academicians are restricted and inexistent in Malaysian academic literature. Hence, an exploration of the actual dynamics of spillover and crossover among Malaysian academicians would confront an important dearth in current literature.

Considering the requirements of various roles an individual is expected to satisfy daily, conflict is bound to occur. Role conflict might be conducive to role ambiguity, which stands as the extent to which an employee is confident about his or her specific roles and responsibilities (Spector, 1997). An absence of awareness in this respect might eventually lead to hesitation, wrong decision-making, anxiety, or distorted reality (Rizzo et al., 1970, cited in Ryan et al., 2009). On the other hand, compensation theory dictates that the lack of satisfaction experienced by employees either at the workplace or home would lead them to compensate by attempting to find more satisfaction in the other, either by increasing commitment to one domain or finding more pleasing satisfaction in the other (Champoux, 1978; Lambert, 1999; Zedeck, 1992).

The questionable generalisability of the studies reviewed, due to the absence of consideration for organisational culture and societal contextual factors, as well as the bias of only focusing on the negative effects of spillover and crossover, were the main issues of academic literature. These concerns were instrumental in guiding the approach of this study, in particular regards to the formulation of the research questions and objectives. Hence, this study aims at addressing important gaps in current academic literature regarding work-life balance and conflict amongst academicians. Therefore, the present study primarily aimed at investigating the experiences of private university academicians with spillover and crossover effects of work-life conflict and the influence of organisational culture on work-life balance.

METHODOLOGY

A qualitative research method with a phenomenological approach was adopted to achieve the objectives of this study. Specifically, a phenomenological approach was selected to describe the phenomena experienced by individuals and not generate theories or models of the phenomena being studied (Ploeg, 1999).

A total of five academicians from a private university in Kuala Lumpur were selected through a purposeful sampling method based on the inclusion criteria, (i) the participants are from different departments such as from social sciences, business, and engineering, to ensure an adequate representation of the university, (ii) Malaysian nationality who are married to account for potential crossover effects (iii) between 31 and 37 years old, and (iv) employed full-time at the university, for at least four months (one academic semester), in order to ensure proper exposure to the

organisation's culture. Besides, to ensure a comprehensive understanding of work-life conflict, academicians occupying different positions and responsibilities were considered for this research. Detailed information about the participants is provided in Table 1.

Semi-structured interviews were used to collect information from the participants. Interview questions were, thus, adapted from valid quantitative measures on worklife balance and work-life conflict. These measures were the Multidimensional Measure of Work-Family Conflict (Carlson et al., 2000), supported by the Multidimensional Scale of Perceived Work-Family Conflict (Hanson et al., 2006), which was used to design the interview questions related to spillover and crossover. At the same time, Sashkin's and Rosenback's (1996) Organisational Culture Assessment Questionnaire was adapted and amended to account for the influence of organisational culture on work-life balance.

In order to ensure the data saturation, the interviewer investigated the topic of interest with the respondent until there was nothing left to add. For example, this was done by using questions at the end of the interview such as 'Anything else?' or 'Do I need to know anything other than what I have asked you?' It is done to ensure that saturation has been achieved; that there is nothing else to add to the topic of interest. Whereas for credibility, the researchers used the triangulation of sources. The participants were interviewed at different points in time and compared with the participants with different perspectives.

The collected data was analysed using thematic analysis to identify, analyse, and report recurring patterns within the data collecting, categorised as distinct themes under which the relevant portions of information belong (Braun & Clarke, 2006). For themes to be extracted from the data, detailed information was required; the purpose of the extracted themes was to answer the research questions posed in this study.

FINDINGS AND DISCUSSION

This study found six themes: departmental cooperation, faculty support, relationship with higher management, reduced involvement with family, emotional transference, and compensation through negotiation. The description of the results is as below, and Table 2 contains a summary of the Themes.

Table 1

Demographic background

Participant	Gender/Age	Department	Duration of Employment (Years)
1	Female/36	Chemical Engineering	7
2	Female/31	English Language Department	2
3	Male/45	Business Studies	8
4	Female/33	Psychology	4
5	Male/37	Mechanical Engineering	3

Departmental Cooperation

Both academicians from the social science field reported entertaining close professional relationships with their colleagues. When questioned about their understanding and description of the workplace culture within their respective department, cooperation amongst colleagues was often mentioned and valued. Colleagues were described as supportive and team-oriented when it came to projects and complex responsibilities to complete. Despite the stress-inducing nature of some responsibilities assigned to the lecturers, a sense of camaraderie, solidarity and collaboration could be noted. Hence, mutual support would lead to an overall sense of increased satisfaction with their current employment.

I'm so happy with my department members. They are very cooperative, supportive. We usually work together and help each other. Not only that, but we also treat each other like a family.

On the other hand, academicians from engineering and business described their workplace environment as highly workfocused with minimal to non-existent cooperation among lecturers. While both pointed out that neither department encouraged competition and that colleagues did not compete amongst each other per se. Concurrently, the academician from engineering described a sense of discouragement among his colleagues, whereby there would be an absence of motivation to excel beyond the required

tasks. The intensity of the workload emerged as one of the main reasons behind the absence of cooperation in the case of the academician from the business. The participant revealed that the work demands and expectations are tremendous, mostly due to the overwhelming number of students and other professional responsibilities the participant has to manage every day at the department level. Hence, the staff was not interested in anything else but conducting lectures, whereby other responsibilities would be preferably avoided.

Faculty Support

There were mixed experiences regarding the level of support obtained from the participants' respective faculties. The participant from the business faculty reflected that the faculty had to manage approximate 3,500 students and 40 programmes almost every semester. As a result, the management of the faculty mostly focused on addressing students' grievances and other academicrelated issues rather than assisting their staff. The overwhelming responsibilities associated with personally managing four to five subjects every semester, along with his other obligations associated with his position, such as correcting midterm papers and assignments for hundreds of students, would lead him to neglect minor issues to focus on more important priorities. Thus, the absence of support from the faculty and the intensity of the workload would lead to a relatively lessened quality of education.

Participants from engineering and social sciences discussed the requirements of their

positions as lecturers in terms of conducting and publishing research work. Despite her position as Head of Department, the social sciences academician would find the balance between her lectures, administration-related work, and research. However, Participant 1 shared a different stance relative to her faculty about the need for the provision of special equipment to conduct research. Considering that she could not have access to such equipment, added to the fact that she is required to complete an additional course, she felt that the faculty was not as supportive as expected. Furthermore, Participant 5 (engineering) highlighted that despite being supported by his Head of Department, the experience of the participant's colleagues was mostly negative. It was due to the constant criticism received at the faculty level instead of commendation. As such, this would lead to decreased motivation to perform more in areas that were optional. Thus, these academicians would prefer limiting themselves only to what was required to fulfil their key performance indicator (KPI).

So sad to tell, but my colleagues are very negative minded. They cannot see other people success. They like to gossip, criticised people. Whenever I hear anything like this, this will demotivate me.

Relationship with Higher Management

Regarding the higher management of the university, almost all of the participants reported difficulties in adjusting to the demands. A recurring dimension of this

issue is tight deadlines to completing such demanding responsibilities as correcting final examination papers. According to Participant 1, she would often have to sacrifice her time with her family to fulfil this requirement because of the hefty number of papers she would have to mark before the release of results. Participant 2 also echoed that, as opposed to her previous employment in a public university, she would have to prepare her questionnaires for examinations and was expected to correct all of them in a very limited timeframe, causing her to neglect her family.

Participant 4 shared the additional responsibilities that she would have to satisfy, aside from conducting lectures. For instance, Participant 4 revealed that she was expected to come to the university on some weekends for marketing purposes: She would be required to help the university promote the different courses available to parents and future students during the marketing events. In addition, Participant 4 pointed out that such requests were usually forwarded to the faculty. The staff would then be expected to conform and perform as required by the higher management. Furthermore, Participant 4 divulged that, despite being satisfied with the opportunities she has had to showcase herself and the trust of her superiors toward her, she felt undervalued in terms of salary and bonuses. Similar feelings were echoed from Participant 1 regards to salary and medical benefits. On the other hand, participant 5 felt valued by his students and Head of Department, but not by the higher management.

Top management is managing people. They always want us to do things that they think it is correct. For example, sometimes I need to work on weekends for marketing. We need to promote our university. But it was not appreciated, never been acknowledged. There is no increment. No bonus.

From the shared responses, an absence of proper communication between the higher management and the faculties can be asserted. Specifically, communication appears to be unidirectional, from the higher management to the faculties, departments and by extension, the academicians. In the process, it can be stated that the staff of the departments and faculties are simply expected to conform and execute instructions as requested. Conversely, the higher management of the university appears to either be unaware of the strain exerted on the faculties due to their substantial demands or unwilling to change their approach to managing their staff. The unidirectionality of communication is indicative of a top-down approach to organisational culture, characterised by an autocratic management style, whereby decisions are made unilaterally without consultation or consideration for other parties involved.

Reduced Involvement with Family

Participants mostly experienced the negative effects of their workload, impacting both the time and quality of time they spend with their families. Participant 1 specifically identified examinations periods as the most probable moment for her to be obliged to sacrifice her family time to meet the job demands within a relatively highly limited timeframe. Making comparisons with her previous employment in a public university, Participant 2 also concurred that the requirements of the occupation, in specific regards to those of a private university, will dictate the high probability of having to neglect the family on occasions. Furthermore, Participant 3 accentuated that the nature of the profession required academicians to avoid absences for the fact that classes would be affected.

More so, in addition to managing an overwhelming number of students, Participant 3 shared that his faculty would constantly organise seminars, training, workshops and activities during breaks. Therefore, he confided that he would rarely take his family on vacation, even during his children's school holidays. Similarly, Participant 3 struggled to maintain a clear separation between the work and family domains, for the fact that he would often be required to bring work home by correcting papers until late at night. Hence, even though he would always allow his children to interrupt him, family time would inevitably be neglected.

On the other hand, the arguments of Participants 4 and 5 were mostly centred on their internal locus of control. Participant 4 discussed that managing her time was within her control to maintain an appropriate work-life balance. She confided that her

children prioritised her work and would always ensure that her workload would not affect her time with the family. Similarly, Participant 5 claimed that his work would only rarely affect his family time because he would consistently avoid bringing work to home and complete the majority, if not all, of his work-related responsibilities before going home.

For me, family comes first. My children are my priority. For me to spend time with them, I will ensure I complete my work on time, so that I can be with them. No matter how much work I have, I will manage my time for them.

When considering potential family-towork conflict, all participants shared that the demands and responsibilities associated with their respective families would not interfere with their performance at work. Amongst the common reasons attributed to this information is that of the age of their children. Participant 1 revealed that she would focus on her children in the morning, as they would be heading to elementary school and taken care of upon returning home. Hence, until she returns home from work, Participant 1 will be able to focus exclusively on her work. In the same line, Participant 4 shared that her children were age 2 and 9 months at the time of the interview and would therefore only need her time to feed them, take them out and play with them. Hence, she would not experience moments of her family life affecting her work.

Emotional Transference

Participant 1 revealed her difficulties in managing the spillover and crossover effects of encountering emotionally challenging moments during work. These would be in the form of difficult students with unprofessional attitudes, which would affect her mood at work and hence, her mood with her family. Similarly, Participant 1 also experienced positive moods at work, positively influencing her mood at home and, by extension, her family.

Sometimes the students' attitude and behaviour when dealing with us will seriously affect our emotions and feelings. There are some students who are very rude. As you know, students in private are not like students in public universities. They are very vocal and don't care about anything. Some only lag. So, this kind of situation will make me angry and sad. Sometimes this effect will carry back home and show to my family as well.

There are some situations where the students are the cause of my happiness. For example, the students who talk nicely, greet us respectfully, and complete the tasks given. Things like this will help me experience positive emotions when I'm so stressed.

Other participants also had mixed experiences, mostly related to the stress of work demands. However, Participant 4 shared a unique perspective whereby she

experienced an excessive amount of stress at work, which not only affected her mood but her health. Claiming that she could normally properly segregate the work and family domains, she posited that her affected health would negatively impact how she would treat her children.

Regarding family-to-work conflict, minimal spillover and crossover could be noted. Almost all participants, excluding Participant 4, concurred that their happiness at home would spillover to their happiness at work. Participant 5 argued that he was more sensitive to happiness so that when he experienced happiness, stress would not affect him. Interestingly, Participant 4 talked about the differences in emotions between the work and family domains, whereby the happiness from home and work were different to her. Hence, she could not perceive any relationship between the nature and experience of her emotions at work, in contrast to those from work.

Compensation Through Negotiation

In order to compensate for instances of work-life imbalance, participants would usually negotiate with their families. For instance, Participant 2 and 3 shared that, in highly demanding moments during the academic year, she would inform the family of her professional commitments and make posterior arrangements, in the form of activities and thus, time together, to mitigate disappointment.

Usually, at the end of the semester, I will be super busy. Since I have two children, I will inform my family

to take 1 or 2 weeks to settle for marking the exam paper, grading, etc. Since I will be busy with my work, I couldn't spend time with my family. So, I will ensure that I will take a few days of leave after settling everything.

Furthermore, Participant 5, upon experiencing tense moments at work that could potentially crossover at home, would negotiate with his wife for a quiet personal moment. He revealed that we would usually go to a café and consume a can of beer while watching the news before heading back home with a less troubled and refocused mind to handle any issue.

When I am too stressed, I will just go to the café or bar to take my time before going back home. But of course, I will inform my wife first.

Negotiation would also attempt to restore the balance between both domains on an intrapersonal level. It implies that participants, who struggled to find balance, would engage in activities to help them manage, accommodate, or eliminate the conflict. Considering her ability to maintain a relatively clear separation between work and family, Participant 4 talked about needing time alone in peace, in instances when she would have gotten emotionally involved with her work. Hence, she would need to refocus in silence before returning to her expected routine. However, Participant 1 confided that she thought of attending counselling sessions, or even resigning from her job, to be with her family.

Table 2 Conclusion of the results based on the research objectives

RESEARCH OBJECTIVES	THEME	DESCRIPTION		
To understand the	Departmental Cooperation	Cooperation and relationships among academicians in the same department.		
influence of organisational culture on the work-life	Faculty Support	Assistance from the faculty in helping academicians manage demands from higher management.		
balance of academicians.	Relationship with Higher Management	Openness and transparency in communicating with faculty and departments.		
To explore the experiences	Reduced involvement with family	The consequence of the work domain spillover to the home domain.		
of academicians with the positive and negative spillover-crossover effects	Emotional transference	Communicating emotions experienced in one domain to members belonging to the other domain.		
of work-life conflict.	Compensation through negotiation	Attempt to achieve work-life balance again through negotiation with members of one particular domain.		

CONCLUSION

This study has argued that organisational culture is a critical aspect of understanding the experience of work-life conflict among academicians. Organisational culture was mostly understood in support from colleagues within the same department, at the faculty level and from the higher management. Regarding support at the department level, the findings of this study corroborate those of Shahid et al. (2016), whereby the support from colleagues would help to ease the pressure of occupational commitment and responsibilities. Furthermore, as Shahid et al. (2016) argued, social support was perceived as an important predictor of work-life balance (WLB) for academicians. Similar attitudes have been observed among academicians who received support from their colleagues and superiors within the department. The intensity of work would be perceived as more manageable, even in such critical moments as the examinations period.

However, the absence of cooperation among colleagues would not necessarily make the workload more difficult to handle or lead to conflict. While cooperation would be preferred, the experience of conflict would begin to occur more in relation to the faculty, rather than within the department; arguably, more cohesion could be observed at the latter level in the case of most academicians interviewed at the university, while the absence of support from the faculty would lead more to job dissatisfaction and thus, imbalance, in most cases. Reviewed studies in the Malaysian academic context (Badri & Panatik, 2015; Noor, 2011; Long et al., 2014) would closely examine work-life balance and conflict in relation to job satisfaction and have properly highlighted similar findings to this study, whereby satisfaction with employment would be connected to balance. However, the same distinction between department, faculty and higher management would not be observed in the studies above; thus, how each level affect academicians was not properly examined.

On the third strata, the work-life conflict would occur when the higher management of the university would be insensible to potential issues of family-to-work conflict that can occur as a result of high demands, which are unilaterally formulated and expected to be executed. As purported by Karasek et al. (1998), high demand with low decision latitude would usually be conducive to higher strain. The findings of this research confirm this statement, as well as the findings of Ren and Caudle (2016), particularly in the deferment of responsibilities to faculty level, from the higher management, and the consequent expectations on the academicians to confirm and execute. Furthermore, when academicians are expected to manage additional roles with unbound demands and limited resources, role overload is more likely to occur (Rantanen et al., 2011; Tiedje et al., 1990).

The findings of this research are indicative of the fact that the understanding of what constitutes job satisfaction is subjective (Ginevicius & Vaitkunaite, 2006). Thus, the conditions for the experience of job satisfaction of the interviewed academicians relate to work-life balance policies, cooperation and support amongst colleagues, support from the faculty, salary and benefits, and appreciation of contributions to the institution. On the other hand, the information derived from the research participants provides an overview

of the organisational culture at the university. The present study can posit that the higher management of the university abides by a result-oriented approach, prioritising job requirements over the wellbeing of the academicians. Tight control over procedural matters can also be associated with the operating procedures of the higher management, which is further highlighted the absence of involvement in managerial decisions, thus confirming the findings of McKinnon and colleagues (2003).

The exploration of spillover-crossover has been rare, if non-existent, in academic literature in the context of academicians. The findings of this study revealed that organisational culture acted as an important mediator of work-life conflict from the perspective of private university academicians. While such factors as high workload, excessive demands, absence of support or hierarchical position (Helvaci et al., 2017; Kinman & Jones, 2008; Lewis, 2016; Shahid et al., 2016) are usually conducive to stress and work-life conflict among academicians in the private sector compared to the public sector, this study properly categorised them under the overarching factor of organisational culture. Thus, organisational culture would dictate the impact of other sub-factors on academicians and their relative spillover effects as a result of their intensity. Hence, while most academicians experienced stress to varying degrees or had to satisfy various occupational demands according to their position, the experience of spillover and crossover varied as well.

The absence of cooperation within the department and excessive demands from the faculty were conducive to a higher degree of spillover from the work-to-family perspective. It would often be to the extent wherein the concerned academicians are only able to maintain a blurred line of segregation between both domains, thereby leading the work sphere to invade the personal domain. On the other hand, academicians in the private sector experiencing cooperation and support from colleagues, irrespective of the nature of the faculty's demands, experienced a better atmosphere at the workplace and thus were able to maintain a very distinctive mindset relative to either work or life domains. Interestingly, academicians would often change their mindset from the moment they would step at the workplace or at home to mitigate potential spillover and crossover from either domain.

This attitude change seemed to be more prevalent for negative experiences at work. It could thus be seen as an intrapersonal coping mechanism meant to limit the potential influence of negative moods on the wellbeing of the home domain. To a certain extent, the experience of negative experiences at home would be moderated by a similar change of mindset upon reaching the workplace, but it would only be relevant in the case of some academicians. In fact, most academicians interviewed suggested that being unhappy or unsatisfied at home would usually spillover on their mood at work. This finding accentuates the importance of the home domain within the collectivistic society of Malaysia, whereby the family unit is highly

prioritised. Similarly, this is again echoed in the prevalence of the personal values of the interviewed academicians, whereby centrality and priority are attributed to the family domain over the professional sphere.

In terms of the crossover of work-tofamily, minimal effects were described by the interviewed academicians, albeit for certain exceptions. On particularly stressful occasions, the immediate family, either children or spouse, would usually experience stress in terms of irritability, with rare arguments between spouses. However, these rare happenings can suggest two interrelated understandings: Firstly, the ability of academicians to maintain crossover effects on family members to a minimum is an indication of proper coping mechanism. Secondly, academicians experience enough support from the family institution to manage work-to-family crossover that would not affect the family as collateral damage, which would be coherent to the findings of Bakker and colleagues (2009), and Shimazu and colleagues (2009).

This study established the existence of positive spillover and crossover effects, thus confirming the findings of Lawson et al. (2014) and Hanson et al. (2006). Interestingly, this research found that the positive effects of spillover would be perceived as more dominant when occurring in the direction of family-to-work. It would be tightly connected to the participants' conception of work and family, whereby prioritisation is subjectively attributed to family overwork. Hence, positive experiences at home would positively affect the mood of academicians when coming

to work, thereby allowing them to handle the everyday demands of their occupation better. However, if negative experiences are experienced at home, these would spillover on the academicians' work performance and, consequently, crossover on students. Thus, the importance of family as a foundational dimension of the interviewed Malaysian academicians' lives is highly accentuated through the extensiveness of experiences from the home domain in affecting the work domain.

Limitation and Recommendations for Future Research

While this research approached the phenomenon of work-life balance and worklife conflict from a different perspective and equally weighed in on its potential for bolstering meaningful change for the enhancement of job and life satisfaction amongst academicians. Future studies should consider increasing the sample size to capture the organisational culture of the institution completely. The experiences of a few lecturers might not appropriately reflect the wholesome experiences and beliefs of academicians at the university, let alone in other departments and faculties. It would also enable the mitigation of potentially contaminated responses due to participants opting for politically correct responses out of apprehension of career-damaging consequences. A final recommendation would be to investigate the experiences of spouses in dealing with the crossover effect of work-life conflict. While the accounts of academicians of spillover effects hold the

truth in that they represent their personal experiences, crossover effects from the perspective of interviewed academicians could be biased. Therefore, another perspective worth exploring would be that of spouses to acquire a more comprehensive understanding of the topic of work-life conflict.

A significant practical contribution of this study lies in its potential for devising and implementing specific WLB-related strategies as inherent components of private university policies. The use of the qualitative research method helped to acquire indepth understandings of the experiences of academicians in dealing with their respective departments, faculty and with the broader management of the institution. These first-hand perspectives may serve as a firm basis to re-evaluate the values and leadership management that define the organisational culture of the university. The potential impact of this reassessment cannot be undermined. An organisational culture at a private university, which fosters and cultivates the wellbeing and satisfaction of its academic staff, serve not only the purpose of increasing their job satisfaction but also improving the frontlines of the university: Fulfilled educators make for more invested performance, which would inevitably impact the experience of students due to higher quality of education. Lastly, the resultant of this would eventually lead to increasing the worth of the university relative to other tertiary education institutions, thus propelling it into the same ranks of currently more prestigious universities.

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REFERENCES

- Ahmad, A. (2007). Work-family conflict, life-cycle stage, social support, and coping strategies among women employees. *The Journal of Human Resource and Adult Learning, 3*(1), 70. http://psasir.upm.edu.my/id/eprint/12488
- Ahmad, A. (2008). Job, family and individual factors as predictors of work-family conflict. *The Journal of Human Resource and Adult Learning*, 4(1), 57-67. http://psasir.upm.edu.my/id/eprint/12549
- Alhazemi, A. A., & Ali, W. (2016). The notion of work life balance, determining factors, antecedents and consequences: a comprehensive literature review. *International Journal of Academic Research and Reflection*, 4(8), 74-85.
- Amstad, F. T., & Semmer, N. K. (2011). Spillover and crossover of work- and family-related negative emotions in couples. *Psychology of Everyday Activity*, *4*(1), 43-55.
- Badri, S. K. Z., & Panatik, S. A. (2015). Influence of work-life balance towards level of job satisfaction among research academics in Malaysia. *International Conference on Human* Resource Development, 253-260.
- Bakker, A. B., Demerouti, E., & Burke, R. (2009).
 Workaholism and relationship quality: A spillover-crossover perspective. *Journal of Occupational Health Psychology*, 14(1), 23-33.
- Beauregard, T., & Henry, L. (2009). Making the link between work-life balance practices and organizational performance. *Human Resource Management Review*, 19(1), 9-22. https://doi.org/10.1016/j.hrmr.2008.09.001

- Belias, D., & Koustelios, A. (2014). The influence of demographic characteristics of Greek bank employees on their perceptions of organizational culture. *International Journal of Human Resource Studies*, 4(1), 81. https://doi.org/10.5296/ijhrs. v4i1.5058
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101. http://doi.org/10.1191/1478088706qp063oa
- Callan, S. (2007). Implications of family-friendly policies for organizational culture: Findings from two case studies. *Work, Employment and Society*, 21(4), 673-691. https://doi.org/10.1177/0950017007082876
- Carlson, D., & Kacmar, K. M. (2000). Workfamily conflict in the organisation: Do life role values make a difference? *Journal of Management*, 26(5), 1031-1054. https://doi.org/10.1177/014920630002600502
- Carlson, D., Kacmar, K. M., & Williams, L. L. (2000). Construction and initial validation of a multidimensional measure of work-family conflict. *Journal of Vocational Behaviour*, 56(2), 249-276. https://doi.org/10.1006/jvbe.1999.1713
- Carnicer, M., Sanchez, A., Perez, M., & Jimenez, M. (2004). Work-family conflict in a Southern European country: The influence of job-related and non-related factors. *Journal of Managerial Psychology*, 19(5), 466-489. https://doi.org/10.1108/02683940410543579
- Casey, J. C., & Chase, P. (2004). Creating a culture of flexibility: What it is, why it matters, how to make it work. *Executive Briefing Series*. Boston College Center for Work & Family.
- Champoux, J. (1978). Perceptions of work and nonwork: A re-examination of the compensatory and spillover models. *Sage Publications*, 5(4), 402-422. https://doi.org/10.1177/073088847800500402

- Chatman, J., & Jehn, K. (1994). Assessing the relationship between industry characteristics and organizational culture: how different can you be? *Academy of Management Journal*, 37(3), 522-553. https://doi.org/10.5465/256699
- Currie, J., & Eveline, J. (2011). E-Technology and work-life balance for academic with young children. *Higher Education*, 62, 533-550.
- Delobbe, N., & Vandenberghe, C. (2000). A four-dimensional model of organizational commitment among Belgian employees. *European Journal of Psychological Assessment*, 16(2), 125-138. https://doi.org/10.1027/1015-5759.16.2.125
- Duxbury, L., & Higgins, C. (2003). Work life conflict in Canada in the new millennium: A status report. *Public Health Agency of Canada*. https://publications.gc.ca/collections/Collection/ H72-21-186-2003E.pdf
- Emery, C., & Barker, K. (2007). Effect of commitment, job involvement and teams on customer satisfaction and profit. *Team Performance Management: An International Journal*, 13(3/4), 90-101. https://doi.org/10.1108/13527590710759847
- Fride, A., & Ryan, A. M. (2005). The importance of the individual: How self-evaluations influence the work-family interface. In E. E. Kossek & S. J. Lambert (Eds.), Work and life integration: Organizational, cultural, and individual perspectives (pp. 193-210), Erlbaum.
- Ginevicius, R., & Vaitkunait, V. (2006). Analysis of organizational culture dimensions impacting performance. *Journal of Business Economics and Management*, 7(4), 201-211. https://doi.org/10.3846/16111699.2006.9636141
- Grant, A., Christianson, M., & Price, R. (2007). Happiness, health, or relationships? Managerial practices and employee well-being tradeoffs. *Academy of Management Perspectives*, 21(3), 51-63. https://doi.org/10.5465/amp.2007.26421238

- Hackman, J., & Oldham, G. (1975). Development of the job diagnostic survey. *Journal of Applied Psychology*, 60(2), 159-170. http://doi.org/10.1037/h0076546
- Hanson, G. C., Hammer, L. B., & Colton, C. L. (2006). Development and validation of a multidimensional scale of perceived work-family positive spillover. *Journal of Occupational Health Psychology*, 11(3), 249-265.
- Helvaci, M. A., Bakalim, O., & Can, V. (2017). The work-life balance of academics. *The Online Journal of New Horizons in Education*, 7(4), 80-85.
- Hutcheson, S. (1996). *The development of a measure of organizational climate*. [Unpublished Master's thesis] University of Witwatersrand, Johannesburg.
- Karasek, H., Brisson, Q., Kawakami, N., Houtman, I., Bongers, P., & Amick, B. (1998). The Job Content Questionnaire (JCQ): An instrument for internationally comparative assessments of psychological job characteristics. *Journal of Occupational Health Psychology*, 3(4), 322-355. https://doi.org/10.1037/1076-8998.3.4.322
- Kinman, G., & Jones, F. (2008). A life beyond work? Job demands, work-life balance, and wellbeing in UK academics. *Journal of Human Behaviour in the Social Environment*, 17(1), 41-60.
- Lambert, S. J. (1999). Processes linking work and family: A critical review and research agenda. *Human Relations*, 43, 239-257.
- Lawson, K. M., Davis, K. D., McHale, S. M., Hammer, L. B., & Buxton, O. M. (2014). Daily positive spillover and crossover from mothers' work to youth health. *Journal of Family Psychology*, 28(6), 897-907. https://doi. org/10.1037/fam0000028
- Lewis, R. A. (2016). Work-life balance in academia: Experiences of lecturers in Switzerland.

- International Journal of business and Management, 4(1), 69-84.
- Long, C. S., Xuan, S. S., Ismail, W. K. W., Rasid, S. Z. A., & Kowang, T. O. (2014). An analysis on academicians' job satisfaction in the perspective of HRD practices. *International Education Studies*, 7(7), 85-95.
- Lyon, D. (2001). Surveillance society: Monitoring everyday life. Open University Press.
- McKinnon, J. L., Harrison, G. L., Chow, C. W., & Wu, A. (2003). Organizational culture: association with commitment, job satisfaction, propensity to remain, and information sharing in Taiwan. *International Journal of Business Studies*, 11, 25.
- Noor, K. (2011). Work-life balance and intention to leave among academics in Malaysian public higher education institutions. *International Journal of Business and Social Science*, 2(11), 240-248.
- Ploeg, J. (1999). Identifying the best research design to fit the question. Part 2: Qualitative Designs. *Evidence-Based Nursing*, 2, 36-37.
- Rantanen, J., Kinnunen, U., Mauno, S., Tillemann, K. (2011) Introducing theoretical approaches to work-life balance and testing a new typology among professionals. In S. Kaiser, M. Ringlstetter, D. Eikhof, M. Pina e Cunha (Eds.), *Creating balance*?. Springer, Berlin, Heidelberg. https://doi.org/10.1007/978-3-642-16199-5_2
- Rantanen, J., Pulkkinen, L., & Kinnunen, U. (2005). The Big Five personality dimensions, work-family conflict, and psychological distress: A longitudinal view. *Journal of Individual Differences*, 26, 155-166.
- Ren, X., & Caudle, D. (2016). Walking the tightrope between work and non-work life: Strategies employed by British and Chinese academics and their implications. *Studies in Higher Education*, 41(4), 599-618.

- Ryan, B., Ma, J., & Ku, M. C. (2009). Role conflict, role ambiguity and work-family conflict among university foodservice managers. *International* CHRIE Conference-Refereed Track. 1-8.
- Sashkin, M., & Rosenbach, W. E. (1996). Organizational culture assessment questionnaire. International and Pan- American Copyright Conventions.
- Schein, E. H. (1992). *Organizational culture and leadership* (2nd ed.). Jossey-Bass.
- Schmidt, S. (2011). Work-life conflict: Factors associated with negative spillover from home to work. *Journal of Undergraduate Research*, 14, 1-14.
- Sempane, M., Rieger, H., & Roodt, G. (2002). Job satisfaction in relation to organisational culture. *SA Journal of Industrial Psychology*, 28(2). https://doi.org/10.4102/sajip.v28i2.49
- Shahid, S. A. M., Amdan, S., Alwi, A., Syazreena, F., & Hassan, C. N. (2016). Social support, negative affectivity, and work personal life balance of academics. *International Journal of Social Science and Humanity*, 16(7), 500-504.
- Shimazu, A., Bakker, A. B., & Demerouti, E. (2009). How job demands influence partners' well-being: A test of the spillover-crossover model in Japan. *Journal of Occupational Health*, 51, 239-248.
- Spector, P. (1997). Job satisfaction: Application, assessment, causes and consequences. Sage Publications.
- Tiedje, L. B., Wortman, C. B., Downey, G., Emmons, C., Biernat, M., & Lang, E. (1990). *Journal of Marriage and the Family; Minneapolis*, 51(1), 63-72.
- Wayne, J. H., Musisca, N., & Fleeson, W. (2002). Considering the role of personality in the work-family experience: Relationships of the big five to work-family conflict and facilitation. *Journal of Vocational Behaviour*, 54, 108-130.

- Westman, M. (2001). Stress and strain crossover. *Sage Journals*, 54(6), 717-751.
- Zedeck, S. (1992). Work, families, and organizations. Jossey-Bass.
- Zeqiri, J., & Alija, S. (2016). The organizational culture dimensions the case of an independent private university in Macedonia. *Studia Universitatis Babe-Bolyai Oeconomica*, 61(3), 20-31. https://doi.org/10.1515/subboec-2016-0002





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Da'wah Qur'aniyah Based on Environmental Conversation: Revitalizing Spiritual Capital Ecotheology, Environmentally Friendly, Gender Responsive

Yuyun Affandi^{1*}, Agus Riyadi², Imam Taufiq³, Abdurrohman Kasdi⁴, Umma Farida⁵, Abdul Karim⁵ and Abdul Mufid⁶

¹Department of Islamic Communication and Broadcasting, Faculty of Da'wah and Communication, State Islamic University Walisongo Semarang, Tambak Aji Ngaliyan Semarang, Central Java, 50185, Indonesia ²Department of Islamic Community Development, Faculty of Da'wah and Communication, State Islamic University Walisongo Semarang, Tambak Aji Ngaliyan Semarang, Central Java, 50185, Indonesia

³Department of Qur'anic Studies and Interpretation, Faculty of Ushuluddin, State Islamic University Walisongo Semarang, Tambak Aji Ngaliyan Semarang, Central Java, 50185, Indonesia

⁴Department of Family Law, Faculty of Shariah, IAIN Kudus, Ngembal Rejo, Bae, Central Java, 59322, Indonesia ⁵Department of Qur'anic Studies and Interpretation, Faculty of Ushuluddin, IAIN Kudus, Ngembal Rejo, Bae, Central Java, 59322, Indonesia

⁶Department of Hadith Studies, Faculty of Ushuluddin, Sekolah Tinggi Agama Islam Khozinatul Ulum Blora, Mlangsen, Blora, Central Java, 58214, Indonesia

ABSTRACT

Religious theology was developed to build a movement to respond to environmental conservation based on Islam (eco-Islam). It is an effort to realize an integral awareness in instilling ethics, particularly in the perspective of da'wah based on environmental preservation, and has a vision of positive education in response to the current environmental crisis and problems. Consequently, this qualitative study employed documentation methods, using books, scientific journals, and websites for data collection. The content

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E-mail addresses:
yuyun.affandi2021@gmail.com (Yuyun Affandi)
agus.riyadi@walisongo.ac.id (Agus Riyadi)
imamtaufieq@walisongo.ac.id (Imam Taufiq)
abdurrohmankasdi@iainkudus.ac.id (Abdurrohman Kasdi)
ummafarida@iainkudus.ac.id (Umma Farida)
karim@iainkudus.ac.id (Abdul Karim)
mufid.prof@gmail.com (Abdul Mufid)
* Corresponding author

analysis was used to capture the meaning and involved three stages; first, an inventory of texts relevant to various literature topics. The second stage was the process and context of understanding in observing the world of texts and writers with different socio-cultural and scientific backgrounds. At the same time, the third was analysis, involving the construction of text meanings by considering the context. The results show that 1) the principles of da'wah Qur'aniyah (da'wah in the Koran) as a value base in

ecofriendly theology (ecotheology) are, first, the essence of a believer in the belief that Allah is the first creator of the environment. Second, there are three pillars of faith in development: belief in the necessity, humans are creatures of development, and true development the sustainability. Third, caring for the environment is part of faith 2) Gender insight in conservation-based da'wah ecotheology specifies that every individual has a balance of feminine and masculine characters in them. 3) Proactive ecospirituality as the objectification of environmentally friendly da'wah is human behavior in interacting with the environment determined by theological and ideological awareness.

Keywords: Da'wah, ecotheology, gender-responsive, revitalization

INTRODUCTION

Environmental damage is getting worse, as human neglect, domination of nature, and irregular management make naturally growing elements, harmony, and objects turn into chaos, leading to disasters. For three decades, Indonesia's livelihood and economy have depended on natural resources, such as oil, coal, copper, gold, and tin, leaving giant holes for air and water pollution. Moreover, deforestation continues to occur in Sumatra, Kalimantan, Sulawesi, Maluku, and Papua (Mangunjaya, 2007).

The Indonesian National Board for Disaster Management recorded about 2,425 landslide disasters between 2011 and 2015 in various regions in Indonesia. Most of these disasters were found in Central Java,

West Java, East Java, West Sumatra, and East Kalimantan Provinces. Subsequently, they have resulted in 1,163 deaths, 112 missing people, 973 injuries, and around 48,191 displaced (The National Agency for Disaster Countermeasure/ Badan Nasional Penanggulangan Bencana [BNPB], 2017). Furthermore, based on the disaster risk assessment by BNPB in 2015, the number of people exposed to flash flood risk, especially on Sumatra, Java, and Sulawesi Islands, exceeded 9 million people, and the value of exposed assets exceeded IDR 44 trillion (BNPB, 2017).

Meanwhile, the environmental portraits obtained yearly are increasingly generating concern. This increasing trend in cases continues, alongside regional policies for managing respective regions. According to data from the Indonesian Ministry of Environment in 2012, there were 300 environmental cases, including forest fires, pollution, law violations, and mining. In addition, there was a decrease in environmental quality in 2009, 2010, and 2011 by 59.79%, 61.7%, and 60.84%, respectively. It is reinforced by the latest data from the Menuju Indonesia Hijau (Towards a Green Indonesia) program, which stated that the country only has a 48.7% forest cover area (Pramesti, 2017).

Also, the feminist movement views environmental damage as directly proportional to women's exploitation cases and considers that they must be involved and promoted in saving nature. This movement is called ecofeminism and seeks to create and preserve nature and the environment based on femininity and women. According

to Shiva (1996), an ecofeminism leader from India, the development experienced by the third world birthed a myth that increasingly placed play a strategic role in promoting or creating a comfortable and beautiful natural environment.

Although gender activists have alternative perspectives for responding to various environmental damage issues through ecofeminism, religion has a different point of view. Hence, this study provides an alternative to mapping the development of religion, specifically the trend of its theology thinking. It uses the da'wah Qur'aniyah (da'wah in the Koran) perspective regarding environmental preservation to realize an integral awareness in instilling ethics and building a movement in response to Islamic-based environmental conservation (eco-Islam). This perspective has a vision of positive education responding to the current environmental crisis.

Based on the background description above, this study examines and answers the formulation of the problem as follows what the principles of proselytizing the Qur'aniyah as a value base in gender-responsive ecotheology are?

METHOD

This qualitative study employed the hermeneutic approach, which is a systematic step in tracing textual data for future reflective studies. The reflection process comprised two steps, namely, seeing the facts (text) or the world of text and, at the same time, seeing the interpreter of these facts (the world of the author) (Rohman, 2013).

Data were collected through the documentation method, from books and scientific journals, and websites. Meanwhile, the content analysis procedure adopted from (Krippendorff, 2004) was used to capture the meaning as follows:

Figure 1 shows that the analysis process consisted of three stages. First, an inventory of texts relevant to topics from various literature; second, the contextual process of understanding in observing the world of texts and writers with various socio-cultural and scientific backgrounds. The third was analysis, involving the construction of meaning from the text by considering the context.

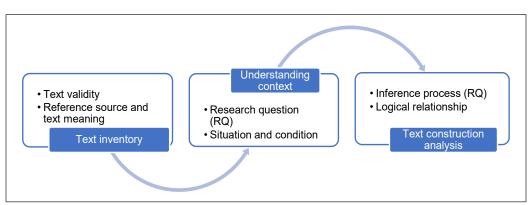


Figure 1. Procedure of the content analysis adopted from Krippendorff (2004)

FINDINGS AND DISCUSSION

The Principles of Da'wah Qur'aniyah as the Value Base in Environmentally Friendly Theology

The study of da'wah and environmental preservation recently started to emerge as a solution to various problems of the people, including environmental crisis. It has encouraged the development of Muslim intellectualism, alongside the essence of Islamic da'wah, often referred to as an effort to invite goodness or make changes from bad to good and better.

This da'wah essence widens the diversity of reflections on spiritual reality; hence the meaning needs to be emphasized in the theological context. Watling (2009) emphasized it as a study called "ecotopias," which describes religion towards nature and humans through the imagination of harmony, togetherness, independence, sacredness, and even connectedness of nature in the world' theological perspective.

The relationship between theological and natural ethics is known as ecotheology (Febriani, 2014). Their essence is human ethics to harmonize its relationship with the Creator, thereby establishing harmony among humans and other creatures. Based on this theological awareness, making people aware of God's existence as the Creator and realizing that the universe is also His creation is necessary (Mujiono, 2001).

Although the relationship between God, humans, and the universe is described as harmonious, it is not touched by human attention when reading the contained teaching texts. As a result, the actualization of normative teachings regarding this relationship is not harmonious, as shown by the increasing research on spiritual, moral, and environmental crises, which are interrelated.

Most Muslims, in particular, are limited to ritualistic religious teachings, though the Qur'an and hadith contain guidelines for a better life. By applying the spirit of the Qur'an, which often instructs people to explore the harmonization of the relationship between God, nature, and humans, spiritual, social, and environmental crises in today's modern era will not exist. Hence, the source of this problem is the low harmony between humans and God, which results in the lack of harmony in relations between humans and nature. Therefore, exploring these theological ethics at the beginning of the study of environmental ethics described in the Qur'an is important.

In the development of theological concepts related to environmental crises, the ecotheology discipline was born. Although theology is a discipline whose purpose is to defend religious beliefs or faith with rational arguments acceptable to human reason, it is also bound by the environmental context (cosmos) and humans. Therefore, this study's theological discussion is limited to this understanding and not placed in the kalam science discourse (Islamic scholastic theology; Febriani, 2014). This discourse on environmental conservation arose due to the need for ecotheology to support ethical, theological, and philosophical arguments (Mudofir, 2009).

According to Mujiono (2001), there is an almost identical paradigm to the theology of environmental preservation by prioritizing

basic principles. These principles are, first, the essence of believers is the belief that Allah is the first creator, owner, and best caretaker of the environment, without Himself being owned. They also believe in the meta-social system, that humans are the most responsible creatures in preserving the ecological and spiritually religious environment. As an actual environmental preserver, a human's ecological niche is a divine mandate. Second, the three pillars of faith in development, namely belief in its necessity, humans are creatures of development, and essential development is sustainable. Third, caring for the environment is part of the faith; hence the lack of care about the environment means one's faith is imperfect. Fourth, destroying the environment is ecological kufr because that is the devil's behavior, making this act one of the major sins. Fifth, energy is limited; hence saving it is part of faith, and wasting is ecological kufr.

Therefore, Ecotheology is a form of constructive theology that discusses the interrelation between religion and nature, especially environmental issues. According to Febriani (2014), it departs from its original premise because of the relationship between human religious worldviews and environmental degradation. Ecotheology becomes an interesting discourse because it accommodates and unites human beings into a large biotic family that lives in one common heritage: the earth. It is an entity that promises and becomes a kind of religious spirit in the future (Gore, 1992). Ecotheology includes spiritual

dimensions, faith, worldview, ethics, morality, and religion. The combination of these disciplines determines the basis of a more comprehensive human understanding of one's place in the universe. It tends to demand moral novelty in the face of environmental crises (Chang, 2000; Wood, 1985).

In affirming the perspective of Islamic ecotheology, Al-Qardawi (2001) stated that maintaining the environment fosters a feeling of conviction among believers. The reason is that all creations worship and prostrate to Allah SWT in their way, which only He knows (The Holy Qur'an, 2021, 17:44).

Also, the commentators compiled by Febriani (2014) include Ibn Kathir, Tantawi Jauhari, al-Majlisi, Fakhr al-Razi, Sa'id Hawwa, and al-Biqa'i, simultaneously interpret the word *tasbih* in this verse in a sense. The interpretation was that *tasbih* for humans is with the tongue, while for God's creatures other than humans, it is according to their circumstances, which humans cannot understand because of their limitations.

Another verse stated, "prostrate" everything that is in the heavens and on earth to Allah' (The Holy Qur'an, 2021, 55:6). Amrullah (2000) understood 'prostration for the universe' as the submission of God's creations to perform their respective functions according to His decrees. This submission is for humans to live in the world by taking its benefits wisely. For believers, various kinds of creatures in the heavens and on earth are signs of Allah's power (The

Holy Qur'an, 2021, 45:3), and studying them provides benefits and increases faith (The Holy Qur'an, 2021, 51:55).

According to the Qur'an, there are various kinds of wisdom behind the creation of the universe, including the intention of Allah to show humans His existence behind the various creations in the universe. Nature's submission to God's decrees involves consistently performing its functions, giving without the pretense of asking for anything back, the various beauties contained in it, and the regularity of motion and position. It also comprises the knowledge contained therein, which turns out to be intended for the benefit, support, and source of human life believed to be God's representative to maintain His various creatures in the world. However, the most important aspect is that the knowledge revealed will increase human faith in Allah SWT (The Holy Qur'an, 2021, 2:117, 3:47, 3:59, 6:73, 16:40).

The submission of the universe to Allah's decree, according to the Qur'an, makes a "Muslim" (Rohman, 2013; The Holy Qur'an, 2021, 3:83) and proves that the universe surrenders to the Creator. Nature and its contents worship by glorifying Allah (The Holy Qur'an, 2021, 57:1) and stick to His provisions to consistently execute their functions and provide benefits without ulterior motives (The Holy Qur'an, 2021, 40:68). It is different from humans, though the teachings of this sincerity and the performance of actions without ulterior motives, except for Allah, were also given to them.

Without any pretensions, except to obey Allah's decrees, the pure submission of nature denotes universal worship. Nature, in this case, is said to have better morals than humans who like to disobey Allah's decrees. Every teaching, including commands and prohibitions contained in the Qur'an and hadith, as well as the human ability to think and feel, makes them more aware of the wisdom behind Allah's decrees.

Humans are not the only spiritual beings with the potential to worship the Creator, as all His creatures in this universe worship without defection, disobedience, sincerity, and without pretensions (The Holy Qur'an, 2021, 16:49).

Nature is completely subject to the power and decree of Allah. However, the argument for the theological awareness echoed by the Qur'an does not always remind humans of their negligence in worshiping His word and increase the intensity of harmonious relationships with Him (Febriani, 2014). The Qur'an shows the greatness of Allah in humans and His other creatures, implying that the universe is a means for humans to realize the oneness of Allah, the Creator, and be rewarded for their actions.

According to Febriani (2014), the Qur'an understands nature to be a means to increase human theological awareness. It is because the Qur'an and the universe or cosmos have the same form. The Qur'an is a revelation that was sent down with various written symbols and collected words (the recorded Quran), while nature is a revelation in cosmic form (takwin). Nature is a book that contains "primordial revelations,"

hence "the Qur'an and nature," in this case, is called the "holy book" of God (Nasr, 2004; Noer, 1999; Suwito, 2011).

Nur Arfiyah Febriani (2015), in her dissertation, revealed three gender identity cues found in the natural ecology, namely:
1) biological pairing, 2) feminine and masculine characteristics and qualities, and 3) pronouns/dhamir, which refers to male (mudhakkar majazi) and female (mu'annath majazi).

Theological awareness is also emphasized in the Qur'an by inspiring humans to desist from arrogance and always be aware of their limitations, as everyone, no matter how great they are, will surely experience death. At that time, Allah fulfilled His promises in the Qur'an to reward every human act of worship in this world, that those people will be his friends and witnesses in the hereafter (The Holy Qur'an, 2021, 2:82, 3:57).

Furthermore, Quraish Shihab (Shihab, 2005), when explaining the Surah Aljasiah, verse 22, regarding the argument of the necessity of the Day of Judgment, stated that two aspects need to be considered. First, Allah created this universe with hagq (truth), and in this life, humans will be extinct or have not reached the level of perfection with hagg that Allah wants and even coveted by them. However, other realms have achieved their perfect haqq. The second is the argument for the need to give recompense for the good and evil committed by humans. Many people do not find the reward for their actions, and some even obtain worldly pleasures as a result of their crimes, and vice versa. Therefore, a certain time—other than in this life—is necessary for everyone to acquire a suitable and appropriate reward.

However, the Qur'an reminds humans of a life that will be full of pleasure in the hereafter, providing they implement its teachings while living in this world. A note still accompanies this statement that no matter how good human actions are, they will someday enter heaven not only because of their deeds but with Allah SWT's grace. Subsequently, this statement aims to prevent humans from being arrogant and realize that the greatness of Allah SWT has been and will be bestowed on them in the hereafter.

Regarding the relationship between Islamic theology and the environment, Febriani (2014) emphasized that the awareness of monotheism will bring people to be *taqarrub* (closer) to Him. They will realize their limitations and acknowledge that life in this world is only temporary (mortal). There is the highest goal of the dynamic process of the world, which is eternal life in the hereafter. Therefore, this theological awareness positively impacts ecotheological awareness.

Jaoudi (1993), in another perspective, explained that monotheism is a belief in the unity of life. Maria used the term Godcentered ecology, which begins with and believes in God. According to Christian mysticism and scientific traditions, a person without monotheism will lose his essence with the source of life (God) and His creatures. It can be seen when he is concerned about environmental issues but becomes weak and tired emotionally and

spiritually due to the lack of internal himself, named monotheism.

It implies that the harmonious relationship between humans and God the creator makes humans realize the nature of the universe and appreciate their existence as His creation. Subsequently, this has a positive effect through a reconstruction of their paradigm of nature, which, so far, tends to be anthropocentric to the theory by (Febriani, 2014), referred to as theocentric eco-humanism. This theory "distinguishes" the paradigm of environmental ethics in the Islamic perspective based on monotheism. It is also distinct from environmental ethics in other religions' perspectives, which differ in faith and monotheism. Environmental ethics, from other religion's point of view, usually uses the terms 'deep ecology' (Mudofir, 2009), 'spiritual ecology' (Abdillah, 2014), 'ecological spirituality' (Gullick, 1991), 'greening religion' (Warner), 'green spirituality' (Miskahuddin, 2019) or 'environmental morals' (Chang, 2000).

Based on this perspective, theocentric eco-humanism provides awareness to humans of the importance of reflecting on a harmonious relationship with themselves, others, all creatures in this universe, and Allah SWT.

Gender Insights in the Ecotheology of Qur'aniyah Da'wah Based on Environmental Conversation

The presence of the Qur'an brings a friendly spirit to the universe, including human beings, both men and women (Mercy to the worlds), in an egalitarian way. This egalitarian spirit leads people to optimize the potential of the mind or intellect and heart or emotion that God has bestowed upon them. The Qur'an does not view gender differences as two types of humans with more potential for reason and heart than the another. Instead, there are signs of balance in humans, making them have the same potential and opportunity to support their existence and realize achievements in their lives (Febriani, 2014).

It is contrary to the opinion of the biologist Unger, who mentioned that there is a distinction in potential due to differences in their biological factors. Women are considered emotional, while men are intellectual. As quoted from the opinion of Mary Wollstonecraft (1995), this stereotype is because women have been educated to be emotional beings rather than rational. Ironically, the distribution of potential imbalance is less favorable for women who have become entrenched. Like Unger's version, it has resulted in them being judged as only worthy of playing domestic roles. It is coupled with a less objective understanding of most people that only understand the verses of the Qur'an and the Prophet's hadith textually.

In these four decades, women have experienced gender inequality, causing men to be considered ambitious and authoritarian due to their intellectual potential. The relationship of this issue with ecological damage is often stated to be the culprit of the destruction of the natural order. Also, women have more potential to cure the disease's symptoms on earth (Ismail, 2015).

Although the various clashes of the thoughts above have led to the discourse around ecology and its relationship to other scientific branches, where solutions to natural damage are being sought based on expertise, the answer is presented separately. Interestingly, gender activists gave rise to a new genre flow, named 'ecofeminism,' born out of concern for the issue of environmental damage, which they consider to be correlated with the discriminatory treatment experienced by women (Shihab, 2005). Febriani (2014) identified that the flow is divided into three groups, namely radical, liberal, and social ecofeminism, each of which has different tendencies.

However, according to Agarwal Bina (1992), the unity of the thoughts of ecofeminist figures from these various schools lie in the common opinion that the dominance of the male patriarchal culture over women and nature is parallel.

The above debates show that the relationship between women's domination and nature is based on ideology, which is the root of a system, values, and beliefs that place women and non-human beings in a hierarchy under men. It invites men and women to reconceptualize themselves and their relationship to fellow human beings and nature in a non-hierarchical way. Therefore, it is necessary to reconstruct this assumption, which is the root of human misunderstanding of religious texts that affect the pattern of their interaction with each other and nature. These two stereotypes for men and women are accusations that should be read and analyzed more carefully. Examining Febriani's (2014) dissertation on gender-oriented ecology that the motivation of the Qur'an for male and female Muslims is to live in harmony and become active and progressive individuals is interesting. Both are described as individuals with feminine and masculine qualities or characters. Both have the same opportunity to attain achievements and success in this world and the hereafter with the balance of character and various potentials.

Febriani (2014) found signs in the Qur'an that humans are given the freedom to determine the character that represents them. Feminine and masculine characters have positive and negative sides, in which the latter is a stereotype for both groups. A good human being can balance positive feminine and masculine characters, as exemplified by the Prophet. Hence, the classification of these characters that have positive and negative values, according to the Qur'an (Al-Shabuni, 2001), can be observed as follows:

Figure 2 shows that each human being has a balance of feminine and masculine characteristics; by optimizing, they can learn to have a perfect personality and be well received in social relationships.

Proactive Ecospirituality as the Objectification of Environmentally Friendly Da'wah Qur'aniyah

The theoretical perspective, which Febriani (2014) referred to as theological ecohumanism or environmental theology by Mujiono (2001), shows that the construction of Islamic theology has become spiritual

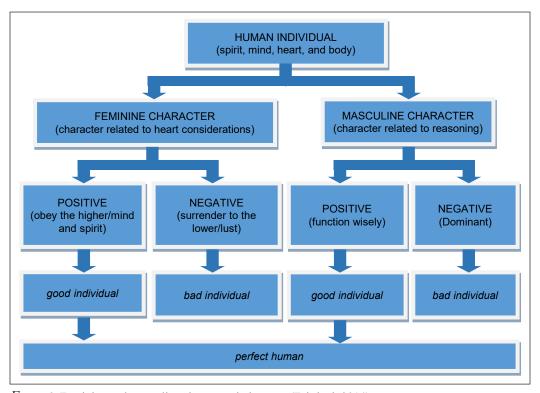


Figure 2. Feminine and masculine characters in humans (Febriani, 2014)

capital in overcoming various environmental crises recently. In this case, Danah Zohar and Ian Marshall (2005) asserted that spiritual capital is reflected in three fundamental human consciousnesses, (1) awareness of the purpose of life, including the creation of the universe. (2) Awareness of aspirations, including the people you aspire. (3) Awareness of their responsibilities and willingness to implement them in concrete actions.

These three awareness values in spiritual capital are found in various religions. Even more universally, Zohar and Marshall (2005) also asserted that the spiritual element in humans compels them to question their actions and seek fundamentally better

ways to perform. This spiritual element makes people want their lives and efforts to have meaning and is also part of the environmental theology path in Islam.

For environmental theology in Islam with various names to be accepted by human beings across all religions, an epistemological approach, which Kuntowijoyo referred to as the objectification of Islam, is needed (Shihab, 2005). This objectification, which emphasizes the importance of Islam as a science, is referred to as the science of Islam and is different from the Islamization of science.

Therefore, this study offers a new epistemology built from environmental theology in Islam. However, its objectification is built through a new theory from research in interfaith societies field, referred to as the theory of "proactive ecospirituality." This effort is explored from the ecospirituality phenomenon of Javanese women in the Simbar Wareh community, and around the Kendeng mountains, in Sukolilo, Pati. Meanwhile, the ecotheological theory or theological humanism described above is used as the theoretical framework.

CONCLUSION

This study concludes that the various human behaviors in interacting with their environment are determined by theological and ideological awareness. They will struggle in the market contestation of ideas scattered in social, cultural, symbolic, and spiritual capital.

Although the da'wah is full of inviting ethical and aesthetic values, its movement requires a proactive epistemology in Islam, which this research refers to as "proactive ecospirituality." It is an effort to objectify friendly Islam to ensure the ecotheological buildings are more applied (applied theology).

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REFERENCES

Abdillah, J. (2014). Dekonstruksi tafsir antroposentrisme: Telaah ayat-ayat berwawasan lingkungan [Deconstruction of anthropocentrism

- interpretation: Studying environmentally insight verses]. *Jurnal Studi Al-Qur'an*, 8(1), 8. https://doi.org/10.24042/klm.v8i1.168
- Al-Qardawi, Y. (2001). *Ri 'ayah al-Bi 'ah fi Shari 'ah al-Islam* [Caring for the environment in Islamic Law]. Dar al-Shuruq.
- Al-Shabuni, M. A. (2001). *Shafwat at-Tafasir* [Shafwa Interpretation]. Dar al-Fikr.
- Amrullah, A. M. A. K. (HAMKA). (2000). *Tafsir al-Azhar* [Al-Azhar's interpretation]. Pustaka Panji Mas.
- Badan Nasional Penanggulangan Bencana. (2017). Penurunan indeks risiko bencana dengan strategi peningkatan indeks [Decreasing the disaster risk index with an index increasing strategy]. BNPB.
- Bina, A. (1992). The gender and environment debate: Lesson from India. *Feminist Studies*, 18(1), 119-158. https://doi.org/10.2307/3178217
- Chang, W. (2000). *Moral lingkungan hidup* [Environmental morals]. Kanisius.
- Febriani, N. A. (2014). Ekologi berwawasan gender dalam perspektif al-Quran [Gender insight ecology in Al-Quran perspective]. Mizan.
- Febriani, N. A. (2015). Wawasan gender dalam ekologi alam and manusia perspektif Al-Qur'an [Gender Insight in natural and human ecology from the perspective of the Qur'an]. *Ulul Albab Journal*, 16(2), 131.
- Gore, A. J. (1992). Earth in balance: Ecology and human spirit. Houghton Mifflin.
- Gullick, W. B. (1991). The Bible and ecological spirituality. *Theology Today*. https://doi.org/10.1177/004057369104800206
- Ismail, N. (2015). Rekonstruksi tafsir perempuan: Membangun tafsir berkeadilan gender (Studi kritis atas pemikiran Asghar Ali Engineer, Fatima Mernissi, dan Amina Wadud Muhsin tentang perempuan dalam Islam) [Reconstruction of

- women's interpretation: Building a gender equitable interpretation (Critical study of the thoughts of Asghar Ali Engineer, Fatima Mernissi, and Amina Wadud Muhsin on Women in Islam)]. Gender Equality: International Journal of Child and Gender Studies, 1(1), 39-50.
- Jaoudi, M. (1993). *Christian and Islamic spirituality sharing a journey*. Paulist Press.
- Krippendorff, K. (2004). *Content analysis; An introduction*. SAGE Publications, Inc.
- Mangunjaya, M. F. (2007). *Menanam sebelum kiamat* [Planting before doomsday]. Yayasan Obor Indonesia.
- Miskahuddin. (2019). Manusia dan lingkungan hidup dalam al-Qur'an [Humans and the environment in the Qur'an]. *Al-Mu'ashirah*, *16*(2), 210-227. http://doi.org/10.22373/jim.v16i2.6569
- Mudofir. (2009). Argumen konservasi lingkungan sebagai tujuan tertinggi syari'ah [Arguments for environmental conservation as the highest goal of shariah]. Universitas Islam Negeri Syarif Hidayatullah Jakarta.
- Mujiono. (2001). *Teologi lingkungan* [Environmental theology]. UIN Syarif Hidayatullah Jakarta.
- Nasr, H. (2004). *Intelegensi & spiritualitas agama-agama* [Intelligence & spirituality of religions]. Inisiasi Press.
- Noer, K. A. (1999). Menyemarakkan dialog agama [Enliven religious dialogue]. In E. A. Effendy, Dekonstruksi Islam Mazhab Ciputat (p. 70). Aman Wacana Mulia.
- Pramesti, O. L. (2017). Potret lingkungan Indonesia kian memprihatinkan; Kasus eksploitasi lingkungan semakin banyak dan tidak sedikit yang mengalami kerusakan [The environmental portrait of Indonesia is

- increasingly concerning: Cases of environmental exploitation are increasing and not a few are being damaged]. *National Geographic Indonesia*. https://nationalgeographic.grid.id/read/13283068/potret-lingkungan-indonesia-kian-memprihatinkan
- Rohman, S. (2013). *Hermeunetik, panduan ke arah desain penelitian dan analisis* [Hermeneutics, a guide to research design and analysis]. Graha Ilmu.
- Shihab, M. Q. (2005). *Tafsir al-Mishbah pesan kesan keserasian al-Quran* [Tafsir al-Mishbah message of Al-Quran harmony]. Lentera Hati.
- Wood, H. W., Jr. (1985). Modern pantheism as an approach to environmental ethics. *Journal Environmental Ethics*, 7(2), 151-163.
- Shiva, V. (1996). Let us survive, women, ecology and development. In R. R. Ruether (Ed.), *Third World Women on Ecology, Feminism, and Religion* (p. 92). SCM Press Ltd.
- Suwito, N. S. (2011). Eko-sufisme studi tentang usaha pelestarian lingkungan pada Jama'ah Mujahadah Ilmu Giri dan Jama'ah Aoliya' Jogjakarta [Eco-sufism studies on environmental preservation efforts in the Jama'ah Mujahadah Ilmu Giri and Jama'ah Aoliya' Jogjakarta]. Litera.
- The Holy Qur'an (M. S. Ali, Trans). (2021). Islam International Publications Limited.
- Watling, T. (2009). Ecological imaginations in the world religions: An ethnographic analysis.

 Continuum International Publishing Group.
- Wollstonecraft, M. (1995). *Women's realities, womens choice*. Oxford University Press.
- Zohar, D., & Marshall, I. (2005). *The quantum self: Human nature and consciousness defined by the new physic.* Quill/William Morrow.



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The Influence of Apprenticeship of Observation on Business Teacher's Beliefs and Attitudes Towards English-Medium Instruction: A Case Study

Mohammad Mosiur Rahman^{1*}, Liza Reshmin², Evita Amin² and Abdul Karim²

¹Department of English and Humanities, University of Liberal Arts Bangladesh, House 56, Rd, 4/A Satmasjid Road, 1209 Dhaka, Bangladesh

²BRAC Institute of Languages, BRAC University, Mohakhali 66, Dhaka, Bangladesh

ABSTRACT

English medium instruction (EMI) in higher education is now a widespread practise around the world. Teachers' beliefs and attitudes concerning EMI can be both barriers and facilitators to implementing EMI in their classroom instruction. However, this important issue has not been studied widely. This study explores a case of an EMI teacher from the business discipline working in a private university in Bangladesh, whose beliefs regarding English and EMI adoption were influenced by the apprenticeship of observation. The site of the reported study is the University of Future (pseudonym), a medium-sized private university based in Dhaka. Avro (a pseudonym) was chosen as the case in this study as he was taught in an English medium university and now teaches business courses at the focal university where medium of instruction (MOI) is English. Two thought-based data collection instruments were used to collect the data: a semistructured interview and a narrative frame. The findings of the study show that the language-related beliefs of Avro are consistent with the rationale for the language policy adopted by his university, and his prior educational experience has played an important role in shaping his attitude towards English and EMI adoption in higher education.

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E-mail addresses:
mosiurbhai2.0@gmail.com (Mohammad Mosiur Rahman)
lreshmin@bracu.ac.bd (Liza Reshmin)
evita@bracu.ac.bd (Evita Amin)
abdul.karim@bracu.ac.bd (Abdul Karim)

* Corresponding author

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INTRODUCTION

Over the last decade or so, English medium instruction (EMI) has grown as a dominant trend in higher education in non-native English-speaking countries (Macaro et al.,

2018; Rahman et al., 2018; Sarkar et al., 2021). EMI functions exclusively at different levels of education in non-native Englishspeaking contexts that range from secondary to tertiary. EMI has been perceived as a key strategy by which universities respond to the impact of globalization (Altbach & Knight, 2007). Thus, English has become the universal second language of higher education (Brumfit, 2004). A growing body of research has been conducted on several issues related to EMI, such as parallel language use (Rahman, Singh, & Karim, 2020), English as a language of international research (Hu & Lei, 2014), stakeholders' views (beliefs, ideologies, perception) regarding EMI adoption and implementation (Rahman & Singh, 2020) in several disciplines in tertiary level, ranging from STEM to social sciences. However, this case study will explore the beliefs and attitude of a business teacher at a private university in Bangladesh regarding English language and EMI in relation to his prior educational history or what Lortie (1975) has defined as an apprenticeship of observation.

Theoretical Underpinnings

The term EMI has been defined and redefined by experts in the field. However, one of the widely accepted definitions of Macaro is as follows:

EMI refers to the observable facts that it is an academic subject other than itself being taught in English and that English is an L2 for the majority of the students and typically for the majority of the teachers. (2018, p. 154)

The three key elements of this definition are that in EMI (a) non-English-speaking contexts are typical, (b) English is used to teach content or academic subjects, and (c) the aim of EMI is not to teach English to learners as subjects, which distinguishes EMI from CLIL courses where the aim is to teach both the content and the language.

EMI is a major trend in language policy adoption in higher education globally. Although the adoption of language policy used to be a macro-level state mechanism in the past, considering its top-down nature of implementation, language policy scholars (e.g., Bernard Spolsky) have viewed the phenomenon as a micro-level affair since the implantation of language policy largely depends on the micro-level stakeholders who are perceived as the policy implementer. Consequently, their ideology or beliefs regarding language are key to adopting and implementing the language policy. Language belief(s) is/are one the main components of language policy and planning (LPP), as it constitutes the deeply held attitudes and assumptions about what is thought to be an appropriate language choice or practice in a community or a context of communication (Spolsky, 2009). As highlighted by Pinto (2017), the language beliefs of higher education (HE) institutional actors may be important obstacles or enhancers of the development of language policies as Rahman and Singh (2021) have pointed out

that micro-level stakeholders may accept or reject to implement any language policy based on their language ideology.

Shouhui and Baldauf (2012) see teachers as influential people in LPP. They are passively or unconsciously involved in making decisions about the use of language. In the mainstream education reform, as Fullan (2007) argued, policy-makers often wonder why teaching reforms are not enacted by every teacher. For example, some EMI instructors insist that teaching English is not part of their job; as one EMI teacher in Sweden put it: "I don't teach language; I teach physics" (Airey, 2012, p. 74). In a recent case study conducted in a private university in Bangladesh, Rahman and Singh (2021) also pointed out that Bangladeshi lecturers do not support an exclusive English-only language policy for instruction and restated the importance of mother tongue in the language policy for higher education. In this situation, as Shouhui and Baldauf (2012) explained, teachers act as the "people with influence in LPP" (p. 5) because of their ability to influence language decision-making passively and unconsciously. They further say:

Teachers' under-the-radar participation in formal LPP may be extremely intermittent and ad hoc, but their individual attitudes towards language use, taken collectively, can affect societal language behavior in a significant way. (2012, p. 5)

In this backdrop, how subject teachers perceive EMI and their beliefs, ideologies, or attitude regarding the English language and its use as a medium of instruction (MOI) have become an important element of research since beliefs can positively or negatively influence the language policy implementation (see Karim et al., 2021).

This research further problematizes the influence of EMI teachers' prior educational experience in their language-related beliefs regarding the use of English and English as MOI. In his seminal work, Lortie (1975) coined the phrase apprenticeship of observation in teaching. Apprenticeship of observation explains teachers' beliefs as the outcomes of their experiences and suggests that teachers form their primary beliefs from their observation. This sophisticated cognitive development of the teachers is contextually grounded, and their learning history contributes to conceptualizing their beliefs. Teacher belief or attitude is considered a construct of teacher cognition (see Borg, 2015) in language teacher education. Teacher beliefs or attitude regarding language teaching is important since they shape the teaching and learning philosophy of teachers in a language classroom (Borg, 2015) and other subject areas of educational research (see Pajares, 1992). Teachers' beliefs are shaped by their prior educational experiences in formal educational settings, which Borg (2015) calls schooling.

In the context of EMI, teachers' beliefs regarding English as a language and the adoption and implementation of English as MOI in their teaching could be influenced largely by their previous educational history. In the mainstream educational psychology research, similar views have been confirmed for subject teachers using English as an MOI. For instance, Kagan (1992) claims that when trainees join teacher education, their beliefs and knowledge about science and science teaching have already been shaped by their own learning/school experience. It indicates that prior educational experience may shape subject teachers' beliefs that they bring into their teaching and can sustain throughout their training career (Rahman, Singh, & Fersi, 2020).

Several professional development attempts have been made at the university level to equip EMI teachers to comply with the MOI (see Bradford, 2016; Hu & Lei, 2014). However, many of such initiatives have failed due to the strong influence of teachers' existing beliefs, and these beliefs , in many cases, are not alterable. As a result, an EMI graduate would prefer to teach in English and support the adoption of EMI. In contrast, a non-EMI graduate might think otherwise. Furthermore, EMI has been implemented in the context of non-native English-speaking countries where universities usually use their mother tongue as the MOI. Due to the beliefs of stakeholders and agents (e.g., teachers), the parallel MOI in higher education is growing in these contexts (Hu & Lei, 2014; Rahman, Singh, & Karim, 2020). Therefore, it is pertinent to understand the source of belief of EMI teachers, especially how and why positive beliefs about English and EMI have emerged in higher education.

Against this backdrop, both from the perspective of adoption of EMI in higher education as well as from the perspective of teacher education of EMI teachers, it is evident that EMI teachers' language beliefs could be a powerful factor in adopting language policies (e.g., EMI) and the implementation (language practices) of such policies. Furthermore, EMI teachers' prior educational experience (e.g., studying in an EMI-based school and university) significantly shapes their beliefs regarding English and EMI in higher education. Therefore, it is important to reflect on EMI teachers' beliefs and prior educational or educational experience, which none of the previous studies has addressed to the best of our knowledge.

EMI Motives and Challenges. EMI's rapid growth is primarily due to universities' desire to 'internationalize' themselves, which can be translated as attracting foreign students and faculty members to gain a global profile and a higher ranking among the Western universities (Lourenço & Pinto, 2019). For example, Lourenço and Pinto (2019) found that teaching English is, according to EMI teachers, a way to attract international students outside the Portuguese-speaking world. In addition, the local needs for producing English-speaking graduates have become important in obtaining a job, locally or abroad. It is assumed that by equipping non-native English-speaking students with the knowledge of this global language, they will excel locally and globally in the job market (Hu et al., 2014). Similarly Rahman and Singh (2020) and Song (2019) have revealed the desire of Bangladesh and China to adopt EMI.

English as an economic resource to meet local needs has become relevant as the language of foreign trade is English. Furthermore, the status of English as a global lingua franca, the prestige of the language in society, and as the language of global higher education and research (Kirkpatrick & Liddicoat, 2017; Liddicoat, 2016; Macaro et al., 2018; Rahman et al., 2018) have played a key role in the adoption of EMI. These EMI-based innovations have also been undertaken and introduced as a result of the aspiration to internationalize higher education in non-English contexts to meet the criteria for educational change and restructure higher education in line with the culture of higher education around the world (Evans & Morrison, 2018).

Existing research has highlighted several challenges in adopting and implementing EMI. One of the main issues is the belief and ideology of higher education stakeholders as shaped by a nationalist approach to language policy. It highlights the resistance and linguistic uncertainty experienced by home students and teachers in full EMI and parallels MOI contexts (Kuteeva, 2014; Rahman, Singh, & Karim, 2020). Furthermore, there is a lack of language skills among students and teachers and a need for additional work and training (Hu & Lei, 2014). As Rahman et al. (2018) have highlighted by summarizing case studies from China, Indonesia, Malaysia, and South Korea, there are several challenges related to teachers' EMI competence, such as proficiency, perception, classroom practices, and code-mixing do exist. In addition, there is a lack of educational infrastructure to implement EMI and provide pedagogical support for students (Hu & Lei, 2014) to cope with English as MOI and professional support for EMI teachers to be effective in teaching a content subject in English (Hu et al., 2014; Macaro et al., 2018).

Bangladesh as an EMI Context.

Bangladesh is one of the largest countries where English is taught and learned as a foreign language (Rahman & Pandian, 2018a, 2018b). However, no explicit MOI policy has been enforced for the higher education level, although macro-level language policy and planning (Rahman et al., 2019; Rahman & Pandian, 2018b). The general trend across publicly funded universities indicates that English use has been prevalent in science, technology, engineering and medicine, while Bangla continues to dominate the humanities and social sciences (Hamid & Baldauf, 2014; Rahman, Singh, & Karim, 2020). In the 1990s, the Englishisation of higher education emerged as a parallel to native language medium education (Karim et al., 2021), with the emergence of private universities. These universities have adopted EMI as their policy pursuant to the Private University Act of 1992, revised in 2010, but did not specifically mention the MOI (Karim et al., 2021; Rahman, Singh, & Karim, 2020). Although EMI has been adopted as the MOI in private universities, the use

of Bangla has also been found in existing studies (Rahman & Singh, 2021; Sultana, 2018). According to Hamid and Baldauf (2014), the adoption of English in private universities is surprising, given Bangla's dominant discourse of linguistic nationalism in public universities (Rahman, Singh, & Karim, 2020). Therefore, it is important, as pointed out by Sultana (2014), to reveal what has prompted these universities to adopt EMI and analyze it from sociolinguistic and educational perspectives.

Earlier sections mentioned that apprenticeship of observation can shape teachers' beliefs in education and how stakeholders' language beliefs can influence the language policy adoption and implementation. EMI views of teachers have been investigated in previous studies in the context of Bangladesh (see Hamid et al., 2013; Rahman, Singh, Johan & Ahmed, 2020) and generally found teachers to have a pro-English pro-EMI ideology and beliefs. Furthermore, in a recent comparative study, Rahman et al. (2021) found that Bangladeshi EMI instructors possess a less considerate approach towards the language challenges of learners than Malaysian EMI lecturers, which influences learners' learning experiences. Thus, the source of Bangladeshi EMI teachers' beliefs and attitudes towards EMI would provide an indepth understanding of the issue. However, the content teachers' prior educational history regarding MOI can influence their beliefs has not been studied previously. As Rahman, Singh, and Karim (2020) recommended, further research is required

to find out how the apprenticeship of observation with respect to MOI influences the beliefs of content teachers regarding English and EMI since they found that teachers who graduated from Bangla medium universities and teachers who graduated from English medium universities viewed the rationale behind EMI differently. Against this backdrop, in Bangladesh, it is important to understand the language beliefs and attitudes of university teachers about EMI and how their prior educational history shapes their EMI-related beliefs. According to Rahman, Singh, and Karim (2020), there is a gap in the existing studies that needs further investigation. Thus, this study explores a case of an EMI teacher from the business discipline working in a private university in Bangladesh, whose beliefs regarding English and EMI adoption were influenced by the apprenticeship of observation.

METHODS

Guided by the theoretical framework of language beliefs and ideology in language policy and apprenticeship of observation in teaching presented above, the current study adopts a case study approach which allows a contemporary phenomenon to be examined for an in-depth understanding (Yin, 2018). The following research objectives are formulated for the study:

- To explore the business teacher's language-related beliefs regarding English and EMI adoption in the current university.
- To find out the influence of his

educational experience in shaping his language-related beliefs regarding English and EMI adoption

The case and data reported in this study are part of a larger study that demonstrates language policy in public and private higher education in Bangladesh. The site of the reported study is the University of Future (pseudonym), a medium-sized private English medium university based in Dhaka. Like other private universities, it has adopted the EMI policy since its inception. In the EMI programs of the university, English textbooks are used, lectures are given in English, and exams are held in English. In addition, knowledge of English has been explicitly mentioned as required in the job circulations for teachers.

Avro (pseudonym) teaches business at the focal university. He was selected as a case purposefully to generate a thicker description and understanding of his present and historical account, both in his educational and professional capacities. His bachelor's and master's degrees are from a top private university in Dhaka, where the MOI is English. Furthermore, he completed a second master's from a native English-speaking country. He has worked in this

university for three years, where English is used as MOI.

This study has adopted the case study method to avail maximum opportunity to obtain the belief statements from Avro regarding English and EMI adoption, both as an EMI teacher and as a former EMI student. According to Creswell and Poth (2017), the case study approach provides an in-depth understanding of any phenomenon. It has allowed us to obtain information on Avro's beliefs regarding English adopting EMI and how his prior educational experience at English medium universities shaped his beliefs.

The data were collected using two thought-based data collection instruments (Cross, 2010). See Table 1 for more information on the corresponding objectives, instrument, and overarching themes of findings. A semistructured interview was conducted (see Appendix A) to explore Avro's beliefs regarding English and EMI adoption in the university. In the questions, Avro was asked questions about the MOI in the university where he is teaching, such as the rationale, educational outcomes, students' adoption of EMI, etc.. The interview was recorded using an

Table 1 Corresponding to the objectives, instruments, and themes of the study

Objectivess of the study	Instrument	Corresponding themes
EMI business teacher's beliefs of English and EMI adoption in the current university	Interview protocol	MOI in Avro's university The rationale of EMI adoption Educational outcomes and students' adoption of EMI
Influence of prior educational experience in shaping beliefs regarding English and EMI adoption	Narrative frame	MOI in Avro's prior university studies The rationale of EMI adoption in those universities Educational outcomes and adaptation strategies in the EMI environment by Avro Avro's positive experience of EMI in prior universities

audio recorder (Creswell & Poth, 2017). A narrative frame was used (see Appendix B) to find the influence of the prior educational experience studying at an EMI university on his teaching beliefs regarding English and EMI. According to Farrell (2020), teacher narratives potentially could unveil important events identified by EMI teachers. Narrative frames guide teacher narrative writing in terms of style and content (Barkhuizen & Wette, 2008). This writing task asked Avro to reflect on his educational experience attending EMI programs at the tertiary level and creating an autobiographical account. Avro's past experiences in his universities related to EMI were explored through the narrative frame.

Data collected from the narrative frame and the semi-structured interview were analyzed using qualitative content analysis. The interviews were audio-recorded and lasted about 30 minutes each. Interviews were transcribed with narrative writing responses and repeatedly scanned for coding (Creswell & Poth, 2017). The analysis process included coding the data and evaluating the themes in three steps, as a data analysis method mentioned by Creswell and Poth (2017). The interviews were first transcribed and then examined for common patterns (Creswell & Poth, 2017). The codes were carefully read in the second phase. The first phase of thematic analysis involves an inductive data analysis approach from codes to emergent themes. Then, a deductive approach was used to develop key themes in response to the study's objectives. In reporting the data, the findings are presented based on the research aims.

FINDINGS AND DISCUSSION

EMI Business Teacher's Beliefs of English and EMI Adoption in the Current University: The Case of Avro

MOI in Avro's Working University. Avro is a senior lecturer in the Department of Business at a private university based in Dhaka, Bangladesh. He has worked at the current university for the last three years. The MOI at the university has been in English since its inception. In Avro's words:

I work at the University of Future, a private university in Dhaka. EMI has been adopted from the outset in line with many other private universities in Bangladesh. In line with the policy of the university, our Department of Business also adopted English as a medium of instruction.

In the context of Bangladesh, EMI is largely adopted by private universities in their programs (see Rahman & Singh, 2020) as opposed to public universities, where Bagla is the MOI. In line with the national context, English has become the de facto language of private higher education in Bangladesh. Therefore, Avro's university requires him to teach in English.

The Rationale of EMI Adoption. During the interview, Avro articulated his beliefs regarding the adoption of English as MOI in his university. In line with the global and national trend in private universities, Avro believes that EMI is a legitimate adoption in higher education. According to him, "it

is globalisation that fuelled the spread of English as the MOI in my university, and other universities in Bangladesh."

He views English as a "passport in this globalised world to succeed." Avro also believes that his university adopted the policy because the demand of employers, students, and parents is growing. He said:

As you know, it is a private university. We do not even receive any government funding but have to pay taxes to the government. Thus, we need to attract students to sustain. We, therefore, need to be informed about the demands of the market. If a student knows English, his or her chances of getting a job are higher. Today, all stakeholders associated with the university, from employers to students and parents, demand knowledge of English. EMI did not appear out of vacuum.

Zhang's (2018) study in China and Rahman and Singh's (2020) study in Bangladesh indicate the economic importance of adopting English as the MOI in universities, as it helps to get a better job. In addition, immense importance has been given to English in education and society in Bangladesh. Similar social (and educational) perceptions of English are also evident in other South Asian countries (see Haidar, 2019). Haidar's study (2019) reported the perceived role of English in Pakistan as a passport to a better life. Thus, the adoption of EMI is a consensual decision of the stakeholders in Bangladesh's private

universities, including the one where Avro works.

In the process, instead of being a mere MOI, EMI is perceived and translated into a tool of English language learning. According to Avro, the goal of his university is to produce a graduate who will be able to communicate with the world in the language that has become the language of international communication. According to him:

I think students are going to improve their English through the EMI. They are more exposed to the language through the use of English as an MOI through the relevant input. And because the official language of the university is English, they are forced to communicate in English and think in English, both inside and outside the classroom.

Such beliefs of using English as MOI would help to learn English better is not a belief of Avro alone. In China, Hu and Lei (2014) have revealed that EMI has been adopted to cope with the international trend and develop the English of learners. In addition to this, English is currently the lingua franca of the world and Bangladesh (see Roshid et al., 2022), and therefore employability is largely dependent on it.

Educational Outcomes and Students' Adoption of EMI. Avro explained both sides of the educational aspects of EMI in higher education. He explained the importance of English as the academic

lingua franca in the world, as well as the issues associated with the adaptation of EMI by the students. In his words:

See, the reality is that after sixteen hundred years of losing dominance of Latin, English has emerged in the world as the language of knowledge in the 21st century. It is important for me to read and publish academic articles in English and give presentations in English at international academic conferences. Our students would need the same. Without learning English or learning content in English, it has become difficult to excel in academia. Furthermore, an EMI-based university would develop student competencies for intercultural dialogue, recognizing the personal and societal value of learning itself.

In addition, today English is widely referred to as the lingua franca of academia. As Avro and his university perceived, knowing English is both to gain academic advantage in the globalized academic world as a university and to help students' professional careers. The views of Japanese EMI teachers on the status of English in today's worldwide higher education, as reported by Aizawa and Rose (2019), are largely similar to those of Avro. However, the need and significance of EMI were explicitly expressed in Japan, given the pressure of international rankings and competition to attract international students

to Japan. The study by Song (2019) in China also reported similar views among lecturers and international students studying at a master's program in China.

Avro also realizes there is an issue of language proficiency among the learners in understanding the critical concepts of business studies when it is taught in English. However, he adds that learning might be difficult in the initial stage, but it would help the learners to prosper in the future. As Avro pointed out:

When you lecture in English, and most of your students come from Bangla medium schools and colleges, it is hard for the students to adapt to English-only classrooms initially. However, as soon as they start adapting to the language, it motivates them to aspire to further higher studies because the language of higher education is largely English in the world. It would help them later when they need to read, write, and communicate extensively in English.

As Avro explained the difficulties students face in the beginning to cope with English, he commented on his assistance in overcoming these challenges. In terms of students' adoption of EMI, he believes they need help from the course teachers most. He explains:

See, I ask my students to discuss whether they find anything difficult to understand during my lecture. Not only in terms of language but also the content. If they do not know a term, I try to explain it in simpler words, using synonyms or sometimes using Bangla to make them understand the concept. Besides, I always ask my students to come and see me about the content of the class. My students have adapted well to EMI after the course. And many of my students have gone to college abroad, including those in English-speaking countries.

Educational outcomes and support for students in EMI are also key issues identified in other contexts. However, the challenges of adopting English as the MOI are often time-consuming in the context of mother tongue education. In previous studies, university professors (and other stakeholders) have given less emphasis to the educational outcomes of such policies in higher education (see Bradford, 2018), coupled with the lack of English support during an EMI course, which has often led to barriers to implementation at a later stage (Rahman, Singh, Johan, & Ahmed, 2020), particularly in relation to student achievement. However, Avro is aware of these difficulties and helps students overcome the need for consultation on subjects he teaches and the occasional use of Bangla in the classroom. He describes:

A lot of students struggle with English instruction, so I am using Bangla in some of the lectures in addition to English. So, it is not always in English. However, it is not just a decision of the university or mine, but the priority given to the needs of the students.

Despite such linguistic challenges in the context of his university to implement EMI and reported elsewhere (see Airey, 2012), Avro restates the significance of English and EMI in the educational achievement of his students in a global scenario. Therefore, as discussed above, he has adopted several strategies, including code-switching in the classroom and providing extra consultation to students who face difficulties due to EMI.

Influence of Prior Educational Experience in Shaping Beliefs Regarding English and EMI Adoption

MOI in Avro's Prior University Studies.

The interview data reflected the strong beliefs Avro has regarding the benefits of English as the MOI. His beliefs are not formulated in isolation but are rooted in his educational history. In the conceptual activity, Avro wrote about his educational background and the MOI of the university he graduated from:

I graduated from the 'University of Past' (pseudonym) with a BBA degree. After that, I completed my MBA from the same department. I further went to the USA for another MBA. After returning, I joined my current university where I am now working now as a senior lecturer. My entire tertiary education was

attended in universities, where the medium of instruction is English. However, my secondary and higher secondary studies were from Bangla medium school and college.

The Rationale of EMI Adoption in Those Universities. In explaining the rationale of English as the MOI in his previous universities, he mentioned several reasons, which corresponded to his explanation for the EMI policy of his current university. According to him:

Oh, I think that several aspects have led to the adoption of English at the university where I studied. The impact of globalization was one of the reasons for this. However, during my university days, the country's economy was booming [...] and growing private sectors where English was needed. Besides, English was back then the most widely used language in higher education, and so on. It was the need of the moment. I chose to enroll at a university where I could train for the future. And without English, it was not possible.

As Avro articulated his belief in his previous university using English as the MOI, similar beliefs reported in recent EMI literature similarly express positive views on the need for English and adopting EMI in universities. In Bangladesh, Rahman and Singh (2020) explored the positive outlook

of learners regarding the adoption of EMI, taking into account the benefits of learning the subject content in English. In Rahman, Singh, and Karim (2020), the ideological stance of teachers regarding their MOI adoption of MOI in their universities often followed the path of their previous universities from which they had graduated.

Educational Outcomes and Adaptation Strategies in The EMI Environment by

Avro. The educational outcomes of studying in an EMI university were positive for Avro. He explained how EMI helped him comply with the current trend in higher education globally, that is, English as the medium of instruction. He said:

EMI helped me save time translating everything into English, which my friends in Bangla medium universities used to do when they faced difficulties in understanding English even of the later stages in academia. Later it helped me to learn content quickly and I could retain a good CGPA in my courses. This indicates that learning was not abrupt due to EMI. Moreover, many concepts of business studies today are in English. Thus, I believe the knowledge of English helped me to understand the content more. Not to forget, my English competence allowed me to adapt linguistically and culturally in foreign soil, which happened when I studied at an English medium university.

Although Avro believes that EMI at his previous university was important in his academic and professional career, he also articulated the difficulties as a Bangla medium learner he had to face, which have influenced his teaching strategy. He described:

It was not easy at the beginning, I had to go to my lecturer in consulting hours to get to know the complex concepts he explained in English. I often ask my students to do the same to address language or content issues. Once I had a conversation with my teacher about any part of the lesson, it was sorted out. That is how, despite my Bangla-medium background, I attended my studies in the EMI environment.

EMI students often report their difficulties in coping with English as their MOI and end up compromising content learning (Hu & Lei, 2014). Avro revealed the difficulties he had encountered during the early stages in coping with the new MOI; however, he also understood the educational potential of English as the MOI in higher education, which he later accomplished. These educational beliefs are evident in the study of Ali and Hamid (2018) in the context of Malaysia. In addition, Avro believes that consulting with his course teachers/instructors gave him tremendous confidence and he benefitted from dealing with their English lectures. Remarkably, his experience and understanding of the importance of EMI have largely influenced his beliefs as an EMI business teacher today.

Avro's Positive Experience of EMI in Prior Universities. In the narrative, Avro mentioned his positive experience with EMI in his university, which later became a reason to accept and encourage the current EMI adoption and practice of EMI by his university. He wrote:

The most important part of the MOI in my university was the expanding use of English in my educational and professional life. Once you get adapted to a lecture in English, you become familiar with the terminologies of business studies around the world. In addition, you attain the ability to read and write business discourses through such use of English. It helped me to go abroad for higher education in a native English-speaking country and is helping me greatly with my current job as a teacher at an EMIbased university. Last but not least, learning English not only allowed me to be multilingual but also transformed me into a multicultural global citizen.

In his statements, Avro mentioned that the knowledge he had constructed in his higher education was helped by EMI immensely. It also opened new doors to him academically, linguistically, and culturally. A similar dimension of the benefit of English and EMI has emerged in the study of Hamid et al. (2013) in Bangladesh, where the participants expressed the cultural value attached to the language encouraged

EMI adoption. In a nutshell, English made several significant contributions to Avro's educational and professional life through his previous educational experience at EMI universities. The relationship between the impact of previous MOI education on shaping the beliefs of the EMI business teacher.

CONCLUSION

The case study of Avro explains the complex and predictable trajectory of the beliefs, perceptions, and orientations of EMI teachers for any given language policy in higher education based on their prior educational experience. Although case studies are difficult to generalize, the current case has made it possible to capture similar instances from other contexts and analyze the relationship between the beliefs of EMI teachers and their prior learning experience by providing them with meaning.

The positive outlook of Avro regarding the adoption of EMI is evident in the findings. Language policy adoption, as indicated in Spolsky (2009), beliefs associated with language play a key role. In EMI adoption in higher education, stakeholders such as teachers 'beliefs about English and EMI are crucial to EMI adoption in higher education.

The case reported in this study is an ideal example of how a positive English language ideology converges on the deeprooted belief that English proficiency would benefit both students and the teachers at the individual level. Internationalization of higher education plays an important role in the development of such a trajectory of teacher beliefs regarding English and EMI

adoption in higher education (see Rahman & Singh, 2020, for a similar view in their case study). Furthermore, the undeniable role of English in private sector jobs and studying abroad has also influenced the language-related beliefs of Avro in this study (see a similar Chinese case study in Hu & Lei, 2014). Furthermore, as Kirkpatrick and Liddicoat (2017) indicated, the status of English as a global lingua franca and the prestige and importance of English in society is an important factor in the Anglicization of higher education which is in line with the case of Avro in this study.

In the case of Avro, the apprenticeship of observation was found to have a strong influence on his beliefs and attitude toward English and EMI (Lortie, 1975), which theoretically implies that teachers' beliefs are the source of their experience and that teachers form their primary beliefs from observation. Avro's beliefs regarding English and EMI adoption at his current university derived from his prior positive experiences in English medium universities where he studied. He rationalized the adoption of EMI and the importance of English on the basis of several benefits. He also discussed the educational outcomes of EMI in a positive way, mentioning the initial struggle of his students from the Bangla medium. As a result, in his teaching at the current EMI university, he adopted similar approaches as an EMI business teacher to support the students he learned from his teachers, which was not the case in the study by Rahman et al. (2021). This study discovered that a positive EMI experience as a learner could lead to a better positive shape in an EMI teacher's consideration of learners' language challenges reflecting on prior educational history. Dearden and Macaro (2016) study reports a near-close scenario. They collected data from three counties on the beliefs of EMI teachers and found that EMI teachers (qualifications from L1 English-speaking countries) have more generous beliefs about the adoption of English and EMI.

In language policy adoption and implementation, beliefs and ideology play an important role. The professional development programs with EMI should therefore be informed about the beliefs of teachers in relation to their prior educational experience. Elsewise, as explained by Borg (2015) and Kagan (1992), teachers join the teacher education program with their beliefs regarding teaching and learning of content that has already been formed based on their own learning/educational experience, including the medium or the language of the instruction. Teachers may or may not possess a positive approach towards EMI, which consequently will determine the adoption and implementation of a language policy in higher education (Spolsky, 2009).

It is, therefore, important to discover the source of the language-related beliefs and attitude of EMI teachers and should be explained contextually as to how and why content teachers' positive beliefs about English and EMI have emerged in higher education. The findings of the study explain the complex relationship between prior educational experience and adoption of EMI by exploring teachers' EMI-related beliefs and attitudes. This study also contributes to

an EMI teacher professional development program at an EMI university. Given that prior educational experience influences the rejection or acceptance of any teaching practices while offering training to EMI teachers, their prior educational experience should be explored and handled sensitively. For example, the language-related beliefs of Avro are consistent with the rationale for the language policy adopted by his university, and his prior educational experience has played an important role in shaping his attitude towards English and EMI adoption in higher education. Furthermore, he has adopted several teaching and learning strategies from his teachers.

Based on the prior educational experience, one can reject the adoption of EMI. Therefore, Avro's beliefs and attitudes towards the EMI adoption could also take a different trajectory. Therefore, to let content teachers adopt the EMI policy and implement it in classroom instruction and facilitate teachers' incorporation of new knowledge into university-led professional development programs, it is important to explore their prior educational experience so that EMI policy and practices do not clash with their prior educational experience and their attitude towards EMI.

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REFERENCES

Airey, J. (2012). "I don't teach language": The linguistic attitudes of physics lecturers in Sweden. *AILA Review*, 25(25), 64-79. https://doi.org/10.1075/aila.25.05air

- Aizawa, I., & Rose, H. (2019). An analysis of Japan's English as medium of instruction initiatives within higher education: The gap between meso-level policy and micro-level practice. *Higher Education*, 77(6), 1125-1142. https://doi.org/10.1007/s10734-018-0323-5
- Ali, N. L., & Hamid, M. O. (2018). 13 English-medium instruction and teacher agency in higher education: A case study. In C. S. K. Chua (Ed.), Un(intended) language planning in a globalising world: Multiple Levels of Players at Work (pp. 234-250). Sciendo Migration. https://doi.org/10.1515/9783110518269-013
- Altbach, P. G., & Knight, J. (2007). The internationalisation of higher education: Motivations and realities. *Journal of Studies in International Education*, 11(3/4), 290-305. https://doi.org/10.1177/1028315307303542
- Barkhuizen, G., & Wette, R. (2008). Narrative frames for investigating the experiences of language teachers. *System*, *36*(3), 372-387. https://doi.org/10.1016/j.system.2008.02.002
- Borg, S. (2015). *Teacher cognition and language education: Research and practice*. Bloomsbury Publishing.
- Bradford, A. (2016). Toward a typology of implementation challenges facing Englishmedium instruction in higher education: Evidence from Japan. *Journal of Studies in International Education*, 20(4), 339-356. https://doi.org/10.1177/1028315316647165
- Bradford, A. (2018). It's not all about English! The problem of language foregrounding in English-medium programmes in Japan. *Journal of Multilingual and Multicultural Development*, 40(8), 707-720. https://doi.org/10.1080/014346 32.2018.1551402
- Brumfit, C. (2004). Language and higher education: Two current challenges. *Arts and Humanities in Higher Education*, *3*(2), 163-173. https://doi.org/10.1177/1474022204042685

- Creswell, J. W., & Poth, C. N. (2017). *Qualitative inquiry and research design: Choosing among five approaches* (4th ed.). Sage.
- Cross, R. (2010). Language teaching as sociocultural activity: Rethinking language teacher practice. *The Modern Language Journal*, 94(3), 434-452. https://doi.org/10.1111/j.1540-4781.2010.01058.x
- Dearden, J., & Macaro, E. (2016). Higher education teachers' attitudes towards English medium instruction: A three-country comparison. *Studies in Second Language Learning and Teaching*, 6(3), 455-486.
- Evans, S., & Morrison, B. (2018). Adjusting to higher education in Hong Kong: The influence of school medium of instruction. *International Journal of Bilingual Education and Bilingualism, 21*(8), 1016-1029. https://doi.org/10.1080/13670050. 2016.1228600
- Farrell, T. S. (2020). Professional development through reflective practice for English-medium instruction (EMI) teachers. *International Journal of Bilingual Education and Bilingualism*, 23(3), 277-286. https://doi.org/10.1080/13670050.20 19.1612840
- Fullan, M. (2007). *Leading in a culture of change*. John Wiley & Sons.
- Haidar, S. (2019). The role of English in developing countries: English is a passport to privilege and needed for survival in Pakistan. *English Today*, 35(3), 42-48.
- Hamid, M. O., & Baldauf, R. B. (2014). Public-private domain distinction as an aspect of LPP frameworks: A case study of Bangladesh. *Language Problems and Language Planning*, 38(2), 192-210. https://doi.org/10.1075/lplp.38.2.05ham
- Hamid, M. O., Jahan, I., & Islam, M. M. (2013). Medium of instruction policies and language practices, ideologies and institutional divides:

- Voices of teachers and students in a private university in Bangladesh. *Current Issues in Language Planning*, 14(1), 144-163. https://doi.org/10.1080/14664208.2013.771417
- Hu, G., & Lei, J. (2014). English-medium instruction in Chinese higher education: A case study. *Higher Education*, 67(5), 551-567. https://doi. org/10.1007/s10734-013-9661-5
- Hu, G., Li, L., & Lei, J. (2014). English-medium instruction at a Chinese University: Rhetoric and reality. *Language Policy*, 13(1), 21-40. https:// doi.org/10.1007/s10993-013-9298-3
- Kagan, D. M. (1992). Implication of research on teacher belief. *Educational Psychologist*, 27(1), 65-90. https://doi.org/10.1207/s15326985ep2701 6
- Karim, A., Kabilan, M. K., Ahmed, Z., Reshmin, L., & Rahman, M. M. (2021). the medium of instruction in Bangladeshi higher education institutions: Bangla, English, or both? *Journal* of Language, Identity & Education, 1-15. https:// doi.org/10.1080/15348458.2020.1871353
- Kirkpatrick, A., & Liddicoat, A. J. (2017). Language education policy and practice in East and Southeast Asia. *Language Teaching*, 50(2), 155-188. https://doi.org/10.1017/S0261444817000027
- Kuteeva, M. (2014). The parallel language use of Swedish and English: The question of 'nativeness' in university policies and practices. *Journal of Multilingual and Multicultural Development*, 35(4), 332-344. https://doi.org/10.1080/01434632.2013.874432
- Liddicoat, A. J. (2016). Language planning in universities: teaching, research and administration. Current Issues in Language Planning, 17(3-4), 231-241. https://doi.org/10. 1080/14664208.2016.1216351
- Lortie, D. C. (1975). *Schoolteacher: A sociological study* (Vol. 21). University of Chicago Press.

- Lourenço, M., & Pinto, S. (2019). Expatriate and home teachers' beliefs about English-medium instruction at a Portuguese university. *European Journal of Higher Education*, *9*(3), 252-267. https://doi.org/10.1080/21568235.2019.1597750
- Macaro, E. (2018). *English medium instruction*. Oxford University Press.
- Macaro, E., Curle, S., Pun, J., An, J., & Dearden, J. (2018). A systematic review of English medium instruction in higher education. *Language Teaching*, *51*(1), 36-76. https://doi.org/10.1017/S0261444817000350
- Pajares, M. F. (1992). Teachers' beliefs and educational research: Cleaning up a messy construct. *Review of Educational Research*, 62(3), 307-332. https://doi.org/10.3102/00346543062003307
- Pinto, S. (2017). Language policies in Portuguese public universities: education and research. In C. Guerra, R. Tavares & M. H. Araújo e Sá (Coord), SCoRE'17 Science Communication for Researchers in Education: Autumn School E-Book (pp. 106-109). UA Editora.
- Rahman, M. M., & Pandian, A. (2018a). A critical investigation of English language teaching in Bangladesh: Unfulfilled expectations after two decades of communicative language teaching. *English Today*, *34*(3), 43-49. https://doi.org/10.1017/S026607841700061X
- Rahman, M. M., & Pandian, A. (2018b). The chaotic English language policy and planning in Bangladesh: Areas of apprehension. *Pertanika Journal of Social Sciences & Humanities*, 26(2), 893-908.
- Rahman, M. M., & Singh, M. K. M. (2020). Language ideology of English-medium instruction in higher education: A case study from Bangladesh. *English Today*, *36*(4), 40-46. https://doi.org/10.1017/S0266078419000294
- Rahman, M. M., & Singh, M. K. M. (2021). English Medium university STEM teachers' and students'

- ideologies in constructing content knowledge through translanguaging. *International Journal of Bilingual Education and Bilingualism*, 1-19. https://doi.org/10.1080/13670050.2021.1915950
- Rahman, M. M., Islam, M. S., Hasan, M. K., & Singh, M. K. M. (2021). English medium instruction: Beliefs and attitudes of university lecturers in Bangladesh and Malaysia. *Issues in Educational Research*, 31(4), 1213-1230.
- Rahman, M. M., Islam, M. S., Karim, A., Chowdhury, T. A., Rahman, M. M., Seraj, P. M. I., & Singh, M. K. M. (2019). English language teaching in Bangladesh today: Issues, outcomes and implications. *Language Testing in Asia*, 9(1), 1-14. https://doi.org/10.1186/s40468-019-0085-8
- Rahman, M. M., Singh, M. K. M., & Fersi, M. S. (2020). Multiple case studies on the impact of apprenticeship of observation on novice EFL teachers' cognition and practices. MEXTESOL Journal, 44(4), 1-11.
- Rahman, M. M., Singh, M. K. M., & Karim, A. (2018). English medium instruction innovation in higher education: Evidence from Asian contexts. *Journal of Asia TEFL*, 15(4), 1156-1164. http://doi.org/10.18823/asiatefl.2018.15.4.20.1156
- Rahman, M. M., Singh, M. K. M., & Karim, A. (2020). Distinctive medium of instruction ideologies in public and private universities in Bangladesh. *Asian Englishes*, 22(2), 125-142. https://doi.org/10.1080/13488678.2019.1666493
- Rahman, M. M., Singh, M. K. M., Johan, M., & Ahmed, Z. (2020). English medium instruction ideology, management and practices: A case study of Bangladeshi private university. *English Teaching & Learning*, 44(1), 61-79. https://doi.org/10.1007/s42321-019-00036-z
- Roshid, M. M., Webb, S., & Chowdhury, R. (2022). English as a business lingua franca: A discursive analysis of business e-mails. *International*

- Journal of Business Communication, 59(1), 83-103. https://doi.org/10.1177/2329488418808040
- Sarkar, J. P. S., Karim, A., Kabilan, M. K., & Sultana, S. (2021). A phenomenological study of the language ideology, language management, and language practice in English-Medium universities in Bangladesh: Lecturers' and students' voices. *Qualitative Report*, 26(4), 1248-1274.
- Shouhui, Z., & Baldauf, R. B., Jr. (2012). Individual agency in language planning: Chinese script reform as a case study. *Language Problems and Language Planning*, 36(1), 1-24.
- Song, Y. (2019). English language ideologies and students' perception of international English-Medium-Instruction (EMI) Master's programmes: A Chinese case study. *English Today*, 35(3), 22-28. https://doi.org/10.1017/S0266078418000408
- Spolsky, B. (2009). *Language management*. Cambridge University Press.
- Sultana, S. (2014). English as a medium of instruction in Bangladesh's higher education: empowering or disadvantaging students? *Asian EFL Journal*, *16*(1), 11-52.
- Sultana, S. (2018). Language practices and performances of identity of young adults within spaces of a private university in Bangladesh. Bangladesh English Language Teachers Association (BELTA) Journal, 1(2), 1-28.
- Yin, R. K. (2018). Case study research and applications: Design and methods. Sage publications.
- Zhang, Z. (2018). English-medium instruction policies in China: Internationalisation of higher education. *Journal of Multilingual and Multicultural Development*, 39(6), 542-555. https://doi.org/10.1080/01434632.2017.140407

APPENDIX A

Interview Protocol

Date and time of the interview:

Place of the interview:

Interviewee code:

Semi-Structured Interview questions:

- 1. What is the medium of instruction of the courses or program that you teach in your university?
- 2. Why do you think English is important in the society and education (or higher education)?
- 3. Why do you think English as MOI have been adopted in your university?
- 4. Would you please explain further about the goal of this MOI in the context of global and national higher education?
- 5. How effective would be current MOI of your course or programme to achieve the educational outcomes?
- 6. How do you think the students have adopted English as MOI? Are there any challenges they face?
- 7. How can you help them to overcome the difficulties?

APPENDIX B: NARRATIVE FRAME

Date and time:

Author:

Sentence starrer of narrative frame: MOI of my higher education.			
The MOI of my graduating universities were			
I think my previous universities chose the MOI because			
The educational outcome of the MOI of the programmes was			
My positive/negative reason(s)/experience(s) related with the MOI of my graduating university that influenced to accept/avoid the MOI in my current courses I teach			





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The Role of Regulator and NGOs in Developing Credit Community and Consumer Sovereignty in Malaysia

Daljit Kaur Sandhu*, Afida Mastura Muhammad Arif, Elistina Abu Bakar and Husniyah Abd. Rahim

Department of Resource Management and Consumer Studies, Faculty of Human Ecology, Universiti Putra Malaysia, 43400 Serdang, Selangor, Malaysia

ABSTRACT

The purpose of regulating the Credit Community industry is to standardise moneylenders' business compliance so that consumers may freely choose where to pursue their moneylending transactions. Media reported an increasing trend on breaching of consumers' sovereignty by the moneylenders in Malaysia. Thus, the primary role of regulation effectiveness comes into the limelight. It raises the question of whether regulation enhancement supports or deter consumers' sovereignty. The study was undertaken in Selangor and Kuala Lumpur, where most of the consumers' issues were handled by non-governmental organisations (NGOs). The phenomenology approach was used to extract the three NGO leaders' experiences and four regulator officers' when dealing with the consumers and the licensed moneylenders' issues. Data from semi-structured interviews and moneylending literature were uploaded into Nvivo 12 for thematic analysis. Findings revealed three themes: the non-governmental organisations' role as the "watchdog", the regulator's educational role, and the regulator's role in uplifting consumers' sovereignty. The findings reveal a tendency for consumers with moneylending issues to seek NGOs, which affect the effort of seeking redress. The

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E-mail addresses: gs46591@student.upm.edu.my (Daljit Kaur Sandhu) afidamastura@upm.edu.my (Afida Mastura Muhammad Arif) elistina@upm.edu.my (Elistina Abu Bakar) husniyah@upm.edu.my (Husniyah Abd. Rahim) * Corresponding author implication is for the regulator to take the lead in strengthening a three-way working relationship involving the moneylenders' associations and the NGOs to resolve consumers sovereignty issues.

Keywords: Consumer sovereignty, consumer watchdog, credit community, non-governmental organisations (NGOs), regulation

INTRODUCTION

Notably, moneylending is an expanding industry that meets the credit needs of many Malaysian consumers (Teo, 2016). The main purpose of regulation and licensing of the moneylenders is to protect the interest of the general public against incompetent lenders and provide safety to consumers (Arif, 2006). Nonetheless, critics have expressed that the present regulation of the moneylending industry is detrimental to consumers sovereignty (Adelene, 2013; Markom et al., 2015). Historically, moneylenders in Malaysia were monitored by the respective local council authorities, who each practised their system of enforcement, resulting in administrative issues (Arif & Parry, 2008). When realising the discrepancy and weakness, a centralised regulation approach was undertaken to govern moneylending activities through the main statute, which is the Moneylenders Act (1951) or MLA (Arif & Parry, 2008). In the MLA's preamble, the purpose is clearly stated that it is "An act for the regulation and control of the business of moneylending, the protection of the borrowers of the monies lent in the course of such business and matters connected therewith."

Furthermore, the regulator's good intention of reforming the MLA provisions in 2003 was focused on tightening the moneylenders' compliance and enhancing protection to the consumers. Likewise, according to Arif and Parry (2008), the imposition of statutory rights and duty to moneylenders and borrowers was meant to

elevate the awareness of both contracting parties. However, the improvement in the law in 2003 is counterproductive, especially in essential matters concerning the pre, during and post moneylending contract implementation. Unfortunately, at present many consumers continue to make wrong choices and depend on the information given by the moneylenders when agreeing to the content of the moneylending contract (Guan, 2003). As highlighted by Lee et al. (2017), for consumers to process information accurately and make the right decisions, the document's readability aspect is critical. Thus, it is proposed that for future MLA reform, changes on the Schedules accompanying the moneylending contract are legible for consumers. Apart from that, the name "moneylending" carries a negative connotation among the public, which led the regulator to re-brand the industry name into Credit Community in April 2019 (The Sun Daily, 2019). The main issue embroiled in the licensed moneylending industry is who among the stakeholders shoulders the responsibility of consumer sovereignty. This issue expands to the two sub-issues, which are paucity in the regulator's role in ensuring consumers' protection and the numerous NGOs overlapping roles that do little to protect the consumers. Thus, this study aims to gain deeper insights on the effectiveness of moneylending regulation with the scope of discussion leaning on the perspectives of the two stakeholders: the regulator and the NGOs.

Consumer Sovereignty

According to Tadajewski (2018), the concept of consumer sovereignty itself is varied. In 1936, the concept of consumer sovereignty was popularised by William Harold Hutt, who stated that "the consumer is sovereign when, in his role of citizen, he has not delegated to a political institution for authoritarian use the power which he can exercise socially through his power to demand or refrain from demanding" (Desmarais-Tremblay, 2020; Hutt, 1936). There is also the dual concept of consumer sovereignty which are "descriptive observation" or "freedom to exercise choice" and "normative standard" or "outcomes of choice" (Cvjetanovic, 2013; Duggan, 1991). Meaning, the economic environment enables the consumers to choose and influence the products or services offered by the businesses freely. Averitt and Lande (1996), on the other hand, proposed a unified theory of consumer sovereignty in ensuring a fair and competitive marketplace with adequate options available for consumers. This view was taken from the legal perspective, that two distinctive elements best portray consumer sovereignty: antitrust and consumer protection (Averitt & Lande, 1996). Instead of being passive, consumers should actively participate in the regulatory practice that will benefit them (Ramsay, 2006; Williams, 2007). Cvjetanovic (2013) research on consumer sovereignty in the Australian payday industry credit reforms found that borrowers limited ability to make rational choices demand policy intervention to protect the consumers better. This study

is in line with the local context, where the NGO role is critical in supporting the regulator in creating moneylending education platforms for consumers to share their views. Another rationale for consumers engagement with the NGOs is to provide them with a channel for giving feedback and empowering consumers. One concern is that there is no mechanism to ensure that new regulatory information compliances are timely and accurately disseminated among their officers for the benefit of the consumers.

Despite advocating the importance of consumers' sovereignty at the policy level, there is a paucity of practical methods to monitor and ensure moneylending compliance. It has raised the question of whether the increase in licenses given to new moneylenders is causing more harm to consumers. Is the moneylending regulation not reaching its full potential due to a lack of adherence among moneylenders? These works of literature have deliberated on the concept of "consumer sovereignty," but very few extend the same idea towards consumers' choice, specifically in regulated moneylending. The gap led towards this paper's query whether regulation support or deter sovereignty within the Credit Community in the Klang Valley, Malaysia. Malaysian consumers require a major shift from accepting second best in the licensed moneylending services offered. In addition to allowing consumers to have a position to choose without predatory lending elements, the purpose of regulation is to protect consumers and provide safe access to credit (Markom et al., 2015).

Interestingly, moneylending in Malaysia is highly regulated, but the persisting issues faced by consumers are unfair preparation of contracts (Zolkepli, 2020), incur excessive interest rates (Bernama, 2019) and overpayment of loans (Kamaruddin, 2016). One possibility is that the consumers are not vocally strong enough to exercise their power collectively to treat the moneylenders fairly. This situation is contributed by the common perception among Malaysian consumers that they have no choice but to accept the terms of a transaction (Yusoff et al., 2012). A consumer protection policy with the best outcome for the consumer in mind was brought forward by Izaguirre (2020). Similarly, Lefevre and Chapman (2017) disclosed that reasonable financial consumer choices are not a matter for debate but should be understood and made commonly known to stakeholders. Regulators, together with the policymakers, need to integrate behavioural apprehension in their new policies as it was found to have a positive effect on the financial consumers' protection outcome (Lefevre & Chapman, 2017).

Lefevre and Chapman (2017) also highlighted a good example by the Netherlands regulator that concluded by just imposing financial disclosure to the financial service providers it was insufficient to assist consumers in making their financial choices when faced with pressure and time limitations (The Netherlands Authority for Consumers and Markets, 2013). By gaining new insights on the consumers' bad assessments of some financial products

that give smaller returns in the long term, measures were taken to stop such savings products from being offered to the consumers (The Netherlands Authority for Consumers and Markets, 2013). In the same way, consumers who engage with licensed moneylenders have restricted time and are pressured, which defies their right to make the best choice. This study probes the contributing factors from the NGOs and regulator that does not support the consumers' sovereignty.

Consumer Watchdog

The NGOs in Malaysia mainly alert any unfair business practices, provide suggestions for consumer rights improvements and assist in consumers issues (Hashim, 2002). In the context of this paper, consumer watchdog is an abbreviation that denotes the NGO's role of monitoring the moneylending industry towards achieving good governance practices. Besides leading the rights of consumers, the NGOs function is to observe the government and public establishments quality of services towards the people (Omar & Ismail, 2019). Under the MLA, the regulator is empowered to monitor and control the licensed moneylenders. Likewise, any complaints from the consumers of licensed moneylenders are to be dealt with solely by the regulator. It means, the NGOs important position is to educate and re-direct the consumers to seek assistance from the regulator's officers. Norkus (2003) illustrated that in ensuring that consumer sovereignty is achieved, the principle that "consumer is always right" and the criterion

that "consumer is the king" must be upheld. Whenever there is a dispute, the interest of the consumer overrides the interests of the service provider (Norkus, 2003). To apply what Norkus (2003) proclaimed, whenever there are any issues between the consumers and licensed moneylenders, the NGO role is the proponent of consumers rights. In the event consumers are dissatisfied with the services given by the regulator's officers, they need to be informed that they may voice it out to the NGOs, who in return need to communicate a red flag to the regulator for service improvement.

The Role of the Regulator

Consumers on their own cannot elevate themselves to be sovereign; instead, they depend primarily on the regulator to ensure a safe and fair business transaction environment. Arner and Furchtgott-Roth (2020) stated that "governments should be defenders of consumer sovereignty" even though the principle of "willing buyer" and "willing seller" may limit their role. The regulator can intervene by creating rules involving business transactions when buyers or sellers are at risk and when third parties' interests are harmed (Arner & Furchtgott-Roth, 2020). Tadajewski (2018) criticised how businesses and marketers behave differently with the customers and the regulator where consumer sovereignty is concerned. Through subtle influence, the businesses and marketers influence the consumers to demand through persuasive advertising, limiting freedom of choice.

Nevertheless, when facing the regulator,

the businesses claim to advocate consumer sovereignty (Tadajewski, 2018). Therefore, the role of the regulator is to ensure that the businesses "value the individual's choice" (Tadajewski, 2018). Meanwhile, Williams (2007) suggested that to avoid conflict with the development of consumer sovereignty, more specific studies should be conducted by the regulator on consumers understanding of financial risks and responsible borrowing. Concerning the present study, there are four roles of the regulator: (1) protect the consumers by monitoring the moneylenders are complying with the law; (2) ensure updated moneylending information is disseminated to the consumers, moneylenders and NGOs; (3) provide sufficient social media and traditional media channels for consumers to put in their moneylending related complaints with an acceptable resolution timeline; and (4) actively seek feedback from the consumers, licensed moneylenders and NGOs on the effectiveness of the moneylending business practices.

MATERIALS AND METHOD

There is little qualitative data analysis on the regulatory and NGOs perspectives in the local moneylending industry. On this basis, the research approach taken is via phenomenology founded by Heidegger (1927), which is best for analysing the different perspectives of the two stakeholders on moneylending regulation towards consumers' sovereignty. A similar multi-perspective phenomenological study has been employed in health care research

(Nyanchoka et al., 2019), but few could be found in consumer studies. Guided by Daher et al. (2017), the phenomenology approach was used to extract the three NGO leaders' experiences and four regulator officers' when dealing with the consumers as well as the licensed moneylenders' issues. The study encompassed primary and secondary data where the pilot data collection began in the last quarter of 2018. The actual data collection took a year to complete in 2019, and the background information of the stakeholders was updated as of 2021. The interviews were conducted in dual languages of Malay and English as some participants expressed themselves better in a combination of both. Interviews with NGO 1 and NGO 3 took more than one and a half hours as audio recording consent was not given, but the researcher was allowed to write their responses.

In contrast, NGO 2 interview audio recording consent was given and completed in less than forty-five minutes. The audiorecorded interviews with the regulatory officers were done simultaneously and were completed within four hours. In order to enhance the study's credibility, triangulation of method using semi-structured interviews, information from social media and content analysis was conducted. The three NGOs selected were those who have experience dealing with licensed moneylending complaints and were willing to participate in this study. This requirement resulted in the study location involving Selangor and Kuala Lumpur, which also met the location triangulation criteria.

According to Creswell and Poth (2018), the stakeholders are a group, or a person impacted by the aim of the organisation either indirectly or directly. The multistakeholders selected is to understand their collective perspectives of the phenomena (Casey et al., 2017), which is the role of regulation in consumers' sovereignty. Purposive sampling was adopted for the participants' selection which was guided according to Creswell and Poth (2018). In order to adhere to the context of this study, the NGOs and regulator's participants ability to fulfil the research objective was taken into consideration. Therefore, the multi-stakeholders sampling strategy led to three NGO leaders as well as four officers from the regulator. In order to protect the interviewees' and the stakeholders' identities, a pseudonym was utilised. Table 1 presents the background of the three NGOs.

For instance, NGO 1, is the third establishment that have handled consumers complaints in Kuala Lumpur, while NGO 2 is the first establishment that has been reaching out to consumers throughout the country. Unlike NGO 1 and NGO 2, NGO 3 provides systematic yearly reporting on nationwide consumers moneylending issues. In Table 2, the officers from different sections have worked together in the regulatory division overseeing licensed moneylenders in the country.

The dependability of the study was enhanced with the use of separate interview guides for the two stakeholders. The first part of the interview guide for the NGOs consisted of questions on their background and information on how they operate

Table 1
Non-governmental organisations background

Non-governmental organisation (Pseudonym)	Years established (as of 2021)	Consumers coverage	Consumer complaint handling method
NGO 1	Third	Klang Valley	Membership fees requirement. Provide legal services. Act on behalf of the complainant.
NGO 2	First	Nationwide	Membership fees requirement. Percentage of the recovered loan. Prepares and forward the complaint to the regulator. Provide legal services. Act on behalf of the complainant.
NGO 3	Second	Nationwide	Free of charge. Assist the complainant by forwarding complaints to the regulator. Prepares yearly reporting.

Table 2 Regulator's officers' background

Regulator's officers (Pseudonym)	Responsibility in the moneylending industry	
Officer 1	Section 1	
Officer 2	Section 2	
Officer 3	Section 3	
Officer 4	Section 4	

on moneylending issues. Meanwhile, the second part of the interview guide consisted of probing questions dealing with consumers, licensed moneylenders, and regulators. Likewise, for the regulator, the first part of the questioning was on their work background revolving around the moneylending industry. Whilst the second part consisted of three sections with detailed questions concerning their role in monitoring and enforcing the MLA involving the consumers as well as the licensed moneylenders. Also, the practice of constant comparison allowed the refinements of the interview guides during the progression of interviews from one participant to the other.

Guided by Saldana (2015), the reliability of the study was ensured by transcribing verbatim, reading and re-reading individual transcripts repeatedly throughout the coding process. The coding, categorisation and thematic analysis were conducted using Nvivo 12 with the input of peer-reviews which increased the findings' reliability, as shown in Table 3.

RESULTS

The stakeholders' perspectives led to three themes: the non-governmental organisations' role as the "watchdog", the regulator's educational role and the regulator's role in uplifting consumers' sovereignty.

Table 3

Thematic analysis

The	emes	Sul	p-themes
1.	Non-governmental organisation role as the "watchdog"	1.	Compilation of consumers' complaints
		2.	Non-governmental organisations act as the mediator
	3.	The informants' role to the regulator	
2.	2. Regulator's educational role	1.	Provide timely moneylending information to stakeholders
		2.	Targeted moneylending education to consumers
3.	3. Regulator's role in consumers' sovereignty	1.	Monitor licensed moneylenders
		2.	Enforce compliance with the moneylenders' law
		3.	Improve existing regulation

Theme 1: Non-governmental Organisations' Role as the "Watchdog"

The first theme is derived from the three NGO leaders' perspective of their roles from three sub-themes which were (a) Compilation of consumers complaints, (b) Act as a mediator and (c) The informant role to the regulator.

Sub-theme 1: Compilation of Consumers Complaints. It was found from the interviews that one of the roles of the NGOs is to compile and provide the list of consumers complaints to the regulator for further action. For instance, NGO 1 requires a membership fee before accepting consumers complaints within Klang Valley. Meanwhile, besides charging a membership fee and preparing the documentary evidence on behalf of the complainants, NGO 2 also provide legal services and accepts nationwide complaints but requires a percentage of the recovered loan from the consumers. Whilst, NGO 3 act as a nationwide moneylending complaint forwarding channel to the regulator, which provides free complaint

facilities to consumers via website, phonein, and walk-in handling centres. Among the three NGOs, the highest complaints from consumers are received by NGO 2 as they have a strong social media presence.

Sub-theme 2: Non-governmental Organisations Act as the Mediator. The findings reveal that the NGOs, in many cases, act as the mediator in the situation of disputes brought to them between consumers and licensed moneylenders. In the opinion of NGO 2, there are two instances. First, in rare cases, the licensed moneylenders are honest, but the consumers try to escape from repaying their loans. He further elaborated: "We also try to work with some of the licensed moneylenders, because they also got a problem with non-repayment". Second, the consumers are naïve and ignorant when dealing with licensed moneylenders. Thus, to protect the best interest of consumers, they volunteer to be the mediator. Otherwise, the consumers would be cheated further by the licensed moneylenders as NGO 2 have come across

serious cases where the consumers only remember having signed the documents without understanding its contents.

Sub-theme 3: The Informant Role to the Regulator. NGO 3 mentioned that their organisation publishes yearly consumer complaints and resolution reports which is a means to inform the regulator of any shortcomings in the moneylending industry. Likewise, both NGO 1 and NGO 2 stated they have restricted working relationships with the regulator and were compelled to raid on errant licensed moneylenders with the police in the past. As NGO 1 expressed: "We have no choice but report to the police and join in the raids. At least got some publicity." NGO 2 highlighted that licensed moneylender has become smarter in covering up their mischievous practices. For example, he revealed: "You know to avoid detection of a higher cost of borrowing, these licensed moneylenders encourage the consumers' to select the longest repayment duration. The consumers are happily thinking they are only paying a minimum monthly repayment amount, but they do not realise they are paying more". NGO 1 articulated that some consumers were enticed to take up additional loans and, in some cases, the spouses were put in as guarantors without their knowledge. As a result, the consumers end up repaying for a longer duration and much more than the initial loan amount. Such cases are compiled and shared with the regulator for court submission, but no action is often taken due to insufficient evidence.

Theme 2: Regulator's Educational Role

The second theme is ascertained from the four regulatory officers' perspective from two sub-themes which were (a) Provide timely moneylending information to stakeholders and (b) Targeted moneylending education to consumers.

Sub-theme 1: Provide Timely Moneylending Information to Stakeholders. Officer 1 point of view is that instead of overly depending on the regulator, Malaysian consumers and lenders must be held responsible. He narrated: "Consumers must know their rights before going into any transactions with the licensed moneylenders and vice versa." However, based on the study's findings, according to the NGOs interviewed, consumers still require more awareness and educational programs from the regulator on the moneylending industry. For example, fundamental information such as the name change to the Credit Community may confuse consumers that it refers to new legalised credit providers. Even the Malaysian National Consumer Policy strategy supports the effort on increasing the type and quality of information available to consumers (Afida et al., 2014). Likewise, accurate and timely information from the Malaysian regulator to the NGOs will ensure every stakeholder is on the same understanding of their respective roles (Lahsasna, 2018).

Sub-theme 2: Targeted Moneylending Education to Consumers. Another officer 2 mentioned that consumers are given targeted

moneylending education through social media and traditional media. He elaborated that, at times, the issue is the interpretation of the law and the information to disseminate to the public. He gave an example of a grey area: "The weakness of the law is that no explanation provided on what is accepted as collaterals." This lack of clarification may lead consumers to unknowingly agree with the unfair conditions set by the lenders, which defeat the purpose of the regulator's educational programs. Also, the actual behaviour of consumers when handling the moneylending process is not within reach of the officers. It means that in cases where consumers put themselves at the mercy of licensed moneylenders, the officers cannot pre-warn them.

Theme 3: Regulator's Role in Uplifting Consumers' Sovereignty

The third theme is derived from the four regulatory officers' perspectives from three sub-themes, which are (a) Monitor licensed moneylenders, (b) Enforce compliance with the moneylenders' law, and (c) Improve existing regulation.

Sub-theme 1: Monitor Licensed Moneylenders. With regards to the licensed moneylenders monitoring role, as stated by officer 3 and officer 4: "We usually randomly examine the licensed moneylenders' transaction reports sent to us every year. Also, the current monitoring practice is when there are official complaints from the NGOs, then we do physical checks of the moneylenders' offices." The

selective monitoring practice defeats the important duty of the regulator, which is to monitor the licensed moneylenders' compliance with the law. Meaning the present scope does not allow the regulator to interfere in the daily operations of the moneylender's business activity to provide better choices for consumers, which does little for consumer sovereignty. This finding matches with Marston and Shevellar's (2010) study on the unsporting conditions of Australia's payday regulation resulting in consumers lacking choices and accepting expensive credit.

Sub-theme 2: Enforce Compliance with the Moneylenders Law. One of the major issues faced by consumers, as maintained by officer 1, is not having a copy of the moneylending contract. However, when checked by his officers, the licensed moneylenders were able to furnish proof of the contracts. Some moneylenders even claim of having given a copy to their clients who, according to them, may have misplaced their copies. Officers 1, together with officer 3, went on to deliberate that the responsibility of obtaining the attested copy of the moneylending contract is on the consumers. The study also shed light on the selective compliance among some moneylenders mainly because of limitations in regulatory enforcement and intervention. For instance, the prohibition of consumers additional expenses other than what is approved by the MLA is not complied with by some moneylenders. The practice of inducing consumers to enter separate but binding insurance premium payments also need to be monitored and made known as wrongful to the public by the regulator.

Sub-theme 3: Improve Existing Regulation. Officers 1, 2 and 3 highlighted that most consumers complaints do not reach them directly but through the NGOs. The officers feel that the present law on moneylending limits their ability to act upon NGOs complaints against moneylenders as the complainants cannot produce any tangible proof. Lauding the name change to the Credit Community, they propose a further enhancement to the law that allows the regulator's officers to demand from the moneylenders on full documentary evidence when there is a complaint from the consumers or the NGOs. Taking lessons from the situation in Uzbekistan's banking sector where excessive interventions hampered its growth, regulation is a delicate balance where the focus must be towards industry's development and gaining financial consumers' confidence (Ruziev & Midmore, 2014). Therefore, the regulator should assess the moneylending business developments and societal needs following the reality on the ground. It may be concluded that in future, the formulation of changes to the moneylending policy should include the input of consumers and moneylenders via a separate preliminary multi-stakeholder focus group discussion.

DISCUSSIONS

In answering the study objective of whether regulation enhancement supports or deter consumers' sovereignty, from the findings of the study, theme 1 indicates the NGOs have yet to expand their full potential in being the "eyes, ears and voice" of the Malaysian consumers. The law does not explicitly inform the role of NGOs in regulated moneylending. However, in the context of this study, the NGOs role as the "watchdog" represents their role as the advocacy group in instigating change for the betterment of consumers rights, which were highlighted by past scholars (Paswan & Chowdry, 2015; Wootliff & Deri, 2001). All three NGOs agree that consumers often lack the opportunity to choose licensed moneylenders due to credit rating constraints. Instead of promoting good preventive measures to minimise consumer dissatisfaction, based on the findings, two NGOs are seen to highlight the consumers' complaints via social media. Clearly, in the licensed moneylending context, consumers satisfaction and wants are not fully considered by the stakeholders. The findings contradict what Norkus (2003) emphasised that consumers are sovereign when the economic environment fulfils their satisfaction and adapt to their wants.

Meanwhile, in theme 2 the regulator's educational role constitutes the responsibility of disseminating accurate information on time to the consumers, licensed moneylenders, and NGOs. Furthermore, the regulator's role is to conduct specific money lending educational programs for the benefit of consumers. Unfortunately, theme 2 proves the regulator needs to gather more data on the consumers that are likely to

engage the moneylenders, their expectations and how best to reach out to them on any moneylending educational programmes.

Whereas theme 3, which is the regulator's role in uplifting consumers' sovereignty, means the acknowledgement of the importance of protecting consumers ability to choose that requires more regulatory interventions. Consumerism gave rise to excessive spending resulting in over indebtedness in personal finance (Amanda et al., 2018). Similarly, according to the NGO interviewed, most of the consumers in the licensed moneylending industry were financially weak but had a penchant for spending for consumption. The findings by Paswan and Chowdry (2015) showed that for consumerism to shift to market-based consumer protection besides consumers experiences, time, culture, environment, and support of NGOs, the main dependent factor is the government's intervention. The findings of the present study show that in the Malaysian context, there is a long hurdle to overcome before market-based consumer protection may be achieved. For example, the inadequacy of the present moneylenders' law in enabling the regulator officers to take action against the non-abiding moneylenders does not support the consumers.

The findings of this study led to the formation of the proposed stakeholders' shared goals towards consumer sovereignty in the licensed moneylending industry, as indicated in Figure 1. It shows the prominent role of accountability in a tripartite relationship among the consumers on self-protection, licensed moneylenders

on self-regulation, and regulator on consumer protection. The equal-sided triangle represents the stability angles of this relationship which are closely linked within the decisions made by each of the stakeholders. At the top of the triangle is the vital balancing role of the regulator between the consumers and licensed moneylenders. The bottom part of the triangle is reinforced with the role of the NGOs as the consumer "watchdog." If any stakeholder fails to fulfil their responsibility, it will influence the other party and vice versa. For example, in a situation where the regulator is providing inadequate consumer protection, it affects the quality of the relationship between the consumers and licensed moneylenders, resulting in more complaints handled by the NGOs. On the other hand, when the licensed moneylenders improve their self-regulation, it benefits the consumers with less burden of complaints to the NGOs and the regulator. With new confidence in the industry, consumers will be able to choose among the ethical licensed moneylenders. Thus, the moneylending industry cycle of noncompliance issues will be slowly eradicated, leading to a balanced licensed moneylending business environment supporting consumer sovereignty.

One significant change the regulator may undertake to strengthen the moneylending process is by including a cool-off period of one to two days. Other than knowing their rights to choose, more important is that consumers must be provided with the platform to make the best choice (Howcroft et al., 2003). This option would allow the consumers to decide after having gone

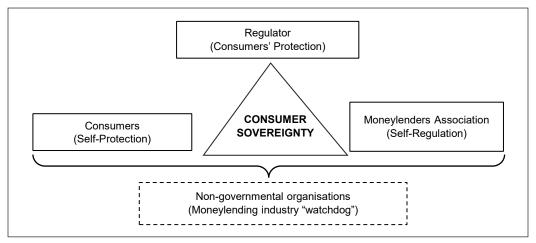


Figure 1. Proposed equal-sided tripartite relationship in licensed moneylending industry Source: Afida et al. (2014)

through the contract with the licensed moneylender whether to take up the personal loan or decline it. With the additional time to reconsider, the consumers have a superior say in taking up the contract and may even re-negotiate it with the moneylender. This view is also advocated by Kaufman (2013), who emphasised that roll-over prohibition and mandatory cool-off are essential to protect payday borrowers in making choices, which is the essence of sovereignty. In defending consumer sovereignty, Arner and Furchtgott-Roth (2020) pointed out that governments, through a thorough understanding of the impact, can limit or ban unfair consumer transactions even though made willingly by the buyers and sellers. Given a suggestion by Arner and Furchtgott-Roth (2020), to assess the level of consumer sovereignty, the Malaysian regulator should re-evaluate the transaction process between the consumers and the licensed moneylenders.

CONCLUSIONS

Claiming to champion consumers' sovereignty will be detrimental for Malaysian policymakers when the changes in the MLA are beyond the reach of common consumers. It can be said that the present state of regulated moneylending is not fully supportive of the consumers. There are 1,493 licensed moneylenders reported in 2020 operating in Selangor and Kuala Lumpur, with each having its own sets of business codes and practices (Ministry of Housing and Local Government, 2021). It is a stark contrast in Ireland; for example, a public consultation effort was conducted to unfold opinions from stakeholders, including the public, on the moneylending interest rates cap, proposal of moneylender's new name change, and methods of advertisement (Department of Finance Report, 2019). Among the advantage of this study is that to improve information flow among the stakeholders, the regulator should adopt prevention strategies and indicators that

denote supportive or detrimental policies for the moneylending industry. NGOs may play a complementary function to the regulator in promoting responsible lending to consumers and moneylenders. To shelve the biased image, instead of siding solely with the consumers, the NGOs should re-think their dominating role as the "new superbrands" (Wootliff & Deri, 2001) and engage actively with the moneylenders' associations to build trust among the stakeholders. Lastly, to resolve consumer sovereignty, access to information is achievable when there is a proactive relationship between the Regulator, moneylender's associations, and NGOs.

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REFERENCES

- Adelene, T. (2013, July 14). Regulating moneylending in Malaysia. *Malaymail*. https://www.malaymail. com/news/what-you-think/2013/07/14/regulating-money-lending-in-malaysia-adeleneteoh/495103
- Afida, M. M., Elistina, A. B., & Syuhaily, O. (2014). Perlindungan pengguna ke arah memperkasakan pengguna di Malaysia [Protection towards strong consumerism in Malaysia]. Malaysian Consumer and Family Economy Association.
- Amanda, F., Possumah, B. T., & Firdaus, A. (2018). Consumerism in personal finance: An Islamic wealth management approach. *Al-Iqtishad Journal of Islamic Economics*, 10(2), 325-340. https://doi.org/10.15408/aiq.v10i2.5518

- Arif, A. M. (2006). Moneylenders law in Malaysia: A comparative study with the United Kingdom [Doctoral dissertation, Universiti Putra Malaysia]. https://hydra.hull.ac.uk/resources/ hull:15167
- Arif, A. M., & Parry, D. (2008). Statutory rights and duties of the parties under the Malaysian moneylenders law. *International Review of Business Research Papers*, 4(3), 11-22.
- Arner, K., & Furchtgott-Roth, H. (2020). Consumer sovereignty and the role of government intervention. *Hudson Institute*, 1-3. https://s3.amazonaws.com/media.hudson.org/3.%20 Consumer%20Sovereignty%20and%20 the%20Role%20of%20Government%20 Intervention%206.3.2020.pdf
- Averitt, N. W., & Lande, R. H. (1996). Consumer sovereignty: A unified theory of antitrust and consumer protection law. *Antitrust Law Journal*, 65, 713-756. https://scholarworks.law.ubalt.edu/cgi/viewcontent.cgi?article=1366&context=all_fac
- Bernama. (2019, October 14). Ministry receives 305 complaints of moneylender misconduct. https://www.bernama.com/en/general/news.php?id=1778990
- Casey, M., O'Connor, L., Nicholson, E., Smith, R., O'Brien, D., O'Leary, D., Fealy, G., Mcnamara, M., Sokes, D., & Egan, C. (2017). The perceptions of key stakeholders of the roles of specialist and advanced nursing and midwifery practitioners.

 Journal of Advanced Nursing, 73(12), 3007-3016. https://doi.org/10.1111/jan.13359
- Cvjetanovic, M. (2013). Consumer sovereignty: The Australian experience. *Monash University Law Review*, 252, 254. https://sevenpillarsinstitute.org/wp-content/uploads/2017/11/Consumer-Sovereignty-EDITED.pdf
- Creswell, J. W., & Poth, C.N. (2018). *Qualitative* inquiry and research design: Choosing among five approaches (4th ed.). SAGE Publications.

- Daher, M., Carre, D., Jaramillo, H., & Tomicic, A. (2017). Experience and meaning in qualitative research: A conceptual review and a methodological device proposal. *Forum: Qualitative Social Research*, 18(3), 9. https://www.qualitative-research.net/index.php/fqs/article/view/2696/4129
- Department of Finance Report. (2019). Public consultation Capping the cost of licensed moneylenders and other regulatory matters. Gov. ie https://www.gov.ie/en/consultation/81d5a4-public-consultation-capping-the-cost-of-licensed-moneylenders-and-ot/
- Desmarais-Tremblay, M. (2020). WH Hutt and the conceptualization of consumers' sovereignty. *Oxford Economic Papers*, 72(4), 1050-1071. https://doi.org/10.1093/oep/gpaa015
- Duggan, A. J. (1991). Some reflections on consumer protection and the law reform process. *Monash University Law Review*, 17(2), 252-284. https://tspace.library.utoronto.ca/bitstream/1807/78140/1/Duggan%20-%20 some%20reflections%20consumer.pdf
- Guan, Y. G. (2003). The long and short of the "Along" problem. Malaysian Bar. http://www.malaysianbar.org.my/general/the_long_and_short of the along problem.html
- Hashim, A. H. (2002). Peranan dan tanggungjawab persatuan pengguna [The the roles and responsibilities of consumer associations]. In N. Yahaya & M. A. Othman (Eds.), Pengenalan sains pengguna (pp.136-147). Universiti Putra Malaysia Press.
- Heidegger, M. (1927). Being and time. A translation of sein und zeit (J. Stambaugh, Trans.). Albany, State University of New York Press. http://www.naturalthinker.net/trl/texts/Heidegger,Martin/Heidegger,%20Martin%20-%20Being%20 and%20Time/Being%20and%20Time.pdf
- Howcroft, B., Hewer, P., & Hamilton, R. (2003). Consumer decision-making styles and the

- purchase of financial services. *Service Industries Journal*, 23(3), 63-81. https://doi.org/10.1080/714005120
- Hutt, W. H. (1936). *Economists and the public*. Jonathan Cape.
- Izaguirre, C. J. (2020). Making consumer protection regulation more customer-centric. CGAP. https://www.cgap.org/research/publication/making-consumer-protection-regulation-more-customer-centric
- Kamaruddin, A. (2016, October 22). Ahlong, licensed moneylenders, powerful? Persatuan Pengguna Islam Malaysia. https://www.ppim.org.my/ruang-bicara-ahlong-pemberi-pinjam-wang-berlesen-berkuasa-bernama-tv-20102016/.
- Kaufman, A. (2013). Payday lending regulation. Finance and Economics Discussion Series Divisions of Research & Statistics and Monetary Affairs Federal Reserve Board. https://pdfs.semanticscholar.org/0d18/4d793cfc7d434890c6a59d93c1b81d3b0c7c.pdf
- Lahsasna, A. (2018). Financial consumer in Malaysia: Regulators efforts and measurements for consumer protection. In *An international comparison of financial consumer protection* (pp. 317-331). Springer. https://doi.org/10.1007/978-981-10-8441-6 11
- Lee, T., Yun, T., & Haley, E. (2017). What you think you know: The effects of prior financial education and readability on financial disclosure processing. *Journal of Behavioral Finance*, *18*(2), 125-142. https://doi.org/10.1080/154275 60.2017.1276064
- Lefevre, A., & Chapman, M. (2017). *Behavioural economics and financial consumer protection* (OECD Working Papers on Finance, Insurance and Private Pensions, No. 42). OECD Publishing. https://doi.org/10.1787/0c8685b2-en
- Markom, R., Ismail, R., Yusoff, S. S. A., & Zakuan, Z. Z. M. (2015). The institutional framework of financial consumers in Malaysia: A legal study.

- *The Social Sciences*, 10(1), 41-45. https://doi.org/10.36478/sscience.2015.41.45
- Marston, G., & Shevellar, L. (2010). The experience of using fringe lenders in Queensland: A pilot study. The University of Queensland. http://www.good4me.com.au/research/UQ_Marston%20 and%20Shevalier%20The-Experience-of-Using-Fringe-Lenders-in-Queensland-A-Pilot-Study%20July%202010.pdf
- Ministry of Housing and Local Government. (2021).

 Active licensed moneylenders statistics 2020.

 https://www.data.gov.my/data/ms_MY/dataset/
 statistik-pemberi-pinjam-wang-dan-pemegangpajak-gadai-berlesen-yang-aktif-mengikutnegeri
- Moneylenders Act 1951 (Act 400) & Regulations (2016). *International Law Books Series*. Golden Books Centre.
- Nyanchoka, L., Tudur-Smith, C., Porcher, R., & Hren, D. (2019). Key stakeholders' perspectives and experiences with defining, identifying and displaying gaps in health research: A qualitative study protocol. *British Medical Journal Open*, 9(8), 1-6. http://dx.doi.org/10.1136/bmjopen-2018-027926
- Norkus, Z. (2003). Consumer sovereignty: Theory and praxis. *Problemos*, 64, 9-24. https://doi.org/10.15388/Problemos.2003.64.5351
- Omar, M. F. H. M., & Ismail, S. H. S. (2019). Development of NGO governance in Malaysia: Lessons from Indonesia and Jordan. *al-Qanatir: International Journal of Islamic Studies*, 13(2), 70-80. http://www.al-qanatir.com/index.php/aq/article/view/146
- Paswan, A., & Chowdhury, J. (2015). Consumer protection issues and non-government Organizations (NGOs) in a Developing Market. *Proceedings of the 2000 Academy of Marketing Science (AMS) Annual Conference*, 171-176. https://doi.org/10.1007/978-3-319-11885-7_39

- Ramsay, I. (2006). Consumer law, regulatory capitalism and the new learning in regulation. *Sydney Law Review*, 28(1), 9-35. https://heinonline.org/HOL/LandingPage?handle=hein.journals/sydney28&div=4&id=&page=
- Ruziev, K., & Midmore, P. (2014). Informal credit institutions in transition countries: A study of urban money lenders in post-communist Uzbekistan. *Post-Communist Economies*, 26(3), 415-435. https://doi.org/10.1080/14631377.201 4.937107
- Saldana, J. (2015). *The coding manual for qualitative researchers* (3rd ed.). SAGE Publications.
- Tadajewski, M. (2018). Critical reflections on the marketing concept and consumer sovereignty. In *Routledge companion to critical marketing* (pp. 196-224). Routledge. https://doi.org/10.4324/9781315630526-12
- The Netherlands Authority for Consumers and Markets. (2013). *Behavioural economics and competition policy*. Authority for Consumers and Markets. https://www.acm.nl/en/publications/publication/11610/ACM-publishes-study-into-behavioural-economics-and-competition-policy
- The Sun Daily. (2019, April 6). Licensed moneylenders now known as Credit Community. https://www.thesundaily.my/local/lincensed-money-lenders-now-known-as-credit-community-CB762422
- Teo, A. (2016), Market-based approach for moneylending in Malaysia. Institute for Democracy and Economic Affairs. https://www.ideas.org.my/publications-item/seanet-perspective-no-9-market-based-approach-formoneylending-in-malaysia/
- Williams, T. (2007). Empowerment of whom and for what? Financial literacy education and the new regulation of consumer financial services. *Law & Policy*, 29(2), 226-256. https://doi.org/10.1111/j.1467-9930.2007.00254.x

- Wootliff, J., & Deri, C. (2001). NGOs: The new super brands. *Corporate Reputation Review,* 4(2), 157-164. https://doi.org/10.1057/palgrave.crr.1540140
- Yusoff, S. S. A., Isa, S. M., Aziz, A. A., & Chin, O. T. (2012). Corporate responsibility via Malaysian contract law: A concern for consumer
- protection. *Pertanika Journal of Social Sciences* & *Humanities*, 20(1), 227-238. https://core.ac.uk/download/pdf/153832224.pdf#page=241
- Zolkepli, F. (2020, April 21). Moneylenders: Let us resume business. *The Star*. https://www.thestar.com.my/news/nation/2020/04/21/moneylenders-let-us-resume-business





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Items for Measuring the Construct of Workplace Oral Communication Skills (WOCS) amongst Civil Engineering Students: Step by Step Using Exploratory Factor Analysis (EFA)

Masadliahani Masduki* and Normah Zakaria

Faculty of Technical and Vocational Education, Universiti Tun Hussein Onn Malaysia (UTHM), 86400 Parit Raja, Johor, Malaysia

ABSTRACT

One of the most crucial factors that influence the success of a construction project is communication. However, past studies found that communication failure frequently occurs at civil engineering workplaces. Among communication failures reported were oral communications, such as giving instruction and briefing; skills, which are supposed to be mastered by engineering graduates during their study years. Thus, students need to equip themselves with proper oral communication skills before they enter the industry. As such, this study aimed to develop a valid and reliable survey instrument to measure Workplace Oral Communication Skills (WOCS) by performing a step-by-step instrument validation through exploratory factor analysis (EFA). The questionnaire consisted of nine components, with 39 items of Workplace Oral Communication Skills (WOCS). In the study, the EFA was carried out in three rotations until every item's factor loading met the minimum requirement of 0.60. Notably, *Bartlett's test of Sphericity* was significant (p <0.05), and the *Kaiser-Meyer-Olkin* test was more than 0.60 in every rotation, which means that the sample size was adequate. Furthermore, all components showed a Cronbach Alpha >0.70, which indicates that the instrument is reliable. The final result of the EFA showed that the WOCS

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E-mail addresses: adliq@yahoo.com (Masadliahani Masduki) norma@uthm.edu.my (Normah Zakaria) * Corresponding author Keywords: EFA, engineering, exploratory factor analysis, oral communication, workplace

construct only had six components with 25 items. Therefore, this study had managed to validate the instrument. Thus, Confirmatory

Factor Analysis (CFA) can proceed in the

next study using the validated instrument.

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INTRODUCTION

Good workplace communication skills can assist engineering students in their career development by allowing them to function effectively in the workplace after graduation. However, recent studies reported an extremely high percentage of communication failures at engineering workplaces (Donnell et al., 2011; Saleh & Murtaza, 2018). Moreover, communication skills are the lowest soft skills dominated by engineering students, especially polytechnic students (Ismail et al., 2017; Mustapha et al., 2014).

Fresh engineering graduates are expected to be capable and excellent in oral communication, regardless of the language they use, as long as they can communicate effectively in the workplace (Sinha et al., 2019). On the other hand, the most important challenge in the construction industry is the lack of communication where poor communication is described as ineffective. unsuccessful, weak, and lack of project information communication processes that should be avoided (Gamil & Rahman, 2017; Yusof et al., 2018). A recent study by Baird and Parayitam (2019) found that 88 percent of the employers in their study rated oral communication as important. In Finalcad's (2020) report, 62 percent of employers stated that communication problems were the main cause of delays in construction projects. Correspondingly, Higher Learning Institutions (HLI) have been blamed for this problem because they are unable to supply graduates with good oral communication skills (Bhattacharyya, 2018).

The main issue and challenge of Technical and Vocational Education and Training (TVET) towards the Fourth Industrial Revolution (IR4) are the mismatches of skills and knowledge of graduates with the demands of the industry, especially in the civil engineering industry (Masduki & Zakaria, 2020). These mismatches include social skills that comprise good oral communication skills (Department of Polytechnic and Community College, 2018).

Poor oral communication skills lead to bad impacts on polytechnic engineering graduates where they find difficulties in searching for employment and are unable to position themselves in the industry (Husain et al., 2015; Ngadiman & Jamaludin, 2018). Notably, oral communication failure affects poor negotiating skills among students (Richards et al., 2020), and difficulties working in a team arise (Ngadiman & Jamaludin, 2018). Hence, the oral communication skills of future engineering graduates must be developed while they are in the institution so that they become effective at the workplace.

TVET institutions have applied various approaches to help students with employability skills, especially oral communication skills. Among the approaches are problem-based learning (Jabarullah & Hussain, 2019), competency-based training (Zakaria et al., 2018b), and extracurricular activities (Zakaria et al., 2018a). However, these efforts seem insufficient as the communication courses at HLI are not supported by the communication

required at the workplace (Hudin et al., 2018). In addition, Winterton and Turner (2019) argued that there was only a little help from the employers to help students cope with the communication skill during their industrial training. Thus, the industry has requested that HLI prepare students with oral communication skills that align with such communication skills in the disciplines as required at the workplace (Bhattacharyya, 2018; Bhattacharyya & Zainal, 2015).

The communication needed in the industry focuses on communicative events, not on the language used. Even though English is crucial in most countries, the use of language at workplaces in Malaysia depends on the needs of the organization. In the Malaysian context, the Malay language is the mother tongue, while English is the lingua franca (the second language), which influences the use of language at the workplace. Small construction companies usually use the Malay language because these companies deal with communities' projects and small government projects. Meanwhile, larger construction companies use both Malay and English because of the need to deal with Government-Linked Companies (GLC) and staff of different races, including foreigners (Masduki & Zakaria, 2020).

Up to now, only a few studies have produced workplace oral communication models for civil engineering students in the country. The research to date has tended to focus on the gap in communication skills between students and the reality in the industry (Fareen, 2018) rather

than determining the workplace oral communication elements or components. Most of the communication elements determined in past studies are general, emphasizing communication skills without focusing on oral communication at the workplace.

Although a few studies have focused on oral communication elements at the workplace, they only cater to the engineers and do not meet the needs of the students, such as the study of Wisniewski (2018). Moreover, many studies that include workplace oral communication do not relate to civil engineering students, such as Kovac and Sirkovic (2017), which concentrated on electrical and mechanical engineering, Cubero (2017) that emphasized multidisciplinary teams, and Hudin et al. (2018), which focused on entrepreneurship. Therefore, a study should be carried out to determine the elements of workplace oral communication skills that need to be learned and mastered by civil engineering students before, during, and after their industrial training.

Elements of Workplace Oral Communication Skills (WOCS)

There are several elements of Workplace Oral Communication Skills (WOCS) that need to be mastered by engineering students.

Oral communication at civil engineering workplaces emphasizes project communication management and discussions within the groups, where these communications also involve oral presentation (Saleh et al., 2019).

Presentation skills are important because the main strength that the employers look for in terms of communication is the graduates' verbal communication, especially the ability to deliver an impactful and effective presentation (Saleh et al., 2019; Solnyshkova & Makarikhina, 2017). Lenard and Pintarić (2018) stressed that students need to master presentation skills because they need to present information to customers or engage with assignments requiring them to speak in front of the audience. Bhattacharyya (2018) insists that oral presentations are becoming more pronounced in the Industrial Revolution 4.0 (IR 4.0) era, where the requirements and conditions of today's presentation are significantly higher than previous requirements.

Two-way communication in meetings is indispensable to any employer in the industry. However, Masduki and Zakaria (2020) found that communication in the meetings held was often one-way, and there was no response from the participants, perhaps because the participants had no idea to speak or were afraid to give any feedback (fear of being wrong or afraid of being criticized). It can be avoided if all participants in the meeting are open and accept the opinions of others and encourage each other.

A face-to-face conversation is essential as it builds up relationships and makes connections inside and outside the organization (Lenard & Pintarić, 2018). This type of conversation is used either formally or informally at the workplace. According to Masduki and Zakaria (2020), a face-to-face conversation enables graduates to

develop their social skills because it makes them involved in numerous interactions, particularly when working in a team.

The telephone conversation was used by 43% in reporting safety issues at construction sites during inspections (Finalcad, 2020). While the study of Spence and Liu (2013) and Spitzberg (2018) found that the internet had competed with phones in communications, Linares and Breeze (2015) insisted that phone calls remain an important method of communication because information can be provided quickly and clearly through telephone conversations.

Briefings are imperative in a civil engineering organization as various elements can be applied when conducting briefings, such as verbal instruction, demonstration, talk on safety issues, discussions, and so on (Lenard & Pintarić, 2018). In addition, Phoya (2017) found that briefings are a safety routine at construction sites requiring responses if the briefing or explanation is unclear.

Finalcad (2020) found that 57% of the instructions delivered at the civil engineering workplace were verbal. Thus, the error of delivering instructions causes misunderstandings that may result in greater problems or errors (Gamil & Rahman, 2017). The spread of weak commands can cause many problems at construction sites (Yap et al., 2018). Safety at the construction site is highly dependent on communication between the workers, particularly in delivery and receiving instructions, where imperfect instructions can lead to accidents (Ahmad, 2016).

Oral communication is a way to make decisions, particularly during discussions regarding duties and policies in an organization (Quintero et al., 2019). Students must prepare themselves with discussion skills as team discussion is critical at the workplace. They must be actively involved in team discussions to avoid conflict and maximize the team's productivity (Masduki & Zakaria, 2020).

In order to be an effective engineer, a student must practice questioning skills and be brave to ask questions to avoid misunderstandings or mistakes in performing their works (Zakaria et al., 2018a). However, the problem faced by most students is that they are shy to ask questions. Zakaria et al. (2019) found that the main shortcoming of engineering students among them was the fear of asking questions, while Zakaria et al. (2018a) insist that engineering students need to be skilled in asking for clarification on specific matters to develop careers effectively.

Technical expertise is undoubtedly significant for an engineer. However, an engineer should also be able to deliver ideas and share knowledge with his or her colleagues. If one idea cannot be well-expressed, team productivity can be affected (Mehta & Jha, 2020). By expressing ideas, graduates will also build their confidence, thus developing their careers well (Zakaria et al., 2018a). Ideas can be obtained through presentations, discussions, or questions and answers (Solnyshkova & Makarikhina, 2017).

Instruments Measuring Workplace Oral Communication Skills (WOCS)

Only a few questionnaires measure Workplace Oral Communication Skills (WOCS). Most established questionnaires measure workplace communication skills in general, not only focusing on oral communication. For example, Gray (2010) developed a WOCS questionnaire consisting of four constructs: listening skills, collegial communication skills, client communication skills, communication skills with management, and general audience analysis skills. However, this questionnaire is only suitable for use in accountancy workplaces.

Mohamed and Asmawi (2018) developed a questionnaire for engineering undergraduate students, but the questionnaire only focuses on technical oral presentations. Likewise, McLaren (2019) also developed a questionnaire in his study but focused on oral presentation, which catered to science students. Besides that, the WOCS questionnaire proposed by Nakatani (2006) emphasized the strategies in English oral communication rather than the elements of oral communication.

Thus, the objective of this study was to explore the suitable elements or components to be used in the research instrument. In addition, this study also aimed to develop a valid and reliable survey instrument that measures Workplace Oral Communication Skills (WOCS) among civil engineering students.

METHOD

Instrument

The questionnaire was developed from an analysis of semi-structured interview sessions by the researchers. The analysis of the interview data in the study used thematic analysis as proposed by Strauss (1987). In the qualitative data encoding model (Strauss, 1987), the categories or constructs are formed based on elements to give accurate meaning to the data obtained.

Prior to the instrument development, experts' approval of constructs and elements was verified. It means the results of the interviews encoded and given the themes went through the expert verification process and Cohen Kappa analysis before being used by the researchers to develop the questionnaire. The value of the total agreement for Cohen Kappa analysis in this study was 0.8, which is at a good level (Viera & Garrett, 2005).

The questionnaire also went through a pre-test (face validity, content validity, and criterion validity process). Therefore, all the necessary changes in the instrument were based on the pre-test result, as shown in Table 1.

The final construct for EFA consisted of nine elements or components, with 39 items as shown in Table 2. A semantic differential scale was used in this study (1 for strongly disagree to 5 for strongly agree). The semantic differential scale is proven to be better than the Likert scale version in terms of model matching and unidimensionality (Friborg et al., 2006; Hair et al., 2006). In addition, all elements in this study focus on communicative events rather than the use of language.

Table 2
Elements and number of proposed items for WOCS
construct

Elen	nents/Components	No. of Item
1.	Oral presentation	5
2.	Meetings	5
3.	Face-to-face conversation	4
4.	Telephone conversation	4
5.	Briefing/ explaining	4
6.	Oral instruction	4
7.	Discussion	4
8.	Questioning	4
9.	Expressing ideas	5
	Total	39

Table 1 Changes based on the pre-test result

Elements/ Components	Existing items	Commented items	Mended items	Removed items
Oral presentation	5	-	-	-
Meetings	5	-	-	-
Face-to-face conversation	5	1	-	1
Telephone conversation	6	2	-	2
Briefing/ explaining	4	-	-	-
Oral instruction	8	4	-	4
Discussion	4	-	-	-
Questioning	5	2	1	1
Expressing ideas	5	-	-	-
Total	47	9	1	8

Participants

The questionnaires were distributed online using Google Forms to 100 Civil Engineering polytechnic students who have just returned from their industrial training. According to Awang (2015), Bahkia et al. (2019), and Rahlin et al. (2019), 100 responses is enough to run the Exploratory Factor Analysis (EFA) in order to obtain reliable estimates of the parameter.

The EFA

EFA is an analysis technique used to identify the factors that influence or do not influence a variable of a study. This method is used to reduce certain numbers of variables and items to a limited number of constructs or dimensions yet still maintains the same characteristics that are to be used in the subsequent analysis (Al-Khamaiseh et al., 2020; Ledesma & Valero-Mora, 2007; Rahlin et al., 2019). To identify the elements of Workplace Oral Communication Skills (WOCS) of Civil Engineering students in the polytechnics, the researchers conducted the Exploratory Factor Analysis (EFA) through Principal Component Analysis

(PCA) method using IBM SPSS 25.0. The EFA was performed using the extraction method of the principal component through a varimax rotation.

RESULTS AND DISCUSSIONS

EFA for the First Rotation

This construct was measured using 39 items of WOCS that were listed as L1 to L39. The item statements and their means and standard deviations are shown in Table 3.

EFA using Principal Component Analysis (PCA) was performed as an extraction method for these 39 items to measure the WOCS construct. Table 4 shows that Bartlett's test of Sphericity was significant (p<0.05), and the Kaiser-Meyer-Olkin test was greater than the value of 0.60. It means that the total number of samples used in the study was sufficient and indicates that factor analysis can proceed (Ehido et al., 2020; Muda et al., 2018, 2020; Shkeer & Awang, 2019).

The number of variances contributing to the factors was 75.31%. The orthogonal rotation through the varimax method had established eight factors to explain the

Table 3
The item statements, the mean and standard deviation for items measuring WOCS

Descriptive Statistics					
Item	Item statement	Mean	Std. Deviation		
L1	Present in front of colleagues	3.91	0.712		
L2	Present in front of clients	3.74	0.787		
L3	Present in front of a superior	3.98	0.791		
L4	Sense of humor in presentation	3.46	0.858		
L5	Encourage audiences to ask questions during presentation	4.20	0.739		
L6	Giving responses in meetings	4.00	0.725		
_L7	Two-ways communication in meetings	4.01	0.810		

Table 3 (continue)

	Descriptive Statistics					
Item	Item statement	Mean	Std. Deviation			
L8	Voicing disagreements in meetings	3.83	0.739			
L9	Giving opinion in meetings	4.10	0.704			
L10	Listening carefully/active listening in meetings	4.43	0.624			
L11	Etiquettes in telephone conversation	4.18	0.869			
L12	Use telephone to convey messages clearly	3.99	0.870			
L13	Take messages from telephone conversations to be delivered to others correctly	3.46	1.068			
L14	Use proper language in telephone conversation	4.25	0.770			
L15	Deliver briefings at the construction site before work starts (toolbox meeting)	4.20	0.853			
L16	Explain specific matters to suppliers/ subcontractors	4.23	0.709			
L17	Questioning and answering in briefing	3.97	0.674			
L18	Inject motivational elements in briefings	4.10	0.732			
L19	Able to give clear instructions verbally to subordinates	4.27	0.709			
L20	Able to communicate accurate instructions to colleagues	4.44	0.656			
L21	Receiving instructions from a superior	4.45	0.657			
L22	Receiving instructions from colleagues	4.51	0.611			
L23	Comply with instructions issued by any interested party	4.24	0.605			
L24	Respond to the instructions given	4.28	0.637			
L25	Receive instructions from suppliers/customers	3.96	0.680			
L26	Listen carefully to the instructions given	4.13	0.706			
L27	Asking for opinions	4.33	0.637			
L28	Ask about the things that you do not understand	4.38	0.648			
L29	Ask about the things that you don't know how to do	4.45	0.592			
L30	Ask if there are other things to learn	4.33	0.637			
L31	Conveying a clear message verbally	3.66	0.997			
L32	Conversing fluently	3.59	0.933			
L33	Create work-related conversations	3.47	1.020			
L34	Report the progress of a project orally	3.57	0.987			
L35	Communicate to generate ideas	4.15	0.626			
L36	Always share ideas in solving problems	4.27	0.649			
L37	Express ideas clearly	4.20	0.711			
L38	Convey ideas confidently	4.17	0.739			
L39	Providing quality/ creative ideas	4.12	0.715			

Table 4 KMO and Bartlett's test for WOCS construct (first rotation)

Test	Value
Kaiser-Meyer-Olkin Measure of Sampling Adequacy	0.854
Bartlett's Test of Sphericity	0.000 (sig.)

number of variances, as shown in Table 5. Eight factors were extracted and had eigenvalues exceeding 1. Eigenvalues help determine the number of factors that should be used in the analysis. An orthogonal rotation was selected to ensure that the variables were not correlated. The varimax method rotated the items in certain factors with their load.

In addition to the eigenvalue criteria exceeding 1, the confirmation of factors can

also be determined by looking at the plot of eigenvalue through the scree plot. Based on the scree plot, the number of factors is determined by the eigenvalue, which decreases sharply before the eigenvalue starts horizontally. The number of factors that are retained is the data point above the horizontal line that is drawn (Williams et al., 2010). Figure 1 below also summarizes that only eight factors were taken into account for the construct.

Table 5
Total variance explained for WOCS (first rotation)

Commonant		Eigenvalues	
Component -	Total	Varians (%)	Cummulative (%)
1	15.319	39.280	39.280
2	3.355	8.602	47.883
3	2.542	6.517	54.399
4	2.280	5.847	60.246
5	1.837	4.711	64.958
6	1.535	3.937	68.894
7	1.297	3.326	72.220
8	1.203	3.085	75.305

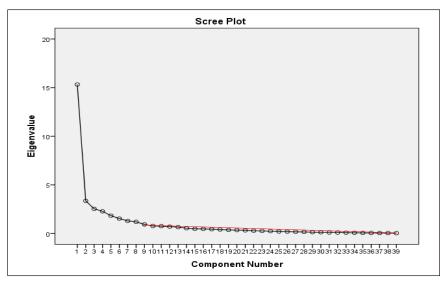


Figure 1. Scree Plot for WOCS (first rotation)

Generally, when looking at the contents of these eight sets of items, the factors are oral instruction (eight items), expressing ideas (five items), briefing or explaining (four items), face-to-face conversation (four items), oral presentation (four items), telephone conversation (four items), discussion (two items), and meetings (two items).

After the review, ten items were removed from the 39 items. These items were L6, L7, L9, L15, L24, L26, L4, L8, L23, and L25. These items had factor loading values that were less than 0.60. According to Hair et al. (2014), items less than the value of 0.60 should be removed because they are insignificant and do not contribute to the constructs.

EFA for the Second Rotation

Next, we conducted a second EFA analysis for WOCS construct after dropping the items with the *factor loading* value <0.60

and setting the factors to extract to 8. Table 6 shows that Bartlett's test of Sphericity was significant (p = 0.000), and the Kaiser-Meyer-Olkin test was greater than 0.70. This value increased compared to the first analysis. It means that the total number of samples used in the study was sufficient and provides an indication that factor analysis can proceed (Alias et al., 2019; Muda et al., 2018, 2020).

The number of variances contributing to the factors was 76.424%. The orthogonal rotation with the varimax method had established six factors to explain the number of variances, as shown in Table 7. Therefore, six factors were extracted and had an eigenvalue that exceeds 1.

Based on the scree plot, it can be formulated that only six factors were considered, as shown in Figure 2.

As a result of the analysis of the second rotation using the scree plot criteria, the six factors formulated were; factor 1,

Table 6
KMO and Bartlett's test for WOCS construct (second rotation)

Test	Value
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	0.866
Bartlett's Test of Sphericity	0.000 (sig.)

Table 7
Total Variance Explained for WOCS (second rotation)

Commonant		Eigenvalues	
Component -	Total	Varians (%)	Cummulative (%)
1	12.213	42.115	42.115
2	2.972	10.250	52.365
3	2.305	7.949	60.314
4	1.933	6.667	66.980
5	1.455	5.018	71.999
6	1.283	4.425	76.424

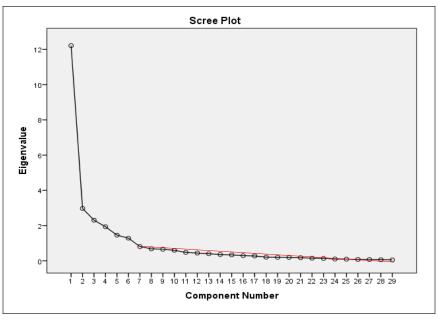


Figure 2. Scree Plot for WOCS (second rotation)

namely, expressing ideas, which had five items; factor 2 was oral instruction that had four items; factor 3 was the face-to-face conversation, which had four items, factor 4 was briefing or explaining which had four items, factor 5, which was the oral presentation with four items, and factor 6, which was the telephone conversation with four items. In this analysis, all the items had a high communality value, > 0.40. However, after the revision was carried out from the second analysis, items L30, L28, L27 and, L10 were removed from the oral communication construct due to the factor loading value of less than 0.60.

EFA for the Third Rotation

Researchers then conducted a third EFA analysis of the construct after dropping the items with a factor loading value < 0.60 and setting the factors to extract to 6. Hooper (2012) pointed out that when deciding on the number of factors, it is highly recommended not to experience performance deficiencies (opting for too few factors). It is considered a bigger mistake than determining too many factors. According to Cattell and Vogelmann (1977), choosing too few factors can lead to deviations in which two factors are combined into a common factor to obscure the actual structure of factors.

Table 8

KMO and Bartlett's test for WOCS construct (third rotation)

Test	Value
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	0.855
Bartlett's Test of Sphericity	0.000 (sig.)

Table 8 shows that Bartlett's test of Sphericity was significant (p = 0.000), and the Kaiser-Meyer-Olkin test was 0.855, which is greater than the value of 0.60. The finding means that the total number of samples used in this study was sufficient and indicates that factor analysis can proceed.

The number of variances contributing to the factors was 79.059%. The orthogonal rotation with the variance method set six factors to explain the variance, as shown in

Table 9. Six factors were extracted and had an eigenvalue that exceeds 1.

Based on the scree plot as shown in Figure 3 below, it can be formulated that only six factors were considered.

As a result of the analysis of third rotation using *the scree plot criteria*, the researchers summarized the six factors: idea-expression (five items), face-to-face conversation (four items), oral instruction (four items), briefing or explaining (four

Table 9
Total Variance Explained for WOCS (third rotation)

C		Eigenvalues	Eigenvalues	
Component -	Total	Varian (%)	Total	
1	10.315	41.258	41.258	
2	2.937	11.749	53.007	
3	2.238	8.953	61.959	
4	1.726	6.903	68.863	
5	1.318	5.271	74.134	
6	1.231	4.925	79.059	

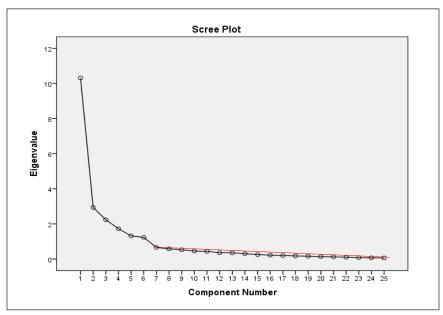


Figure 3. Scree Plot for WOCS (third rotation)

items), oral presentation (four items), and telephone conversation (four items).

The factor loading and communal values of each item are clearly stated in Table 10 below. Table 10 also shows that the item commonality is high. If an item has a communal value that is lower than 0.40, the item will be dropped, while if the item has a communal value approaching or greater than 0.40, the item is retained. In this analysis, all items had high communal values, > 0.40,

and no items were removed from the oral communication construct as all items had a factor loading value of more than 0.60.

The number of items eliminated until the final rotation (third rotation) of the oral communication construct was 14, as shown in Table 11. Overall, from the nine elements and 39 items that were developed to measure the WOCS construct, the final result of EFA showed that the WOCS construct only consisted of six elements and 25 items.

Table 10 Factor loading and communal values for WOCS construct

Itama			Fac	ctor			Extraction value
Item	Idea	Instruction	Conversation	Briefing	Presentation	Telephone	
L37	0.838						0.836
L39	0.826						0.789
L38	0.824						0.834
L36	0.738						0.864
L35	0.636						0.743
L33		0.905					0.897
L34		0.874					0.825
L32		0.869					0.798
L31		0.846					0.792
L21			0.797				0.848
L20			0.756				0.813
L22			0.748				0.825
L29			0.742				0.758
L18				0.822			0.794
L17				0.816			0.734
L19				0.779			0.793
L16				0.684			0.742
L2					0.822		0.811
L3					0.813		0.793
L1					0.716		0.764
L5					0.705		0.722
L12						0.817	0.791
L13						0.765	0.750
L11						0.710	0.708
L14						0.644	0.742

Table 11 Numbers of rotations, eliminated items, and remaining items of WOCS construct

Numbers of rotations	Eliminated items	Numbers of eliminated items	Numbers of remaining items
3	L6, L7, L9, L15, L24, L26, L4, L8, L23, L25 (first rotation), L30, L28, L27, L10 (second rotation)	14	25

Item L6, L7, L8, L9, and L10 belonged to the "meeting" construct. These items were eliminated because the nature of civil engineering workplaces demands engineers to work more at the construction sites rather than at offices (Yusof et al., 2018). So, they would have briefings and discussions more than meetings as meetings usually took place at the offices.

Item L23, L24, L25, and L26 were regarding external instructions outside the organizations. These items were removed because they were less important than internal instructions from the organizations, like the instructions from the superior. Item L4 was regarding the sense of humor in the presentation. This item is not valid as the presentation at engineering workplaces is a serious task (Bhattacharyya & Zainal, 2015) involving coordination, specifications, requirements, progress, budget, and many more, that need to be presented carefully without mistakes. Finally, item L15 was the toolbox meeting. Toolbox meeting in construction projects is usually delivered by a health and safety officer (Phoya, 2017).

Moreover, items L27, L28, and L30 were deleted because these items were related to asking questions/opinions. Students did not find asking questions and opinions important because they were afraid

that they would ask silly questions and be negatively evaluated by others. According to Masduki and Zakaria (2020), students are usually shy to ask questions because they do not want to look incompetent in front of their superiors or colleagues. Therefore, item L29, which was "asking the things they do not know how to do," is not eliminated because students feel it is important to ask their superior if they do not know how to do certain tasks or works so that they will perform the tasks without any mistake and avoid conflicts.

All the remaining items in this study had high factor loadings (> 0.60); thus, these items were pivotal and contributed to the WOCS construct. It means that all the remaining items are valid and undoubtedly portray the construct, which can be used as the instrument to measure workplace oral communication skills in the civil engineering industry.

Internal Reliability

In this study, the internal reliability was measured using *Cronbach's Alpha* for every component (Alias et al., 2019; Ehido et al., 2020). According to Loewenthal (2001), the reliability index of 0.70 and more is satisfactory, while 0.80 and more is good. The reliability index of 0.90 and above

is very well-received. Thus, the higher the alpha value, the higher the reliability of the built-in instrument. The result for *Cronbach's Alpha* for all components was 0.931, as shown in Table 12, which means the instrument is very reliable.

Table 12 Cronbach's Alpha for internal reliability

	Component	Cronbach's Alpha
1.	Idea expression	0.937
2.	Face-to-face conversation	0.929
3.	Oral instruction	0.912
4.	Briefing/ explaining	0.883
5.	Oral presentation	0.861
6.	Telephone conversation	0.806
		0.931

CONCLUSION

The current study enhances the outstanding contribution to the measurement of the WOCS construct, primarily in the context of civil engineering. The outcome of EFA has shaped a formation that determines six components of WOCS that can be measured using the 25 items developed in this study. With the high value of Cronbach Alpha, Bartlett's test of Sphericity was significant, and KMO was > 0.70. All factor loadings surpassed the minimum requirement of 0.60. Thus, this result indicated that the final elements are valid and firm for the samples. Therefore, it can be concluded that the extracted elements or components with their corresponding items are reliable.

The aim of performing an EFA is to define a multidimensional data set using fewer variables (Samuels, 2017). So, all deleted items in the EFA process functioned

to improve the instrument, which means that the instrument became fixed and validated after the EFA. This also means that the eliminated items in this study increased the validity of the instrument. All items with high factor loadings (> 0.60) remained because these items were significant and contributed to the WOCS construct. Thus, the instrument can be used in future research to perform Confirmatory Factor Analysis (CFA). Although CFA has yet to be done, this finding can still be used by civil engineering students to prepare themselves with the oral communication skills needed at the workplace.

Limitations and suggestions for future research

Due to resource and time constraints, the results of this study have several drawbacks that require further study.

This study is limited to elements of oral communication skills at the workplace; as such future research may investigate other constructs of communication skills, such as written and interpersonal communication skills. Besides that, the survey is a method that most researchers widely use as this method saves cost and is consistent in terms of data collection. In this study, the questionnaire was conducted online, and the questions that were posed may not be clear to some respondents and could have influenced a biased response. Therefore, it is proposed that future researchers distribute the questionnaire face-to-face so that they can explain the question items clearly in front of the respondents.

REFERENCES

- Ahmad, D. I. (2016). Kemalangan di tempat kerja [Accidents at work]. *NIOSH Updates*, 9(17), 1-16.
- Al-Khamaiseh, Z., Halim, B. A., Afthanorhan, A., & Alqahtani, A. H. (2020). Exploring and developing items measuring situational leadership II (SLII). *Humanities & Social Sciences Reviews*, 8(2), 579-588. https://doi.org/10.18510/hssr.2020.8266
- Alias, N., Awang, Z., & Muda, H. (2019). Policy implementation performance of primary school leaders in Malaysia: An exploratory factor analysis. *IIUM Journal of Educational Studies*, 7(2), 22-39.
- Awang, Z. (2015). SEM made simple (1st ed.). MPWS Rich Publication Sdn. Bhd.
- Bahkia, A. S., Awang, Z., Afthanorhan, A., Ghazali, P. L., & Foziah, H. (2019). Exploratory factor analysis on occupational stress in context of Malaysian sewerage operations. AIP Conference Proceedings, 2138(1), 050006. https://doi. org/10.1063/1.5121111
- Baird, A. M., & Parayitam, S. (2019). Employers' ratings of importance of skills and competencies college graduates need to get hire. *Education* + *Training*, 61(5), 622-634. https://doi:10.1108/et-12-2018-0250
- Bhattacharyya, E. (2018). Stakeholders perspective on communicative competence in industry 4.0. *SHS Web of Conferences*, *53*, 03001. https://doi.org/10.1051/shsconf/20185303001
- Bhattacharyya, E., & Zainal, A. Z. (2015). What do students and engineers have to say about communicative competence in technical oral presentations? *Pertanika Journal of Social Sciences and Humanities*, 23(S), 123-142.
- Cattell, R. B., & Vogelmann, S. (1977). A comprehensive trial of the scree and kg criteria for

- determining the number of factors. *Multivariate Behavioral Research*, 12(3), 289-325.
- Cubero, S. N. (2017). Essential communication skills for engineers, scientists and multi-disciplinary teams. *International Journal of Information and Education Technology*, 7(7), 483-494.
- Department of Polytechnic and Community College. (2018). Rangka kerja TVET 4.0 (2018-2025) [TVET 4.0 framework (2018-2025)]. Perpustakaan Negara Malaysia.
- Donnell, J. A., Aller, B. M., Alley, M., & Kedrowicz, A. A. (2011, June 26-29). Why industry says that engineering graduates have poor communication skills: What the literature says [Paper presentation]. ASEE Annual Conference and Exposition, Conference Proceedings, Vancouver. https://peer.asee.org/18809
- Ehido, A., Awang, Z., Halim., B. A., & Ibeabuchi., C. (2020). Establishing valid and reliable measures for organizational commitment and job performance: An exploratory factor analysis. *International Journal of Social Sciences Perspectives*, 7(2), 58-70.
- Fareen, J. A. M. (2018). Job focus: Revisiting students' communicative needs and industrial demands. *Journal of Language and Education*, 4(4), 42-53. https://doi.org/10.17323/2411-7390-2018-4-4-42-53
- Finalcad. (2020). Exploring digital transformation in global construction. https://www.finalcad.com/survey-report-exploring-digital-transformation
- Friborg, O., Martinussen, M., & Rosenvinge, J. H. (2006). Likert-based vs. semantic differential-based scorings of positive psychological constructs: A psychometric comparison of two versions of a scale measuring resilience. *Personality and Individual Differences*, 40(5), 873-884. https://doi.org/10.1016/j. paid.2005.08.015

- Gamil, Y., & Rahman, I. A. (2017). Identification of causes and effects of poor communication in construction industry: A theoretical review. *Emerging Science Journal*, 1(4), 239-247. https://doi.org/10.28991/ijse-01121. https://doi. org/ 10.28991/ijse-01121
- Gray, F. E. (2010). Specific oral communication skills desired in new accountancy graduates. *Business Communication Quarterly*, 73(1), 40-67.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2014). Multivariate data analysis (7th ed.). Pearson. https://doi.org/10.1198/tech.2007.s455
- Hair, J. F., Jr.Black, W. C., Babin, B. J., Anderson, R.E., & Tatham, R. L. (2006). *Multivariate data analysis* (6th ed.). Englewood Cliffs.
- Hooper, D. (2012). Exploratory factor analysis. In H. Chen (Ed.), Approaches to quantitative research Theory and its practical application: A guide to dissertation students (pp. 1-33). Oak Tree Press.
- Hudin, N. S., Osman, J., Shokory, S. M., & Wahid, H. A. (2018). Service learning in higher education: Evidence from Malaysia. *International Journal of Engineering & Technology*, 7, 474-479. https://doi.org/10.14419/ijet.v7i3.30.18361
- Husain, M. Y., Mokhtar, S. B., & Alias, A. H. (2015). Polytechnic engineering students perceptions of the employability skills: A case study. Advanced Journal of Technical and Vocational Education, 1(1), 112-122.
- Ismail, I., Ahmad, A. R., & Awang, M. M. (2017). A study of soft skills among polytechnic students. *Open Journal of Social Sciences*, *5*(8), 295-311. https://doi.org/10.4236/jss.2017.58025
- Jabarullah, N. H., & Hussain, H. I. (2019), The effectiveness of problem-based learning in technical and vocational education in Malaysia. *Education + Training*, 61(5), 552-567. https://doi.org/10.1108/ET-06-2018-0129
- Kovac, M. M., & Sirkovic, N. (2017). Attitudes towards communication skills among engineering

- students. English Language Teaching, 10(3), 111-117. https://doi.org/10.5539/elt.v10n3p111
- Ledesma, R. D., & Valero-Mora, P. (2007).
 Determining the number of factors to retain in EFA: An easy-to-use computer program for carrying out Parallel Analysis. *Practical Assessment, Research and Evaluation*, 12(2) 1-12.
- Lenard, D. B., & Pintarić, L. (2018). Comparison of employers' and students' perceptions regarding communication skills. *Journal of Teaching English for Specific and Academic Purposes*, 6(1), 063-082. https://doi.org/10.22190/JTESAP1801063B
- Linares, C. V., & Breeze, J. (2015). Is instant messaging the future of workplace communication within oral and maxillofacial surgery? *International Journal of Oral and Maxillofacial Surgery*, 44(4), e301-e302. https://doi.org/10.1016/j.ijom.2015.08.365
- Loewenthal, K. M. (2001). An introduction to psychological tests and scales (2nd ed.). Psychology Press.
- Masduki, M., & Zakaria, N. (2020). Fulfilling the demand for workplace communication skills in the civil engineering industry. *Pertanika Journal* of Social Sciences and Humanities, 28(4), 3069-3087.
- McLaren, I. (2019). Science students' responses to an oral communication skills development initiative: Attitude and motivation. *International Journal of Teaching and Learning in Higher Education*, 31(1), 73-85.
- Mehta, N. K., & Jha, S. (2020). Facilitation of team communication skill among engineers: An empirical study. *Higher Education, Skills and Work-Based Learning, 11*(2), 435-453.
- Mohamed, A. A., & Asmawi, A. (2018). Understanding engineering undergraduates' technical oral presentation: Challenges and perspectives.

- *International Journal of Language Education and Applied Linguistics*, 8(1) 41-53.
- Muda, H., Baba, Z. S., Awang, Z., Badrul, N. S., Loganathan, N., & Ali, M. H. (2020). Expert review and pretesting of behavioral supervision in higher education. *Journal of Applied Research* in Higher Education, 12(4), 767-785.
- Muda, H., Loganathan, N., Awang, Z., Jusoh, H., & Baba, Z.S. (2018). Application of theory, methodology and analysis in conducting research. A Practical Guide to Quantitative Research and Thesis Writing. UniSZA Publisher.
- Mustapha, R., Husain, M. Y., Mohamad, S. A. M. S, & Mokhtar, S. B. (2014). Persepsi majikan kejuruteraan terhadap tahap kemahiran empolyabiliti pelajar kejuruteraan institusi teknikal: Satu kajian kes [The engineering employers' perceptions towards the level of employability of technical institution engineering students: A case study]. Journal of Science, Mathematics and Technology, 1(2), 41-55.
- Nakatani, Y. (2006). Developing an oral communication strategy inventory. *The Modern Language Journal*, 90(2), 151-168.
- Ngadiman, S. H., & Jamaludin, M. F. (2018). Hubungan di antara kemahiran kerja berpasukan dan kemahiran komunikasi dalam kalangan pelajar semester akhir politeknik. [The relationship between teamwork skills and communication skills among final year students at polythecnics]. *International Journal of Education, Psychology and Counseling*, 3(19), 1-18. https://doi.org/http://www.ijepc.com/PDF/IJEPC-2018-19-09-01.pdf
- Phoya, S. (2017). The practice of communication of health and safety risk information at construction sites in Tanzania. *International Journal of Engineering Trends and Technology*, 47(7), 384-393.
- Quintero, Y. A. R., Sukier, H. B., Capella, J. A. C., & Molina, R. I. R. (2019). Responsible

- communication strategies for small and mediumsized enterprises. *Opción*, 89(2), 1208-1234.
- Rahlin, N. A., Awang, Z., Afthanorhan, A., & Aimran, N. (2019). Antecedents and consequences of employee safety climate in small manufacturing enterprises: Translation, validation and application of generic safety climate questionnaire. *International Journal of Innovation, Creativity and Change*, 7(10), 307-328.
- Richards, J., Guerrero, V., & Fischbach, S. (2020). Negotiation competence: Improving student negotiation. *Self-Efficacy Journal of Education for Business*, 95(8), 553-558.
- Saleh, N. S., & Murtaza, S. F. (2018). English Language use in Malaysian government and private civil engineering workplaces. *International Journal of Education & Literacy Studies*, 6(3), 84-91. https://doi.org/http://dx.doi.org/10.7575/aiac.ijels.v.6n.3p.84
- Saleh, R., Widiasanti, I., & Hermawan, H. (2019). Development of communication competency for civil engineering students. *Journal of Physics:* Conference Series, 1402(2) 022024.
- Samuels, P. (2017). *Advice on exploratory factor analysis*. Birmingham City University. https://doi.org/10.13140/RG.2.1.5013.9766
- Shkeer, A. S., & Awang, Z. (2019). International review of management and marketing exploring the items for measuring the marketing information system construct: An exploratory factor analysis.

 International Review of Management and Marketing, 9(6), 87-97. https://doi.org/10.32479/irmm.8622
- Sinha, S., Ghosh, P., & Mishra, A. (2019). Employability of fresh engineering graduates in India. *Education + Training*, *62*(1), 47-63. doi:10.1108/et-12-2018-0265
- Solnyshkova, O., & Makarikhina, I. (2017). Analysis of forming of students' professional communication

- elements on the base of transporting and civil Engineering university according to the requests of potential employers. *IOP Conference Series:* Earth and Environmental Science, 90(1), 012022.
- Spence, P., & Liu, G. Z. (2013). Engineering English and the high-tech industry: A case study of an English needs analysis of process integration engineers at a semiconductor manufacturing company in Taiwan. *English for Specific Purposes*, 32(2), 97-109. https://doi.org/10.1016/j.esp.2012.11.003
- Spitzberg, B. H. (2018). Preliminary development of a model and measure of
 - Computer-Mediated Communication (CMC) competence. *Journal of Computer-Mediated Communication Preliminary*, 11(2), 629-666. https://doi.org/10.1111/j.1083-6101.2006.00030.x
- Strauss, A. L. (1987). *Qualitative analysis for social scientists*. Cambridge University Press.
- Viera, A. J., & Garrett, J. M. (2005). Understanding interobserver agreement: The kappa statistic. *Family Medicine*, *37*(5), 360-363.
- Williams, B., Onsman, A., & Brown, T. (2010). Exploratory factor analysis: A five-step guide for novices. *Journal of Emergency Primary Health* Care, 8(3), 1-13.
- Winterton, J., & Turner, J. J. (2019). *Preparing graduates for work readiness: An overview and agenda. Education + Training, 61*(5), 536-551. https://doi.org/10.1108/et-03-2019-0044
- Wisniewski, E. C. (2018). Novice engineers and project management communication in the

- workplace. *Technical Communication*, 65(2), 153-168.
- Yap, J. B. H., Abdul-Rahman, H., & Wang, C. (2018). Preventive Mitigation of Overruns with Project Communication Management and Continuous Learning: PLS-SEM Approach. *Journal of Construction Engineering and Management*, 144(5), 04018025. https://doi.org/10.1061/(asce) co.1943-7862.0001456
- Yusof, Z. M., Mohamed, S. F., Misnan, M. S., Habil, H., & Ohueri, C. C. (2018). Improving labor productivity in Iskandar Malaysia: Insights from site supervisors. *Advanced Science Letters*, 24(6), 4162-4165. https://doi.org/10.1166/ asl.2018.11563
- Zakaria, N., Masduki, M., Hamzah, N., Rubani, S. N. K., & Ariffin, A. (2019). Shy engineers? Strategies to eliminate shyness and enhance engineering students' career development. *International Journal of Innovative Technology and Exploring Engineering*, 9(2), 4610-4615. https://doi.org/10.35940/ijitee.b9041.129219
- Zakaria, N., Masduki, M., & Ismail, N. N. (2018a). Eliminating shyness through cocurricular activities towards enhancing the career development of engineering students. *IOP Conference Series: Journal of Physics*, 1049(1), 012057. https://doi.org/10.1088/1742-6596/1049/1/012057
- Zakaria, N., Masduki, M., Kamis, A., Yamin, N. A., & Ismail, N. N. (2018b). Effective Competency-Based Training Learning Environment towards Career Competencies Amongst Vocational Students. *Journal of Engineering Science and Technology*, 13(2018), 18-26.





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Factors Influencing ESL Learners' Behavioural Intention in Using Edmodo: An SEM Approach

Jayanthi Muniandy¹, Malini Ganapathy^{1*} and Munir Shuib^{2,3}

ABSTRACT

This study examines factors influencing ESL learners' behavioural intention in using Edmodo, a social learning network, as a virtual learning community platform under the Unified Theory of Acceptance and Use Technology (UTAUT) model with gender as the moderator variable. A total of 200 English language learners from one of the public universities completed a five-point Likert questionnaire based on the UTAUT constructs: performance expectancy, effort expectancy, social influence, and facilitating conditions. The collected data were analysed using the structural equation modelling (SEM), and the results showed that facilitating conditions were the major predictor of learners' behavioural intention. Besides, the learners' gender had a significant moderation effect on social

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E-mail addresses: jayanthi@usm.my (Jayanthi Muniandy) malinik@usm.my (Malini Ganapathy) munirshuib08@gmail.com (Munir Shuib) *Corresponding author influence and behavioural intention. The findings of this study have the potential to enable English language educators to take into account the importance of the UTAUT factors and gender differences while developing an engaging and active virtual learning community.

Keywords: Edmodo, ESL learners, gender, SEM, UTAUT

¹School of Languages, Literacies and Translations, Universiti Sains Malaysia, 11700 Gelugor, Pulau Pinang, Malaysia

²National Higher Education Research Institute, Universiti Sains Malaysia, 11700 Gelugor, Pulau Pinang, Malaysia

³DRM Learning Consultancy, Penaga, Penang, 13100, Malaysia

INTRODUCTION

The novel coronavirus (COVID-19) has significantly affected the education sector, and educators and learners were placed in a position where they had to adapt to remote learning. Online education has been imposed from preschool to higher education in many countries. However, it should be highlighted that not everyone has the privilege of joining live-streaming classes. As such, web 2.0 tools, also known as 'read/write' web (Holmes, 2007), have become prominent in giving room for synchronous and asynchronous learning because it is accessible and compatible with many devices (Ashari et al., 2018).

Nevertheless, bringing learners together in building a thriving virtual learning community has always been a major challenge among educators, especially in the ESL classroom. In this study, Edmodo, a social learning network site (SLNS), was used as the major platform to bring the learners together virtually. The major reason for this choice is that Edmodo was created from the amalgamation of social network sites (SNS) and learning management systems (LMS), and it has been a meaningful innovation in the field of education (Ashari et al., 2018). Besides, earlier studies have shown that Edmodo eases discussion and enhances learners' academic performance (Algahtani, 2019; Ngo & Ngadiman, 2019). Purnawarman et al. (2016) indicate Edmodo as an assistant for language teachers because the platform's features bring a significant number of advantages to educators during the teaching and learning process. Ekici (2017) states that Edmodo helps in discussion and knowledge sharing.

Nevertheless, the potential of Edmodo in building a successful virtual learning community among ESL learners is still unknown. Some studies have pointed out its drawbacks in terms of accessibility and interaction (Mokhtar, 2016; Simon, 2016). According to Mokhtar (2016), ESL learners believe that they could learn better in a physical classroom rather than in a virtual environment. Mokhtar explains that becoming an autonomous learner is incredibly challenging in the virtual environment because learners are easily distracted when using other internet websites simultaneously. Amid the pandemic, faceto-face classroom interaction has become too risky. Nevertheless, it is crucial to gather all learners to learn virtually to meet the learning outcome.

The lack of comprehensive studies regarding ESL learners' behavioural intention towards Edmodo has resulted in a negligible understanding of learners' behavioural intention of this technology, particularly as a platform for a virtual learning community. The investigation of the factors that influence ESL learners' behavioural intention in using Edmodo has become necessary since the success of Edmodo as a platform for a virtual learning community is greatly dependent upon learners' intention to adopt this educational tool. Although the use of Edmodo is common in developed countries, there is a need to investigate the acceptance of Edmodo in developing countries like Malaysia (Annamalai et al., 2018; Mokhtar, 2016). Besides, using Edmodo as a platform for a virtual learning community is a new learning opportunity in the ESL context, particularly during the COVID-19 pandemic. Therefore, it is essential to identify the factors determining learners' behavioural intention in using Edmodo to create highly qualified education and better learning performances.

In addition, the investigation on the relationship between ESL learners' behavioural intention in using Edmodo and gender differences becomes necessary since the literature suggests that male and female learners acquire language and use technology differently (Islam et al., 2011; Reid, 1995; Tatarinceva, 2009). Although Venkatesh et al. (2003) indicate the importance of including individual differences such as gender while investigating one's behavioural intention in using technology as it could give robust results, many related studies have neglected this claim, and it remains a gap in the literature (Williams et al., 2015). Hence, using the unified theory of acceptance and the use of technology (UTAUT) framework, this study aims to:

- investigate the factors that determine ESL learners' behavioural intention in using Edmodo as a platform for a virtual learning community.
- ii. examine the impact of gender on the relationship between the influential factors and ESL learners' behavioural intention to use Edmodo as a virtual learning community platform.

LITERATURE REVIEW

Edmodo is a social learning network developed by deriving strength from social network sites and learning management systems (Ashari et al., 2018). The canon of the literature suggests that the application of Edmodo in the language learning classes promotes academic performance (Andrienko, 2017; Ngo & Ngadiman, 2019), interaction (Abidin et al., 2018), and enhances language skills (Nguyen & Nguyen, 2019; Warawudhi, 2017). However, factors that influence ESL learners' behavioural intention in using Edmodo as a platform for a virtual learning community are still uncertain.

According to Brahmasrene and Lee (2012), the success of educational technology is determined by learners' behavioural intention towards the use of technology in the learning environment. Ajzen (1991) defines behavioural intention as a direct predictor of an individual's attitude regarding performing or not performing the desired behaviour. Many behavioural intention theories and models have been developed over the last few decades in line with the burgeoning of technology and information system at an unprecedentedly fast rate.

Theoretical Background and Hypotheses Development

The UTAUT was used as the fundamental framework in this study because of its high validity and reliability values in the academic setting in determining learners' behavioural intention in using an educational technology tool (Abu Bakar et al., 2013; Asare et al., 2016). The UTAUT determinants such as performance expectancy, effort expectancy, social influence, and facilitating conditions were developed based on a systematic review of the constructs of eight prominent theories and models (Venkatesh et al., 2003). Some studies have investigated the acceptance of Edmodo through the UTAUT framework (Ashari et al., 2018; Taqwatika et al., 2019) but not specifically from the perspective of English language learners.

Performance Expectancy. Venkatesh et al. (2003) define performance expectancy as the degree to which an individual believes that using the system can increase his or her job performance. In this study, performance expectancy refers to the degree to which an ESL learner believes that the use of Edmodo will increase his or her academic performance and develop language skills. Several scholars have indicated that performance expectancy is an important determinant of users' acceptance of online learning platforms. Ashari et al. (2018), who conducted a study on the use of Edmodo in learning biology, found a positive correlation between performance expectancy and behavioural intention. A similar result was also found in studies conducted in Indonesian universities (Kurniabudi & Assegaff, 2016; Taqwatika et al., 2019). However, other studies indicate that performance expectancy is not an important predictor for learners to adopt a particular educational technology tool (Abu Bakar et al., 2013; Anggoro & Arisantoso, 2018).

Literature suggests that the application of Edmodo in language classes improves learners' language skills such as writing skills (Nguyen & Nguyen, 2019), speaking skills (Sofia & Phil, 2018), and reading skills (Warawudhi, 2017), and learners' overall academic performance (Ngo & Ngadiman, 2019). Besides, Williams et al. (2015), who reviewed 174 articles on the UTAUT framework, state that performance expectancy is the most important predictor in determining users' behavioural intention and followed by social influence in the acceptance of certain technologies or systems. Therefore, the researchers hypothesised:

H₁= Performance expectancy significantly impacts ESL learners' behavioural intention towards using Edmodo.

Effort Expectancy. Effort expectancy refers to the degree of ease in using a system (Venkatesh et al., 2003). In this study, effort expectancy refers to the degree to which an ESL learner uses Edmodo effortlessly in the virtual class. According to Ashari et al. (2018), effort expectancy has a high potential in influencing university students' behavioural intention towards using Edmodo. A similar result has also been reported by Thongmak (2013) in his study: the ease of use contributes significantly towards the behavioural intention to use Edmodo. Although some researchers have found that effort expectancy does not influence learners' behavioural intention in using Edmodo (Anggoro & Arisantoso, 2018; Kurniabudi & Assegaff, 2016), many scholars suggest that Edmodo is a user-friendly platform and it eases learners-educators, learners-learners, and learners-content interactions (Abidin et al., 2018; Ekici, 2017; Khoo et al., 2018). Therefore, the researchers hypothesised:

H₂= Efforts expectancy significantly impacts learners' behavioural intention towards using Edmodo.

Social Influence, Social influence refers to the extent to which an individual believes that people who are important to him or her influence the individual's intention to use a particular technology or a system (Venkatesh et al., 2003). In this study, social influence refers to the degree to which an ESL learner believes that his or her intention to use Edmodo is influenced by people who are important to him or her (e.g., family, friends, and peers). According to Tan (2013), learners usually have a high intention of using an online learning platform when they are influenced to a great extent by important people such as teachers and peers. However, studies have shown that social influence has a nonsignificant relationship with learners' behavioural intention to use Edmodo (Ashari et al., 2018; Kurniabudi & Assegaff, 2016; Nuari et al., 2019; Taqwatika et al., 2019). According to Taqwatika et al. (2019), learners are not easily influenced by their peers in determining whether to accept or reject Edmodo because they listen more to their intuition. However, Williams et al. (2015)

describe social influence as an important determinant in influencing an individual's behavioural intention in using technology. In addition, North-Samardzic and Jiang (2015) state that learners' behavioural intention to use an educational technology tool increases when educators prioritise the tool in online learning. Therefore, the researchers hypothesised:

H₃= Social influence significantly impacts ESL learners' behavioural intention towards using Edmodo.

Facilitating Conditions. According to Venkatesh et al. (2003), facilitating conditions refer to the extent to which an individual believes that he or she has organisational and technical infrastructure support to assist in the use of the system. In this current study, facilitating conditions refer to the degree to which an ESL learner believes that an educational institution and technical infrastructure support exist to help him or her use Edmodo. In the original UTAUT model, facilitating conditions affect the actual user behaviour directly. According to Venkatesh et al. (2003), facilitating conditions have become a nonsignificant determinant in predicting behavioural intention in the presence of performance expectancy and effort expectancy. However, many recent studies suggest that facilitating conditions impact learners' behavioural intention significantly in using an online learning platform (Abu Bakar et al., 2013; Asare et al., 2016).

In terms of the adoption of Edmodo, many studies show a positive and significant relationship between facilitating conditions and behavioural intention. The high compatibility and accessibility of Edmodo from learners' devices facilitate the learners in utilising the tool during the teaching and learning process (Anggoro & Arisantoso; 2018; Kapti, 2017; Nuari et al., 2019; Taqwatika et al., 2019). In other studies, facilitating conditions appeared to be nonsignificant predictors because learners receive limited assistance from the institution on the use of Edmodo. One main reason for this nonsignificant relationship is due to the fact that since most of the educators from the higher education institutions used Edmodo according to their preference (Ashari et al., 2018), the learners had to depend on the educators, in the main if they encountered any difficulties in using Edmodo (Ashari et al., 2018; Kurniabudi & Assegaff, 2016). The researchers hypothesised:

H₄= Facilitating conditions significantly impact ESL learners' behavioural intention towards using Edmodo.

Gender Differences. Venkatesh et al. (2003) have highlighted that the inclusion of moderator variables that consist of individual differences such as gender, age, and experience in the UTAUT model is important to get better results. However, it is essential to highlight that most related studies pay less attention to the impact of learners' differences towards technology

acceptance in education. It has become a major gap in the literature. According to Venkatesh et al. (2003), the relationship between performance expectancy and behavioural intention is stronger for male users than female users. The team also indicates that the relationship between effort expectancy, social influence, and behavioural intention is more salient towards female users than the male users towards using a system. In this study, the researchers include ESL learners' gender differences as the moderating effect to obtain a better result for the entire research. A summary of the studies on learners' behavioural intention towards using Edmodo is presented in Table 1.

According to Oxford (as cited in Viriya & Sapsirin, 2014), gender plays an important role in language learning. Literature shows that social factors highly influence the participation of male learners in the English language classroom in comparison to female learners (Tatarinceva, 2009). In another study, Cyfeku (2013) states that female learners outperform their counterparts in the English classroom. In online learning, male learners prolifically utilise the online learning tool compared to female learners (Islam et al., 2011; Liaw & Huang, 2011). Therefore, the researchers hypothesised:

H_{1a}= Gender moderates the relationship between performance expectancy and ESL learners' behavioural intention towards using Edmodo, such that the effect is stronger for male learners than female learners. H_{2a}= Gender moderates the relationship between effort expectancy and behavioural intention towards using Edmodo, such that the effect is stronger for male learners than female learners.

 H_{3a} = Gender moderates the relationship between social influence and behavioural intention towards using Edmodo, such that the effect is stronger for female learners than male learners. H_{4a} = Gender moderates the relationship between facilitating conditions and behavioural intention towards using Edmodo, such that the effect is stronger for female learners than male learners.

Table 1
Past studies on the acceptance of Edmodo under the measurement of the UTAUT framework

Author(s)	Objective	Sample's Institution(s)	Sample	variables	Result
Ashari et al. (2018)	To determine students' interaction behaviour towards Edmodo	Universiti Teknologi MARA, Malaysia	74 Biology students	Utaut factors No moderator	PE+BI EE+BI SI-BI FC-BI
Nuari et al. (2019)	To determine factors that influence the utilisation of Edmodo	SMK Negeri 2 Semarang, Indonesia	178 school students	Utaut factors No moderator	PE+BI EE-BI SI-BI FC+BI
Kapti (2017)	To evaluate the utilisation of Edmodo as an e-learning platform	STMIK Bina Patria, Indonesia	200 school students	Utaut factors & Hedonic Motivation (HM) No moderator	PE+BI EE+BI FC+BI HM+BI SI-BI
Anggoro and Arisantoso (2018)	To analyse students' behavioural intention towards Edmodo as a supplementary tool	Universitas Islam Attahiriyah (UNIAT), Indonesia	UNIAT undergraduates	Utaut 2 factors No moderator	PE-BI EE-BI SI-BI FC+BI HM-BI PV-BI H-BI

Table 1 (Continue)

Author(s)	Objective	Sample's Institution(s)	Sample	variables	Result
Taqwatika et al. (2019)	To analyse learners' acceptance towards Edmodo as an online learning system	SMP Negeri 1, Singaraja, Indonesia	72 school students	Utaut factors No moderator	PE+BI EE-BI SI-BI FC+UB

Note. PE = performance expectancy, EE = effort expectancy, SI = social influence, FC = facilitating conditions, BI = behavioural intention, PV = price value, H = Habit, UB = use behaviour

The conceptual framework of this study is presented in Figure 1.

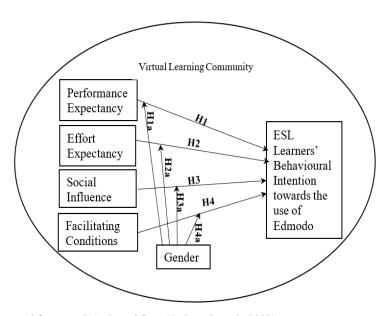


Figure 1. Conceptual framework (Adapted from Venkatesh et al., 2003)

METHODOLOGY

The present study is a cross-sectional study in which the researchers examine the exposure and outcome simultaneously, according to Bhattacherjee (2012). He explains further that a cross-sectional study is the most appropriate if the researcher

intends to test or integrate certain theories. Hence, the researchers of this study employed the descriptive cross-sectional design to examine factors influencing ESL learners' behavioural intention in using Edmodo as a platform for a virtual learning community with the moderating

effect of gender. Besides, the selection of cross-sectional design in this study allows data collection from a massive pool of respondents, increases the generalisability of the findings to large populations, and enables the researchers to look into a phenomenon of interest from multiple perspectives (Bhattacherjee, 2012).

Sampling

The participants of the current study were undergraduates taking English for Specific Purposes courses at Universiti Sains Malaysia in one academic semester. The participants were selected through a stratified random sampling based on the learners' gender differences. The sample size was determined according to Krejcie and Morgan's sample size table. The link for the questionnaire was shared among 210 learners. However, only 200 respondents submitted the questionnaire. Nevertheless, the sample size is deemed sufficient for data analysis, according to Krejcie and Morgan (1970) and Wolf et al. (2013). The study's population comprised 93 male and 107 female respondents, and they came from various faculties at the university.

Research Procedure

The data collection of this current study was approved by Universiti Sains Malaysia's Human Research Ethics Committee. An approval from ESL educators was obtained to recruit their students for this study. Detailed information of this study in terms of content and procedure was explained to both ESL educators and learners. The ESL

educators from the recruited classes are well versed in the use of Edmodo. In fact, they have been using Edmodo as a preferred tool in their English classes. Edmodo was mainly used for the following activities:

- Ongoing discussion on certain topics such as presentation skills, vocabulary skills, reading texts, and others either in the main Edmodo class or small groups.
- ii. Development and sharing of own individual oral presentation slides and video on Edmodo. Learners were encouraged to ask questions and give feedback based on the topics of the presentation.
- iii. Collaboration with other learners for writing activities such as opinion-based essays and response writing.
- iv. Sharing content materials in the form of websites, video, audio, images, and other types of files on Edmodo.

On the 10th week, the questionnaire developed based on a google form was shared with the learners. The estimated time for the respondents to complete the Likert-scale questionnaire was within 15 minutes. Since the current study employed an online survey, the learners were given five days to complete the questionnaire at their convenience. On the fifth day, the questionnaire link was locked to allow for the analysis of the collected data to begin.

Research Instrument

The UTAUT questionnaire items with a five-point Likert scale were adapted to suit the current research context. For example,

the original questionnaire items were intended to use an information system in a corporate organisation (Venkatesh et al., 2003). Since the present research focused on using Edmodo among ESL learners, the term 'information system' was replaced with 'Edmodo' in the questionnaire items. All items in the UTAUT questionnaire had shown high reliability and validity values (Abu Bakar et al., 2013; Kurniabudi & Assegaff, 2016).

The questionnaire's introduction, which consisted of the purpose of the current research, participants' criteria, risks, possible benefits, the confidentiality of the respondents' information, researcher's contact information, and instruction to fill up the questionnaire, were explained in detail. The respondents were also assured that their participation in the survey was completely voluntary, which they could refuse to participate in the research or withdraw from answering the questionnaire.

Data Analysis

In this study, the data were analysed in two stages: preliminary analysis and hypothesis testing. In the first stage, the data were assessed for normality test. Hence, the values of both skewness and kurtosis were examined. According to Field (2009), the data are normally distributed if the value of skewness and kurtosis fall in the range of -1 to +1. Next, the Cronbach coefficient alpha was used to examine the internal consistency of each item in the questionnaire. According to Hinton (as cited in Taherdoost, 2016), the reliability of the questionnaire items is met when Cronbach's alpha value exceeds 0.7.

Next, the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and Bartlett's test of sphericity were performed to examine the suitability of the current questionnaire. The KMO value that exceeds 0.5 indicates that the data can be analysed for factor analysis (Field, 2009). The exploratory factor analysis (EFA) was used to examine the construct validity. Factor loadings that have a value of above 0.5 are known to be significant (Bhattacherjee, 2012). The confirmatory factor analysis (CFA) was performed to examine the adequacy of the measurement model (Hair et al., 2006). The requirements to examine the goodness-of-fit (GoF) model is presented in Table 2 (Hair et al., 2006; Kline, 2013).

Table 2
Requirements of a good fit model

Measure	Requirement	
Normed Chi-square (x^2/df)	< 3	
Goodnees-of-fit Index (GFI)	> 0.9	
Comparative Fit Index (CFI)	> 0.9	
Tucker-Lewis Index (TLI)	> 0.9	
Root Mean Square Error of Approximation (RMSEA)	< 0.08	

The invariance test was conducted during the CFA since the present study also investigates the moderating effect of gender on learners' behavioural intention in using Edmodo. Therefore, it is necessary to examine if the factor structure is equivalent for male and female learners. Then, the convergent and discriminant validity were tested for construct validity through average variance extraction (AVE) and composite reliability (CR).

In the second stage, structural equation modelling (SEM) was performed to analyse the hypotheses in this study. The p-value, coefficient value, and r squared value were determined and explained through AMOS regression weight. A path-analysis was created to show the influence of the key constructs towards ESL learners' behavioural intention in using Edmodo. For the moderating effect hypotheses, a multigroup moderation effect analysis in AMOS was carried out to identify the impact of the moderator variable (i.e., gender) towards the relationship between the predictors and behavioural intention. The significant differences were determined through critical ratio and p-values.

FINDINGS

In the preliminary analysis, it was found that the data of the current study were normally distributed with both skewness and kurtosis values in the acceptable range, as suggested by Field (2009). The internal consistency of each questionnaire item was above 0.8 Cronbach's alpha value. According to Hinton (as cited in Taherdoost, 2016), it

shows the instrument has high reliability. The KMO value of this study is 0.899, and Bartlett's test of sphericity is significant at α =0.000 with a chi-square of 3375.344, indicating the suitability of the data for factor analysis. The construct validity was performed through EFA, and it was found that the correlation coefficient values for each item were greater than 0.3, and the factor loadings for each indicator were determined. According to Hair et al. (2006), factor loadings that exceed a value of 0.5 is considered significant. In this analysis, all the indicators showed a significant value.

The CFA was performed to measure the GoF of the current research model. Based on the requirements described by the statisticians, the model fit indices of the current study are a good fit. Although the GFI and TLI values do not exceed the value of 0.9 (Table 3), they are still deemed acceptable if the value is above 0.8, as proposed by Baumgartner and Homburg (1996). Besides, most of the fit indices fulfil the fundamental requirements in the GoF test. Figure 2 shows the model measurement that was performed through CFA. All the items show significant factor loadings. Modification indices were performed to improve the model fit. As such, error terms between e4 and e5 were covaried.

In terms of the invariance test, the unconstrained model for gender had a good fit (X^2 /df=1.965; GFI=0.862; TLI=0.9; CFI=0.91; RMSEA=0.07), indicating the configural invariance is supported. The value of the chi-square difference between the unconstrained and the fully constrained

Table 3

Measures of a good fit model

Measure	Requirement	Result	Explanation
x^2/df	< 3	2.147	Good
GFI	> 0.9	0.845	Acceptable
CFI	> 0.9	0.908	Good
TLI	> 0.9	0.893	Acceptable
RMSEA	< 0.08	0.070	Good

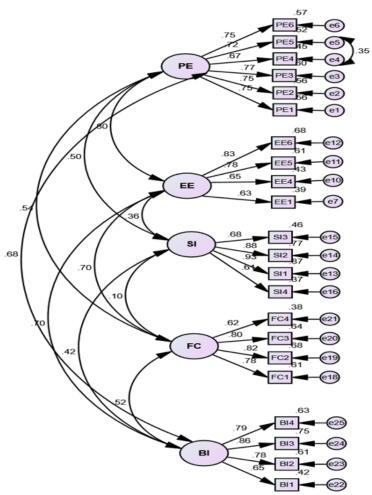


Figure 2. Measurement model

model ($\chi^2 = 4.688$; p > .05) indicates that both groups (male and female) are equivalent across the factor structures, according to Hair et al. (2006). The convergent validity was determined based on the AVE and CR

values. According to Straub et al. (2004), the greater the value of AVE (>0.5) and CR (>0.7), the higher the validity and reliability of the construct. Table 4 shows that the construct validity is at a satisfactory level.

Table 4

Construct validity

Construct	AVE	CR
Performance Expectancy	0.55	0.88
Effort Expectancy	0.51	0.86
Social Influence	0.56	0.86
Facilitating Conditions	0.51	0.84
Behavioural Intention	0.60	0.86

According to Neuman (2014), discriminant validity is measured to determine if the items of different constructs diverge and whether the items of one construct have a low correlation with another

construct. Table 5 shows that the squared correlation of each construct is lower than the square root of AVE. It indicates that the discriminant validity is supported, according to Hair et al. (2006).

Table 5

Discriminant validity

construct	PE	EE	SI	FC	BI
PE	0.74				
EE	0.45	0.7			
SI	0.25	0.28	0.75		
FC	0.27	0.26	0.01	0.76	
BI	0.44	0.33	0.19	0.26	0.77

Note. Diagonal elements (in bold) are square roots of average variance extracted (AVE)

Hypotheses Testing (H₁, H₂, H₃, and H₄)

The hypotheses of the current study were tested through SEM analysis by controlling the learners' age and academic specialisation that may affect the relationship between performance expectancy, effort expectancy, social influence, facilitating conditions, and behavioural intention. Controlling these variables is necessary to increase the validity of the result.

Our structural model in Figure 3 demonstrates a good fit $(X^2/df = 1.915, TLI)$ = 0.954, CFI= 0.983, RMSEA = 0.068). It explains the 50% variance of learners' behavioural intention to use Edmodo as a virtual learning community platform. In addition, the controlled variables do not give any significant effect to learners' behavioural intention in using Edmodo, except the academic specialisation has a slightly negative effect on behavioural intention. Table 6 clearly indicates that the path coefficients are statistically significant as their value of the critical ratio is above 1.96. The table shows that the relationship between performance expectancy and behavioural intention of the ESL learners is significant ($\beta = 0.227$; p = .000). The coefficient value indicates that performance expectancy has a direct, positive, and moderate influence on the ESL learners' behavioural intention in using Edmodo. The ESL learners' behavioural intention to use Edmodo as a virtual learning community platform changes in direct proportion to performance expectancy with a coefficient of 0.227. In the performance expectancy, ESL learners mainly use Edmodo because

they perceive Edmodo as a useful tool in learning ESL to enhance their knowledge and skills.

The relationship between effort expectancy and behavioural intention also appears to be significant ($\beta = 0.228$, p= .002). The coefficient value shows that effort expectancy directly, positively, and moderately influence ESL learners' behavioural intention. The ESL learners' behavioural intention towards using Edmodo as a platform for a virtual learning community change in direct proportion to effort expectancy with a coefficient of 0.228. It indicates that the influence of effort expectancy towards ESL learners' behavioural intention in using Edmodo is stronger than the performance expectancy. The findings indicate that ESL learners prefer to use Edmodo because it eases their learning process, and its features are userfriendly.

Similarly, the relationship between social influence and behavioural intention is significant with $\beta = 0.201$ and p =.000. It shows that social influence has a direct, positive, and moderate influence on learners' behavioural intention. ESL learners' intention to use Edmodo is mainly determined by the influence of their peers and friends. The relationship between facilitating conditions and behavioural intention is also significant ($\beta = 0.229$, p=.004). It suggests facilitating conditions have a direct, positive, and moderate influence on ESL learners' behavioural intention to use Edmodo as a virtual learning community platform. The coefficient value shows that facilitating conditions are the strongest predictor of ESL learners' behavioural intention to use Edmodo as a virtual learning community platform. It is also identified that the amount of assistance determines the ESL learners' intention to use Edmodo that they receive from teachers or peers in using Edmodo and the availability of internet networks. In short, hypotheses H₁, H₂, H₃, and H₄ are supported as presented in Table 6.

Table 6

Path coefficients

Hyp	othesis		β	S.E.	C.R.	P	Result
BI	<	PE	0.227	.079	3.474	***	Supported
BI	<	EE	0.228	.072	3.120	.002	Supported
BI	<	SI	0.201	.044	3.369	***	Supported
BI	<	FC	0.229	.081	2.915	.004	Supported
BI	<	Age (control variable)	0.003	.105	0.059	.953	
BI	<	Academic (control variable)	-0.137	.068	-2.629	.009	

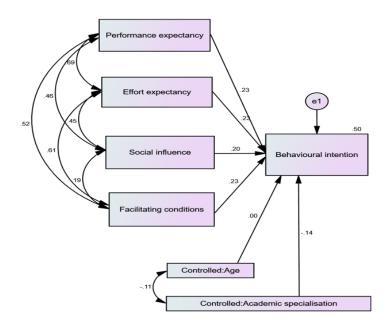


Figure 3. Path analysis H1 - H4

Multi-group Moderation

In order to conduct a categorical moderation hypothesis, the values of critical ratios were determined to examine the differences between male and female learners in using Edmodo. P-values were calculated from these critical ratios. Table 7 indicates that gender moderates the relationship between social influence and behavioural intention significantly. The relationship is stronger for female learners ($\beta = 0.270$) than the male learners ($\beta = 0.062$). In addition, it was identified that peers' influence is stronger

for female learners than male learners. Therefore, hypothesis H_{3a} is supported. It is important to indicate that hypotheses H_{1a}, H_{2a}, and H_{4a} are rejected because gender does not have any significant moderation effect towards the relationship between performance expectancy, effort expectancy, facilitating conditions, and behavioural intention. The relationships between the UTAUT factors, learners' behavioural intention, and gender are presented in Figure 4.

Table 7

Moderating effect of gender

Mu	lti-grou	ıp mod	eration analysis	
BI	<	PE	$Male = 0.287$ $Female = 0.228$ $\Delta Zscore = -0.425$	Not supported
BI	<	EE	Male = 0.285 Female = 0.243 ΔZ score = -0.280	Not supported
BI	<	SI	Male = 0.062 Female = 0.270 ΔZ score = $2.608**$	Supported Stronger for female learners
BI	<	FC	$Male = 0.211$ $Female = 0.272$ $\Delta Zscore = 0.393$	Not supported

Notes. *** p-value < .01; ** p-value < .05; * p-value < .10

DISCUSSION

This study found that facilitating conditions, effort expectancy, performance expectancy, and social influence determine ESL learners' behavioural intention significantly in using Edmodo as a platform for a virtual learning

community, with coefficient values 0.229, 0.228, 0.227, and 0.201, respectively.

Based on the literature and the current findings, performance expectancy constantly showed a significant and direct effect on learners' behavioural intention. The

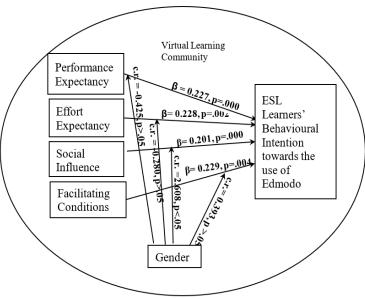


Figure 4. Structural model test results

researchers concurred with Ashari et al. (2018) that learners participate actively in Edmodo to increase academic performance. Similarly, in this study, ESL learners mainly used Edmodo to enhance knowledge, improve language skills, and perform better in academics. It is worth highlighting that in this study, Edmodo, which was utilised for ongoing discussion, oral presentation, and collaborative writing provided ample space for learners to engage in the learning community to enhance their expertise.

In addition, effort expectancy and facilitating conditions showed slightly higher predictive power in determining ESL learners' behavioural intention to use Edmodo as a virtual learning community platform. The findings of this study aligned with previous studies that indicate Edmodo is a user-friendly

platform, which eases the learning process (Ashari et al., 2018; Thongmak, 2013). Thus, the relationship between effort expectancy and behavioural intention in using Edmodo appeared significant. In terms of facilitating conditions, the researchers agreed with Yunkul and Cankaya (2017) that Edmodo is not a university's official e-learning portal in many higher education institutions. Therefore, educators who choose Edmodo as their preferred tool have a high responsibility in guiding and assisting learners to use it. In this study, facilitating conditions were regarded as important predictors because the assistance from the educators and the availability of internet resources significantly influenced learners' intention to use Edmodo.

The strong relationship between facilitating conditions, effort expectancy,

performance expectancy, and behavioural intention implies that the availability of assistance from educators would enhance the efficiency of using Edmodo as a virtual learning community platform among ESL learners. It eventually eases their learning process and improves their learning quality. In other words, the more learners receive technical support, the better is their learning process and learning performance. Hence, facilitating conditions, effort expectancy, and performance expectancy play equal roles in determining ESL learners' behavioural intention to use Edmodo as a virtual learning community platform.

Past studies have shown that social influence does not have any significant effect on learners' behavioural intention to use Edmodo (Anggoro & Arisantoso, 2018; Ashari et al., 2018; Kapti, 2017; Nuari et al., 2019; Taqwatika et al., 2019). On the contrary, this research was premised on the grounds that social influence appeared to be a significant predictor in determining ESL learners' behavioural intention to use Edmodo as a virtual learning community platform. It suggests that the influence from friends and peers plays a fundamental role in determining learners' behavioural intention in using Edmodo. The researchers were in tandem with Fisher et al. (2014) that the involvement of both educators and learners in the community through technology eventually encourages one another to build a successful virtual learning community.

With regards to gender, the multi-group moderation analysis shows that social influence was more salient for female learners, as regards their intention in using Edmodo in comparison to male learners. Thus, the researchers believed and agreed with Venkatesh et al. (2003) that female learners' behavioural intention towards technology is strongly affected by social influence, regardless of the purpose of using technology.

Mokhtar (2016) establishes that most auditory learners have difficulty learning through Edmodo because it does not offer a video conferencing feature, and so they prefer to learn in a physical classroom. Some scholars state that most female learners are auditory learners (Reid, 1995; Viriya & Sapsirin, 2014). According to Reid (1995), auditory learners learn better from oral explanations or hearing words. Hence, this could be why most female learners, auditory learners, need some motivation from both peers and teachers to participate in Edmodo. Since the reviewed literature suggests that both male and female learners learn language differently (Oxford, as cited in Viriya & Sapsirin, 2014; Reid, 1995), it is crucial for language educators to pay attention to learners' differing learning styles when utilising certain online learning platforms for English language learners.

However, it is crucial to highlight that gender is not a significant moderator towards the relationship between performance expectancy, effort expectancy, and facilitating conditions. The findings of the current study contradicted past studies that indicated male learners use online learning platforms better than female learners (Islam et al., 2011; Liaw & Huang, 2011). The

results of this study showed that there were no significant differences between gender and the utilisation of an online learning platform. In addition, the researchers had a different opinion from Cyfeku (2013), who states that female learners outperform male learners in both reading and writing skills in the ESL classroom. In this study, the results showed that the role of gender differences in their academic performance could not be discerned when the learning takes place in the virtual environment.

CONCLUSION

This study explores the factors influencing ESL learners' behavioural intention to use Edmodo as a virtual learning community platform. The findings show a significant association between performance expectancy, effort expectancy, social influence, facilitating conditions, and behavioural intention. It implies that the ESL learners' intention to use Edmodo is greatly determined by the factors mentioned above.

The present study suggests that an effective virtual ESL classroom is not determined by the sophistication and the infusion of technology in the course. However, the value in utilising appropriate technology as a supplementary tool has the potential to bring learners together in the learning process. As such, ESL educators who attempt to build a virtual learning community should consider the UTAUT factors that can influence ESL learners' behavioural intention in using an online learning platform.

Implications

This study shows a significant relationship between the influential factors such as performance expectancy, effort expectancy, social influence, and facilitating conditions on ESL learners' behavioural intention in using Edmodo as a platform for a virtual learning community. Therefore, it is of paramount importance for ESL educators and course designers to embed the concept of a virtual learning community as part of the ESL syllabus.

Besides, the results showed that the application of the virtual learning community through Edmodo did improve not only learners' learning performances but also boosted their confidence and autonomous skills. For this reason, education institutions should run workshops, seminars, and intervention programmes to enhance ESL learners' participation and engagement in a virtual learning community through Edmodo.

Recommendations

It is identified that facilitating conditions, effort expectancy, performance expectancy, and social influence play an essential role in determining ESL learners' behavioural intention in using Edmodo as a platform for a virtual learning community. Therefore, it is recommended that ESL educators ensure that learners receive sufficient assistance, use Edmodo effortlessly, and acquire adequate knowledge and skills in using Edmodo. In addition, it is also important for educators and peers to motivate and assist learners to be involved actively in online

discussions to build a successful virtual learning community.

Some of the findings of the current study contradict previous studies' results, especially on the impact of social influence towards ESL learners' behavioural intention in using Edmodo. It was also identified that facilitating conditions, effort expectancy, and performance expectancy have an equal influence on ESL learners' behavioural intention in using Edmodo. It shows a novelty in the current study. However, further investigation on the acceptance of Edmodo as a platform for a virtual learning community is required, especially from the perspectives of ESL learners.

The current study has disclosed a new finding in which ESL learners' distinctive learning styles in relation to their gender differences can determine their behavioural intention in using Edmodo as a platform for a virtual learning community. Therefore, it is suggested that future research should expand on the UTAUT framework by integrating ESL learners' learning styles with the aim to investigate their behavioural intentions towards using Edmodo as a platform for a virtual learning community.

Since the proposed research model was validated and tested, it can act as a reference for researchers, educators, and policymakers who aim to use Edmodo or other suitable educational tools in the ESL educational context as a platform for a virtual learning community.

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REFERENCES

- Abidin, Z. N. A., Abu Bakar, A. H., & Ali, Z. (2018). Web 2.0: A collaborative learning approach using Edmodo in group discussion. *Journal of Humanities, Language, Culture and Business*, 2(10), 26-36. http://umpir.ump.edu.my/id/eprint/24169
- Abu Bakar, A., Razak, F. Z. A., & Abdullah, W. S. W. (2013). Assessing the effects of UTAUT and self-determination predictor on students continuance intention to use student portal. *World Applied Sciences Journal*, 21(10), 1484-1489. https://doi.org/10.5829/idosi.wasj.2013.21.10.2920
- Ajzen, I. (1991). The theory of planned behavior. Organizational Behavior and Human Decision Processes, 50(2), 179-211. https://doi. org/10.1016/0749-5978(91)90020-T
- Alqahtani, A. S. (2019). The use of Edmodo: Its impact on learning and students' attitudes toward it. *Journal of Information Technology Education: Research*, 18, 319-330.https://doi.org/10.28945/4389
- Andrienko, A. (2017). The role of virtual educational environment in English for specific learning purposes. *Advances in Computer Science Research*, 72, 209-215. https://doi.org/10.2991/itsmssm-17.2017.45
- Anggoro, A., & Arisantoso. (2018). Analisis perilaku dari penerapan e-learning secara tidak penuh terhadap penggunaan aplikasi web Edmodo pada proses belajar mengajar dengan pendekatan UTAUT [Behavioural analysis of a full application of e-learning to the use of the Edmodo web application in the teaching-learning process with the UTAUT approach]. *Maklumatika*, 5(1), 54-63.

- Annamalai, N., Kabilan, M. K., & Annamalai, S. (2018). Enhancing meaningful learning of poems using Edmodo. *Pertanika Journal of Social Sciences and Humanities*, 26(2), 841-858.
- Asare, A. O., Shao, Y. F., & Adjei-Budu, K. W. (2016). Adoption of e-learning higher education: Expansion of UTAUT model. *European Academic Research*, 3(12), 13236-13259.
- Ashari, M. Z. S., Azmi, N., Yaacob, Y., Noor Alshurdin, S. H., & Low, K. F. (2018). Interaction behavior on Edmodo in biology: Integrating UTAUT model. *International Journal of Engineering & Technology*, 7, 104-108. https://doi.org/10.14419/ ijet.v7i3.7.16248
- Baumgartner, H., & Homburg, C. (1996) Applications of structural equation modeling in marketing and consumer research: A Review International Journal of Research in Marketing, 13(2), 139-161. https://doi.org/10.1016/0167-8116(95)00038-0
- Bhattacherjee, A. (2012). Social Science Research: Principles, Methods, and Practices. Global Text Project. http://scholarcommons.usf.edu/oa textbooks/3
- Brahmasrene, T., & Lee, J. W. (2012). Determinants of intent to continue using online learning: A tale of two universities. *Interdisciplinary Journal of Information, Knowledge, and Management*, 7, 1-20.
- Cyfeku, J. (2013). ESP students; variations across gender and proficiency. A case study. *Journal of Educational and Social Research*, *3*(7), 774-781. https://doi.org/10.5901/jesr.2013.v3n7p774
- Ekici, D. I. (2017). The use of Edmodo in creating an online learning community of practice for learning to teach science. *Malaysian Online Journal of Educational Sciences*, *5*(2), 91-106. https://files.eric.ed.gov/fulltext/EJ1142512.pdf
- Field, A. (2009). Discovering Statistics Using SPSS (3rd ed.). Sage Publications Ltd.

- Fisher, A., Exley, K., & Ciobanu, D. (2014). *Using technology to support learning and teaching*. Routledge.
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R.E., & Tatham, R. L. (2006). *Multivariate Data Analysis* (6th ed.). Pearson University Press.
- Holmes, J. (2007). Designing agents to support learning by explaining. *Computers and Education*, 48(4), 523-525. http://doi.org/10.1016/j.compedu.2005.02.007
- Islam, M. A., Rahim, A. A., Tan, C. L., & Momtaz, H. (2011). Effect of demographic factors on e-learning effectiveness in a higher learning institution in Malaysia. *International Education Studies*, 4, 112-121. http://doi.org/10.5539/ies. v4n1p112
- Kapti. (2017). Evaluasi implementasi e-learning Edmodo di STMIK Bina Patria [evaluation of Edmodo eLearning implementation at STMIK Bina Patria]. *TRANSFORMASI Jurnal Informasi & Pengembangan Iptek*, 13(2), 62-68. https://ejournal.stmikbinapatria.ac.id/index.php/JT/article/view/135
- Khoo, Y. Y., Yusof, R., Yap, S., & Zakariya, Z. (2018). The effects of collaborative mobile learning using Edmodo among Economics undergraduates. *International Journal of Academic Research in Progressive Education and Development*, 7(3), 40-47. https://doi.org/10.6007/IJARPED/v7-i3/4283
- Kline, P. (2013). *Handbook of psychological testing*. Routledge
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational* and *Psychological Education*, 30(3), 607-610. https://doi.org/10.1177/001316447003000308
- Kurniabudi. K., & Assegaff, S. (2016). Analisis perilaku penerimaan Edmodo pada perkuliahan dengan model UTAUT [Edmodo acceptance behaviour analysis in lectures using the UTAUT

- model]. *TEKNOSI*, 2(3), 1-10. https://doi.org/10.25077/TEKNOSI.v2i3.2016.1-10
- Liaw, S., & Huang, H. (2011). A study of investigating learners' attitudes toward E-learning. *Proceedings of the 5th International Conference on Distance Learning and Education*, 12, 28-32.
- Mokhtar, F. A. (2016). Recognizing possible limitations of e-learning through Edmodo. *Proceeding of ICECRS. 1*, 243-252. https://doi.org/10.21070/picecrs.v1i1.607
- Neuman, W. L. (2014). Social research methods: Qualitative and quantitative approaches (7th ed.). Pearson New International Edition.
- Ngo, J., & Ngadiman, A. (2019). The impacts of Edmodo on students' performance in ESP classrooms. *International Seminar on Language, Education, and Culture*, 369-378. https://doi.org/10.18502/kss.v3i10.3918
- Nguyen, H. B., & Nguyen, B. T. P. (2019). Edmodo use in ESP writing: Students' perceptions. *European Journal of English Language Teaching*, 4(4), 130-140. https://doi.org/10.5281/zenodo.3240463
- North-Samardzic, A., & Jiang, B. (2015). Acceptance and use of Moodle by students and academics. *AMCIS*, 1-13.
- Nuari, E. S., Nurkhin, A., & Kardoyo. (2019). Analisis determinan pemanfaatan Edmodo dengan menggunakan unified theory of acceptance and use of technology (UTAUT) [determinant analysis of Edmodo utilization using Unified Theory of Acceptance and Use of Technology (UTAUT)]. Jurnal Pendidikan Akuntansi Indonesia, 17(1), 57-73. https://doi.org/10.21831/jpai.v17i1.26337
- Purnawarman, P., Susilawati, S., & Sundayana, W. (2016). The use of Edmodo in teaching writing in a blended learning setting. *Indonesian Journal of Applied Linguistics*, 5(2), 242-252. https://doi.org/10.17509/ijal.v5i2.1348

- Reid, J. M. (1995). *Learning styles in the ESL/EFL classroom*. Heinle & Heinle Publishers.
- Simon, K. (2016). Edmodo: The Facebook of learning platforms. *The Electronic Journal for English as a Second Language*, 20(1), 1-8.
- Sofia, H., & Phil, M. (2018). Video recordings of oral presentation skills and Edmodo app to enhance presentation skills of students. *Challenges and Opportunities for Teaching and Research in English Language and Literature, 18*(6), 110-119. http://www.languageinindia.com/june2018/vitseminarenglish/sofiaoralpresentationfinal.pdf
- Straub, D., Boudreau, M., & Gefen, D. (2004). Validation guidelines for IS positivist research. Communications of the Association for Information Systems, 13, 380-427. https://doi.org/10.17705/1CAIS.01324
- Taherdoost, H. (2016). Validity and reliability of the research instrument; how to test the validation of a questionnaire/survey in a research. *International Journal of Academic Research in Management*, 5(3), 28-36.
- Tan, P. J. B. (2013). Applying the UTAUT to understand factors affecting the use of English e-learning websites in Taiwan. *SAGE Open*, *3*(4), 1-12. https://doi.org/10.1177/2158244013503837
- Taqwatika, S., Agustini, K., & Suyasa, P. W. A. (2019). Analisis penerimaan sistem pembelajaran online Edmodo menggunakan Unified Theory of Acceptance and Use of Technology (UTAUT) Studi kasus: Kelas IX di SMP Negeri 1 Singaraja [Acceptance analysis of Edmodo online learning system using Unified Theory of Acceptance And Use Of Technology (UTAUT) case study: Class Ix At Smp Negeri 1 Singaraja]. Kumpulan Artikel Mahasiswa Pendidikan Tekni Informatika, 8(2). https://doi.org/10.23887/karmapati.v8i2.18389
- Tatarinceva, A. M. (2009). Influence of the gender factor on a student 's learning style and achievements in language learning. *Problems of Modern Education*, 64-71. https://www.tsi.

- lv/sites/default/files/editor/science/Publikacii/ Education/2009/12_tatarinceva.pdf
- Thongmak, M. (2013). Social network system in classroom: Antecedents of Edmodo adoption. *Journal of e-Learning and Higher Education*, 1-15. https://doi.org/10.5171/2013.657749
- Venkatesh, V., Morris, M. G., Davis, G. B. & Davis, F. D. (2003). User acceptance of information technology: Toward a united view. MIS Quarterly, 27(3), 425-478. https://doi.org/10.2307/30036540
- Viriya, C., & Sapsirin, S. (2014). Gender differences in language learning style language learning strategies. *Indonesian Journal of Applied Linguistics*, 3(2), 77-88. https://doi. org/10.17509/ijal.v3i2.270
- Warawudhi, R. (2017). The evaluation of Edmodo in business reading class. *International Journal of Information and Education Technology*, 7(2). https://doi.org/10.18178/ijiet.2017.7.2.858

- Williams, M. D., Rana, N. P., & Dwivedi, Y. K. (2015). The unified theory of acceptance and use of technology (UTAUT): A literature review. *Journal of Enterprise Information Management*, 28(3), 443-488. https://doi.org/10.1108/JEIM-09-2014-0088
- Wolf, E. J., Harrington, K. M., Clark, S. L., & Miller, M. W. (2013). Sample size requirements for structural equation models: An evaluation of power, bias, and solution propriety. *Educational* and Psychological Measurement, 76(6), 913-934. https://doi.org/10.1177/0013164413495237
- Yunkul, E., & Cankaya, S. (2017). Students' attitudes towards Edmodo, a social learning network: A scale development study. *Turkish Online Journal* of *Distance Education*. https://doi.org/10.17718/ tojde.306554





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Nexus of Stakeholder Integration, Green Investment, Green Technology Adoption and Environmental Sustainability Practices: Evidence from Bangladesh Textile SMEs

Mohammad Imtiaz Hossain¹, Tze San Ong^{2,3}, Boon Heng Teh^{1*}, Ridzwana Mohd Said² and May Ling Siow⁴

ABSTRACT

This study investigates the sway of stakeholder integration and green investment on Environmental Sustainability Practices (ESP), as well as the moderating role of Green Technology Adoption (GTA) in Bangladesh Textile small and medium enterprises (SMEs). A questionnaire has been used to collect data from 140 textile SMEs and analysed using the quantitative survey method. The findings have revealed that Buyer Pressure (BP), Governmental regulations (GR), and Green Investment (GI) have significant effects on ESP, but not Supplier pressure (SP). The study has also evidenced the insignificant moderating influence of GTA on the relationships among BP, GR, GI, except SP. This study makes a conceptual contribution by highlighting the relationships among these constructs and confirming the lack of stakeholder integration. The findings of the research extend the understanding and comprehensiveness of Stakeholder theory (ST) and Transaction Cost

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E-mail addresses:
imtiazhossain677@gmail.com (Mohammad Imtiaz Hossain)
tzesan@upm.edu.my (Tze San Ong)
bhteh@mmu.edu.my (Boon Heng Teh)
ridzwana@upm.edu.my (Ridzwana Mohd Said)
siowml@upm.edu.my (May Ling Siow)
*Corresponding author

Economics (TCE) theory by providing empirical insights from the firm level. Consequently, the outcomes promote environmental practices and offer food for thought for policymakers, compliance managers, entrepreneurs, and relevant stakeholders.

Keywords: Bangladesh, environmental sustainability practices, green investment, green technology adoption, stakeholder integration, SMEs, textile

¹Faculty of Management, Multimedia University, Persiaran Multimedia, 63100 Cyberjaya, Selangor, Malaysia

²School of Business and Economics, Universiti Putra Malaysia, 43400 Serdang, Selangor, Malaysia ³Department of Business Administration, Daffodil International University, Daffodil Smart City 1207, Dhaka, Bangladesh

⁴Department of Landscape Architecture, Faculty of Design and Architecture, Universiti Putra Malaysia, 43400 Serdang, Selangor, Malaysia

INTRODUCTION

Environmental sensitivity has gradually received much attention for business initiatives' considerations whereby being a stakeholder, consumers play a crucial role. The awareness, preferences and willingness of customers' mitigation towards ecological deterioration are seen as the fundamental push for introduction of green technology in business' initiatives (Ogiemwonyi et al., 2020; Uddin et al., 2021).

Undoubtedly, manufacturing is the main user of natural resources relative to other businesses. Therefore, the environmental impact of the manufacturing industry is higher than that of other businesses. For example, manufacturing firms account for 36% of CO₂ emissions and consume about one-third of the globe's energy (Tatoglu et al., 2015). Certainly, the manufacturing sector's consumption of resources and generation of waste is a cause for concern (Bhanot et al., 2017). However, a firm is liable to ensure that the environment and human life are not affected by its actions. Thus, firms should take the initiatives to incorporate Environmental Sustainability Practices (ESP) into their corporate strategies.

Internal and external factors (e.g., stakeholder collaboration, long-term commitment, trust, and knowledge exchange) affect ESP. Increased interdependence between operations and stakeholders has emerged as a prime consideration in the management of a ubiquitous supply chain because it requires adequate governance frameworks for effective management

(Ciravegna et al., 2013). However, developing economies experienced a weak institutional environment and underdeveloped regulatory frameworks causing a lack of collaboration between stakeholders. Adedeji et al. (2020) claim that all stakeholders do not equally impact firms. Thus, it is crucial to find out the prime stakeholders and their relationship based on the nature of the industry, geographical and cultural aspects. This study focuses on the textile SMEs in a developing country, Bangladesh. It is mainly because the collective impact of SMEs on the environment is higher than large firms (Dev et al., 2018). Thus, there is a burning need for investigation on SMEs.

Stakeholder integration may be defined as the relationship process, which guides the actions of parties to achieve common objectives. Accordingly, to Plaza-Ùbeda et al. (2010), stakeholders integration is a "description of a set of practices, which characterise corporate management" and conceptualise it into three dimensions. They are: "knowledge dimension," which is comparable with the rational level, "interaction dimension" involves the process level and "adaptation" includes the transactional level. Further, Saudi et al. (2019) propose stakeholders' integration as an intervening variable on the relationship between ESP and completeness and claim that stakeholder integration was not investigated adequately in earlier studies. Finally, stakeholder theory (ST) has been widely used to describe the applicability of stakeholders in management, but this theory ignores the stakeholder's integration (Plaza-Úbeda et al., 2010).

Perfidious behaviour and discrepancies in priorities and operational routines are the main causes for non-relational governance. On the other hand, Liu et al. (2017) demonstrate that transactional and relational mechanisms are effective for improving operational efficiency. Thus, it has been asserted that sustainable practices are positively related to sustainable outcomes through the mediating influence of collaboration and trust.

Confidence, transparency, and integrity are among the most critical factors in the successful creation of a responsible and ethical relationship, in this regard, meticulous selection, continuous effort, and intense monitoring are believed to have a positive effect on ESP (Kumar & Rahman, 2015). In addition, it has been contended that among stakeholders, it is a power that dictates the value and risk of sustainability. Therefore, one of the objectives of this study is to extend the stakeholder theory by integrating selected stakeholders' integration and their impact on environmental sustainability practices. Furthermore, the study is novel in that it introduces and empirically tests the moderating construct, namely green technology adoption, which contributes to the body of knowledge.

For the implementation of ESPs in business entities and the organisations in their supply chains, funding is essential. For example, green investment acts as a financing strategy for green ventures. The green investment includes selecting projects that reinforce the basis for sustainable growth, thus reducing the likelihood of deterioration of the environment; hence, sustainability implies efficient management and the conservation of conventional and renewable resources from environmental pollution (Tran et al., 2020). The successful implementation of environmental sustainability practices requires not only internal support but also resources from external stakeholders (Bollinger, 2015). In the developing countries and SME context, where firms with financial limitations and dependency on external funding, i.e., investment from investors or flexible loan, tax waived policy from government and banks; the entire financial eco-system should be restructured and consolidated (Tran et al., 2020). In this regard, stakeholders' vision and action to transform to a "green economy" is important. Bollinger (2015) defines the green economy as a dynamic process of economic transformation to low-carbon development by increasing environmental resource efficiency. The green economy simultaneously facilitates green product distribution; reduces pollution; reduces energy and resource use; encourages re-use and recycling; protects natural resources; creates job opportunities; and revitalises the local economy (D'Amato et al., 2019). However, financial institutions tend to have less interest in green projects due to a lower rate of return and higher risk in green technologies (Taghizadeh-Hesary & Yoshino, 2019).

Consequently, the promotion of green projects should be supported by financial institutions where government authorities and banks can promote preferential green loans on favourable terms to fund environmentally friendly projects. The establishment of green credit guarantee schemes (GCGSs) and returning a portion of the tax return can reduce the abovementioned risk of green finance (Taghizadeh-Hesary & Yoshino, 2019). Green finance is often used interchangeably with green investment. However, in practice, green finance is a wider lens than investments, which includes the operational cost of green investment (Yu & Huo, 2019). Tran et al. (2020) considers green investment as a main component of green finance besides green capital. In addition, policymakers should compel banks to build green frameworks; and in relation to Foreign Direct Investment (FDI)—which is pivotal for the economic growth of developing nations to enhance green finance accessibility and motivate investors. Green FDI ventures can be encouraged by offering financial incentives proportionate to their green fund investment.

This study focuses on the Textile industry, particularly the textile manufacturing Small and Medium Enterprises (SMEs) of Bangladesh. The textile industry of Bangladesh has substantial ramifications on its environment and economic growth. In 2018 the global textile industry annual sales were approximately US\$2 trillion; in context, the economic development of Bangladesh is largely dependent on the export of textile goods to the West.

Bangladesh is the second-largest readymade apparel exporter in the world, and this industry creates 45% of the employment in Bangladesh (Rahman & Chowdhury, 2020). It is also the biggest contributor to GDP. Unfortunately, the toxic effluents discarded by textile factories have caused enormous environmental pollution: More than 200 rivers are directly and indirectly impacted by waste and toxic chemicals from these factories. Partnership for Cleaner Textile reports that in Dhaka, 719 textile factories discharge 300 metric tons of wastewater into four rivers and it has been estimated that 50% of textile SMEs contribute to environmental pollution (Iamrenew, 2019). Despite being encircled by four rivers, Dhaka's water supply to its 18 million inhabitants is increasingly becoming endangered by escalating pollution; thus, the environment is crying out for more sustainable textile production and consumption.

Green technology (GT) refers to technologies (such as new or modified processes, techniques, and systems) that, in a circular economy, guarantee less water pollution, lower carbon emissions, green transport, green supply systems, and sustainable production processes (Uddin & Miah, 2020) and considered as a solution for minimising the firms' environmental pollution. Green technologies are used to monitor emissions, implement systems for contaminant management and minimise negative emissions (Klassen & Whybark, 1999). In addition, GT leads to efficient production processing with minimal waste in the supply chain; sustainable product

innovation is also enhanced wherever GT is practised (Chong et al., 2019). Currently, there are several sustainability barriers in SMEs, but GT is an effective solution (Saudi et al., 2019). Thus, the adoption of GT should be fostered.

However, most GT research originates in developed economies whilst GT research in developing countries is limited, especially in the textile industry. Given the major role of Asian countries in textile development, this disparity warrants the need for further research. Therefore, this paper does not explicitly compare current ESP practices on both sides of the divide; rather, it stresses that developing countries have unique challenges in the adoption of GT.

This study extends the literature on green investment. It investigates stakeholder integration and elucidates the moderating influence of GTA on Bangladeshi Textile SMEs—these have not previously been addressed in the field. Additionally, this research contributes theoretical, empirical, and analytical insights into stakeholder influence in promoting ESP.

The remaining sections of this paper are literature review, theories on ESP, green investment, and stakeholders. Finally, these will be followed by methodology and data collection strategies. Finally, this paper concludes with a section on findings, implications, limitations, and final remarks.

LITERATURE REVIEW

Environmental Sustainability Practices (ESP)

As a strategic construct, ESP is the reflection

of a company's understanding, dedication, and proclivity for environment conservation activities (Roxas & Chadee, 2012). From the corporate perspective, a commitment to sustainability leads to the adoption of recycling strategies and result in waste minimisation (Adedeji et al., 2020); application of green technologies (Kasbun et al., 2016); decreases in the use of water, and increases in the purchase of green goods; decreases in the use of conventional fuels and, finally, decreases in harmful effects on animal species and the natural environment. These strategies are the mechanisms for the industry to transform conventional business practices into environmentally sustainable ones; thus, balancing economic and environmental objectives (Roxas & Chadee, 2012).

Buyer Pressure and ESP

Stakeholder pressure finds to be the most dominant factor in improving manufacturing firms' environmental performance (Meixell & Luoma, 2015). This pressure involves meeting the environmental requirements, standards through strict scrutiny. The firms then transfer this requirement to their suppliers as well. However, the environmental requirement is not limited to providing guidelines rather comprises introducing green technologies, new standards, and eco-designs (Shumon et al., 2019).

Previous literature evidences the significance of the relationships between buyers and the company in improving ESP; particularly, the foreign international buyers

can collaborate with local suppliers to boost green manufacturing capability (Yu & Huo, 2019), and this activity is likely to lead to sustainable business relationships with higher competitiveness (Ong et al., 2021).

In the Bangladesh textile industry, the major buyers are from Europe, Canada, the USA, Japan, Australia, and India. Therefore, they consistently pressurise manufacturing text firms by introducing stringent green compliance (Sarkar et al., 2020). However, this green compliance involves huge investments, and the return of the investment is also low and long term (Taghizadeh-Hesary & Yoshino, 2019). As a result, cost-profit negotiations regarding strategic collaboration between both parties are crucial. In addition, local government and financial institutions' eco-friendly policies can act as a catalyst to mitigate issues, such as narrow-focused regulation, single-performance centred, and misfit with the process (Simpson et al., 2012).

In exploring an organisational environmental initiative, the significance of buyer engagement as a research topic has become an area of intensive focus by researchers (Helmig et al., 2016). According to Hall (2006), if firms have adequate capability and network with authority to operate under specific environmental pressure, an organisations' commitments towards environmental challenges becomes easier to follow. It implies that it is essential for buyers to know their standing; thus, it becomes necessary for buyers to know their capacity to impact their suppliers, as

well as to possess the knowledge of their suppliers' operations and capabilities. The environmental goals of both parties should be aligned. The environmental performance of firms improves when buying firms have engaged in greater collaboration and resource-sharing cooperation.

The starting point of environmental practices lies in information exchange between the buyers, suppliers, and companies. Parker et al. (2009) investigate the moderating influence of relationships between buyers and their suppliers on the commitment and efficiency of environmental activities by the supplier organisations. Where the levels of relationship-specific investment increase, buyers become more responsive to their suppliers' environmental performance needs. Simpson (2007) finds that suppliers' environmental commitment relies on buyer environmental requirements and suppliers' relationship conditions with the buyers. Ong et al. (2021) also demonstrate that buyer requirements become stringent or stricter in relation to the specifications of the requirements and to the timeline of meeting those requirements. Overall, the literature shows that buyers' pressure does influence SMEs environmental performance. Accordingly, the following hypothesis is proposed:

 H_1 : There is a positive and significant relationship between buyer pressure and Environmental Sustainability Practices (ESP)

Supplier Pressure and ESP

Besides buyers, suppliers also play a vital role in enabling businesses to better environmental performance. For example, suppliers may influence firms to appreciate ecological impacts concerning the supply chain (Lamming & Hampson, 1996); thus, under certain circumstances, a supplier may push to fulfil environmental standards, especially where the buyer organisations are dependent on key components from the supplier. Consequently, supply partners can push for a more holistic appreciation of ecological issues, encouragement of insights, and sharing of resources.

When choosing their suppliers, businesses must be sceptical and strict because supplier actions can harm the corporate image and credibility of the business. That notwithstanding, businesses still need to work closely with their suppliers to produce environmentally friendly products (Kasbun et al., 2016). Meanwhile, suppliers should have environmental understanding because suppliers who have environmental certifications, such as ISO 14001:2004, LEED (Leadership in Energy and Environmental Design), Oeko-Tex (textiles screened for hazardous substances), CU certificates, WRAP, OE-100 & OE-Blended and GOTS (global organic textile standard) (Reza et al., 2017), can influence and meet stakeholder demands. In fact, the influence of the suppliers in the supply chain is growing day by day, and they are in a strong position to influence eco-friendly brand images with their clients (Yang et al., 2020). That is why the suppliers-buyers

dependency, information sharing, vision exchange is increasingly important. The relationship period is also a key factor. The long-term contact motivates both suppliers and buyers to engage in sustainable activities (Ong & Teh, 2009). Accordingly, the following hypothesis is proposed:

 H_2 : There is a positive and significant relationship between supplier pressure and Environmental Sustainability Practices (ESP).

Governmental Regulation (GR) and ESP

As environmental sustainability has become a prime driving force towards sustainable development across the world governments are more proactive in taking green initiatives to attain sustainable development than before (Fraj-Andrés et al., 2009). It is undeniable that governments have the supreme power to impose environmental rules and regulations and provide regulatory pressure (Hossain et al., 2020). For example, banning plastic bags by the Bangladeshi government in 2002 resulted in a reduction in its use (Hafezi & Zolfagharinia, 2018). Currently, urban areas of Bangladesh generate 633,129 tons/year of plastic waste, of which 51% of plastic waste gets recycled, and the recycling of the remaining could save USD 801 million every year (Waste Concern, 2016). It has been reported that about 5115-11,760 MWh/d electricity can be generated through gasification or incineration energy recovery from the daily plastic wastes. The government has initiated the installation of two waste-toenergy power plants in Dhaka, one at the Aminbazar landfill and the other at Matuail landfill, using daily waste produced, aiming at making it habitable and a clean city (Hossain et al., 2021).

Wong et al. (1996) find that environmental rules are a major factor that pressures businesses to invest in environmental innovations that are safe for the environment. Furthermore, Ong et al. (2021) argue that highly regulated companies are most likely to see the use of advanced environmental technologies to maintain their competitiveness. Moreover, Jajja et al. (2019) also evidence that GR exerts significant pressure on businesses to pursue an environmental policy; and government collaborates with top management to influence the ESP. In addition, the government can subsidise and provide taxation rebates to create a positive influence on total investment efficiency (Adedeji et al., 2020). Moreover, Gouda and Saranga (2020) suggest that government regulations, being a significant pressure factor, should be specific and customised for specific regions, locations, and industries.

Bangladesh, with its consistent economic growth for the last decade, aims to become a middle-income economy by 2021. To achieve this goal, development in the industrial, especially the textile sector, is essential (Sarkar et al., 2020). For ensuring the continuous growth of the textile industry, following the international environmental standard is crucial. Consequently, the local firms also confront the pressure. In

some cases, the government is forced to implement environmental policy due to trade barriers and get a special opportunity, such as a Generalized System of Preferences (GSP) facility from a developed country. Some scholars and practitioners conclude that such laws and restrictions on businesses will improve environmental performance (Simpson et al., 2007; Zhu & Sarkis, 2006). For example, Tatoglu et al. (2015) performed a study on the adoption of ESP in Turkey and found that the pressure from the government has a significant influence on the firm environmental strategies. Furthermore, governmental regulation is considered the most crucial driving force to implement ESP (Awan, 2017). Accordingly, the following hypothesis is proposed:

*H*₃: There is a positive and significant relationship between government regulation and Environmental Sustainability Practices (ESP).

Green Investment (GI) and ESP

A significant solution to environmental destruction and sustainable growth is fostered through green investment. Eyraud et al. (2013) define green investment as "the investment for diminishing carbon emissions and controlling other pollutants, without substantially hampering the current production." It has been accepted that it is not possible to protect the environment with conventional investment policy. An integrated approach is needed that enables policymakers to provide a clear understanding of the consequences of

human behaviour and their harmful acts on the environment. Only this integrated approach can protect the environment and improve the usage of resources.

In the management decisions domain, the cost is the primary deciding factor. High costs often impede top managers' decisions and ability to participate in such environmental activities; for example, to boost the environmental performance of the organisation, capital expenditure must be allocated (Klassen & Whybark, 1999). However, some scholars state that they expect companies to realise financial benefits because ESP implementation can lead to reductions in production costs (Zhu & Sarkis, 2006). According to Rao and Holt (2005), implementing the ESP requires substantial investment initially, but the returns will come in many ways. Partalidou and Kodra (2017) evidence the positive relationship between green investment and environmental performance. Zhang et al. (2020) find that green investment taken by the rival firms often motivates the focal firm to invest so. Foreign buyers and retailers may share the green investment cost and offer a special subsidy to adopt ESP.

Accordingly, the following hypothesis is proposed:

*H*₃. There is a positive and significant relationship between green investment and Environmental Sustainability Practices (ESP).

The Moderating Role of Green Technology Adoption (GTA)

The adoption of environmental sustainability practices can be seen as a process of gaining competitiveness because new technical and administrative knowledge constitutes innovation and development. Hossain et al. (2020), Ong et al. (2019), Saudi et al. (2019), and Yacob et al. (2019), are some of the researchers who, from a technology perspective, have explored environmental concerns and offered insights into the impact on GT on organisational and environmental factors. Management style, financial capital, development activities, human resources, creative ability, technical approach, and external cooperation are important factors affecting the adoption of GT in SMEs (González & Barba-Sánchez, 2020).

Bollinger (2015) also find a positive relation between GTA and sustainability in the textile industry. Wang et al. (2018) conducted a study on the impact of competition on the development and adoption of GT and found that with the increasing competitiveness of the market, embracing of GT in the textile industry is rising. Similarly, among logistics firms, the implementation of environmental sustainability practices is affected by technology, organisational, and environmental factors. For example, the Swedish Chemicals Agency has identified more than 900 chemicals used during the production of clothing, which is dangerous and harmful for the environment (Busi et al., 2016). Bangladeshi rivers are badly impacted by the harmful chemicals thrown by textiles as most of the textile SMEs

still use conventional technology. Using the technology that restricts pollution by wastewater treatment is the only solution (Sakamoto et al., 2019). Optimistically, Busi et al. (2016) claim that 40% of the pollution caused by the chemical liquid can be protected by implementing high-end technology.

Despite the importance of green technology to improving environmental performance, the strategic management literature has failed to explain whether and how green technology can contribute to this performance (Przychodzen et al., 2018). Previous literatures such as Hossain et al. (2020), Ong et al. (2019), Saudi et al. (2019), and Yacob et al. (2019) confirm that these technologies do have positive and negative effects, resulting from the adoption or use of these technologies on environmental performance. However, these studies did not investigate the stakeholder aspects of the phenomena. These lacks in comprehensiveness and empirical inconsistency have led to a degree of controversy within academia regarding the indirect effect of GTA on the relationship between stakeholder influence and ESP. Accordingly, the following hypotheses are proposed:

H₅: GTA moderates the relationship between BP and Environmental Sustainability Practices (ESP).

H₆: GTA moderates the relationship between SP and Environmental Sustainability Practices (ESP). H_7 : GTA moderates the relationship between GR and Environmental Sustainability Practices (ESP).

H₈: GTA moderates the relationship between GI and Environmental Sustainability Practices (ESP).

THEORETICAL BACKGROUND

Stakeholder Theory (ST)

According to Freeman (2015), when viewed from a strategic management perspective, stakeholder theory is based on the idea that a business needs to adapt its policies and strategic efforts to meet the needs of several different stakeholders in the organisation. In essence, Stakeholder Theory was a response to the competitive climate, dynamic environment, and globalised context in which businesses find themselves (Schaltegger et al., 2019). Since it was first proposed, ST has been enhanced to accommodate a scheme to link different aspects and multiple environments related to the operations of companies (Schaltegger et al., 2019). Three attributes govern relations between businesses and their stakeholders: "Legitimacy" includes the assertion that one stakeholder is entitled to act in a particular way towards another stakeholder (Mitchell et al., 1997). "Urgency" includes the assertion that the idea of time affects the relationship between the stakeholders and that this relationship can be viewed as something fundamental between the stakeholders. "Power" in terms of a stakeholder's ability to promote its interests against resistance is combined with access to the political process

and media. As a result, businesses are now implementing sustainable supply chain practices to respond to various demands from various stakeholder groups, including employees, shareholders, and environment-conscious bodies. Schaltegger et al. (2019) recently argued that organisations need to go beyond optimising the resources of shareholders and they should address the needs of stakeholder groups and individuals who may influence, or be impacted by, the purpose and life of the organisation. Those stakeholders have deemed potential recipients or bearers of any danger caused by the organisation.

Understanding the participating stakeholders is vital for organisational success (Ardito et al., 2018). Matthews et al. (2019) have divided stakeholders into primary and secondary groups; where the primary stakeholders have the greatest effect on an organisation's environmental policy because they have a direct influence on the sustainability, production, and profitability of the business (Ardito et al., 2018) and the secondary stakeholders, who are equally important, and they safeguard and enhance the social reputation of the company (Ardito et al., 2018). In this study, buyers, suppliers, and governmental regulators are identified as the stakeholders that influence the ESP.

This study provides an intensive focus on three stakeholders: buyers, suppliers, and governmental regulators, considering their proximity to the textile industry of Bangladesh. A previous study (Clarkson, 1995) on this context also suggests that these stakeholders are more powerful in

influencing the ESP than NGOs, media, consumers. Secondary stakeholders like NGOs, media, and communities indirectly influence firms' environmental practices (Islam & Deegan, 2008). In a developing country, consumers are not highly conscious about the environmental effect of the company, which impacts their green purchasing behaviours consequently (Ogiemwonyi et al., 2020).

Transaction Cost Economics (TCE)

TCE theory is a widely used management theory and is highly relevant in the organisational sustainability domain. This theory explains how the firms' decision to adopt any technology or system is influenced by their ability to "buy" by contacting suppliers instead of "making" (Birken et al., 2017). The three key constructs of TCE are asset specificity, uncertainty, and frequency of the transaction (Williamson, 2008). Asset specificity determines the transferability of resources where "Uncertainty" involves ambiguity about transaction factors and "Transaction frequency" refers to how often parties engage in a transaction; increased transaction frequency increases transaction costs (Birken et al., 2017). Moreover, Grover and Malhotra (2003) ensure the consolidated effort of stakeholders through adding a "Governance mechanism" with these constructs, which relates to the suppliers, process, and technology. TCE theory has been coined that any transaction has a transaction cost. These costs have extensive consequences on economic and organisational fundamentals. This transaction cost depends on the relationship between buyer-supplier, duration of the contact, firms' capability, and identity (Williamson, 2008). Levels of uncertainty also influence the bargaining for cooperation and investment decision (Yang et al., 2020). This study considers TCE theory in realising the influencing factors of buyers' or other stakeholders' green investment decisions on supplying firms. Moreover, through

this theory, the foreign textile buyers and ready-made Bangladeshi garments SMEs can review their length of the contacts and restructure the governance mechanism to adopt green technology and ESP. Furthermore, Grover and Malhotra (2003) have demonstrated the usefulness of TCE to assess stakeholder relationships.

Figure 1 indicates the research framework of the study.

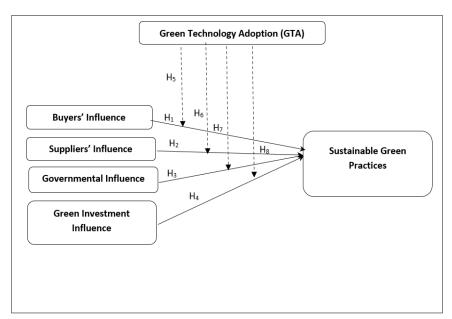


Figure 1. Conceptual framework

Measurement of the Constructs

Buyer Pressure. The questionnaire to measure BP was adapted from existing pieces of literature. The items are tight environmental regulatory requirements from buyers; Boycotting of products by buyers; Negotiation capability of buyers; Monitoring capability of buyers; Buyers' collaboration approach with the company;

and financial stability of buyers (Kumar & Rahman, 2015).

Supplier Pressure. SP is measured by following adapted items: Minimising the risk of damage to reputation by dealing with environmentally responsible suppliers; Pressure from suppliers; Clear communication of environmental policies to suppliers; Emphasis on environmental

certification by suppliers (Ong et al., 2019); Appraisal of the environmental performance of suppliers; and Environmental performance as criteria for supplier selection (Romero et al., 2019).

Green Investment. The questionnaire items adapted to measure GI include Green investment knowledge (Awan, 2017); Difficulties in accessing loans to finance green investment activities (Eyraud et al., 2013); Enterprises' plans to implement green investment projects (Ong et al., 2019); Government support for green investment development policy (Tran et al., 2020); Bank support for green investment development policy; and Incentives for green investment activities when accessing loans (Tran et al., 2020).

Green Technology Adoption (GTA).

Adapted measurement of GTA consists of Adopting Green Buildings; Having GT financing schemes (Yacob, 2019); Installing water-efficient devices and equipment; Using green chemicals; Installing effluent treatment plants (ETP); Using energy-efficient electrical equipment (Reza et al., 2017).

Environmental Sustainability Practices (ESP). Based on the existing pieces of literature, the adapted items to measure ESP comprise Using sustainable energy sources; Manufacture products in an eco-friendly way; Zero waste policy; Recycling of waste (Ahmed et al., 2018); Use Life Cycle Analysis to assess the environmental impact of products; Carry out environmental audits at regular intervals (Yacob, 2019).

METHODOLOGY

This study focuses on environmental sustainability validation as practised by textile SMEs in Bangladesh. The need for numerical verification of the applicability and causality of proven predictors in the implementation of ESP in Bangladesh necessitates the use of a deterministic philosophy, such as post-positivism, with its well-defined framework for accurate variable measurement.

The validation of GTA and ESP in SMEs requires numerical assessment of the relationships between constructs and their requisite hypotheses; this is so that relationships may be tested. This nature of the study inspires the researchers to apply the quantitative method and deductive statistical approach.

Research Design

The essence of causal research explains the cause-and-effect relationship between an observed variable and an outcome variable. This research examines the association between the six variables to understand how diverse stakeholders and GTA impact ESP.

Strategy of Inquiry

This research followed a quantitative approach, and data has collected through questionnaires. This approach is effective for obtaining data from many respondents. Questionnaires make it easier to ask multiple questions to promote data collection. The questionnaire was developed by adapting the items for each construct from the existing pieces of literature and then refined through pre-tests with three (3)

academicians and three (3) sustainability compliance managers, and then a pilot test was conducted. The wordings of some questions were changed after the discussion with the pre-test panellists. Definition of the terms was included in the questionnaire to enhance the clarity of the questions. Few questions were dropped based on the practitioners' suggestions considering the country's context and practices. A five-point scale was mainly used (1= strongly agreed to 5= strongly disagree) in the questionnaire.

The time horizon for this research is the cross-sectional analysis of the phenomena where data are collected at a specific period (Saunders et al., 2016). A pilot study was conducted for the following: 1. Eliminate vague or double-barrelled questions; 2. Test for effective questionnaire layout; and 3. Ensure flow and consistency of statements. These steps helped decrease the questionnaire errors, which would have rendered the questionnaire ambiguous (Brace, 2018). The collected data were analysed using the SPSS and PLS-SEM software.

Population and Sample Size

The total population of 1,695 SMEs is obtained from the latest data of the Bangladesh Textile Mills Association (BTMA, n.d.). In Dhaka city, 38% of textile SMEs are situated, estimated at 641 SMEs. According to the Ministry of Industries (2016), small and medium-sized manufacturing enterprises (SMMEs) are the manufacturers whose employee number is below 300 in Bangladesh.

The respondents were top and middle management, including supervisors. Information obtained was from individuals who knew the implementation of sustainability initiatives and had ample experience in their organisations to ensure quality. The proportional random sampling method was used after selecting four types (Washing, Dyeing, Spinning, Weaving) of textile SMEs. For analysis, one questionnaire from each firm was used. Six hundred forty-one questionnaires were distributed, and 152 were returned; of these, a total of 140 questionnaires were usable for analysis.

ANALYSIS OF DATA

Respondent Demographics Profile

Table 1 shows that 30.7% of participating textiles were spinning SMEs; 25.7% of the sample companies were engaged in dyeing; 23.6% from weaving, and 20% from washing. Most of the companies (32.1%) were in operation for not more than two years. The majority (28.5%) of the textile SMEs had an average of 81–130 employees. 52.8% of these SMEs had annual incomes not exceeding 10 million BDT. It could be one of the main factors that hinder the adoption of expensive green technologies and practices. Textile management were mostly males (77.8%), and only 22.2% were females. A possible reason for this might be the nature of the job and the immense workload. The highest number of respondents was from the age category of 30-36 years (35%) and worked for 6-8 years (35.29%).

Table 1
Demographic profile of companies and respondents

Type of Company	Frequency	Percent
Washing	28	20.00
Dyeing	36	25.71
Spinning	43	30.7
Weaving	33	23.6
Company Age	Frequency	Percent
Less than 2 years	45	32.14
3–5 years	39	27.86
6–8 years	35	25.00
9–11 years	18	12.86
12 years or above	3	2.14
Number of Employees	Frequency	Percent
31–80	26	18.57
81–130	40	28.57
131–180	31	22.14
181–230	25	17.86
231 or Above	18	12.86
Company's Annual Income	Frequency	Percent
Not exceeding 10 million BDT	74	52.86
Between 11-20 million BDT	29	20.71
Between 21–30 million BDT	13	9.29
Between 31-40 million BDT	21	15.00
More than 40 million BDT	3	2.14
Gender	Frequency	Percent
Male	109	77.86
Female	31	22.14
Employee Age	Frequency	Percent
Less than 30 years	5	3.57
30–36 years	49	35.00
37–43 years	40	28.57
44–49 years	32	22.86
More than 50 years	14	10.00
Job Experience	Frequency	Percent
Less than 2 years	25	17.86
3–5 years	22	15.71
6–8 years	48	34.29
9–11 years	24	17.14
12 years or above	21	15.00

Measurement Model Results

Construct Validity and Reliability. Table 2 shows that the composite reliability condition was satisfied as it achieved higher than the cut-off value of 0.70. In addition, Cronbach's α has found higher than the suggested value of 0.7 (Cronbach, 1951).

Convergent Validity

Table 2 shows that convergent validity has been demonstrated—the Average Variance Extracted (AVE) for every latent variable has been greater than the suggested cut-off value of 0.5 (50%) (Fornell & Larcker, 1981).

Table 2
Internal consistency and convergence validity results

Constructs/Items	CA	CR	AVE
BP	0.920	0.938	0.716
GI	0.928	0.943	0.736
ESP	0.941	0.953	0.773
GR	0.932	0.946	0.746
PGTA	0.924	0.941	0.727
SP	0.925	0.941	0.726

Notes: CR: Composite Reliability; AVE: Average Variance Extracted; CA: Cronbach's Alpha

Discriminant Validity

Table 3 shows that the square roots of the AVE of all constructs are bigger than their corresponding inter-correlations. Therefore,

the evaluation of validity and reliability advocates that the measurement model is acceptable.

Table 3

Discriminant validity—Fornell and Lacker Criterion

Constructs	BP	GI	ESP	GR	PGTA	SP
BP	0.846					
GI	0.008	0.858				
ESP	0.201	0.134	0.879			
GR	0.270	0.116	0.210	0.864		
PGTA	0.230	0.037	0.239	0.278	0.853	
SP	0.187	0.144	0.135	0.202	0.215	0.852

Note: The off-diagonal values are the correlations between latent variables, and the diagonal is the square root of AVE.

To further confirm the discriminant validity of the model, a second technique was used: Heterotrait-Monotrait Ratio (HTMT). Compared to Fornell Larcker, this approach seems to be the superior test.

According to Henseler et al. (2015), HTMT values must be below 0.90. In this study, the upper threshold value has been found less than 0.90 (Table 4); thus, satisfying the < 0.90 cut-offs.

Table 4

Results of Heterotrait-Monotrait Ratio (HTMT)

Constructs	BP	GI	ESP	GR	PGTA	SP
BP						
GI	0.042					
ESP	0.214	0.139				
GR	0.290	0.128	0.221			
PGTA	0.252	0.050	0.255	0.299		
SP	0.205	0.154	0.138	0.216	0.230	

Structural Model

Coefficient of Determination (\mathbb{R}^2). Table 5 shows the \mathbb{R}^2 value of ESP to be 0.137, which is above 12%, thus demonstrating that this model has a moderately acceptable level

of prediction for empirical research (Cohen & Levin, 1989). In contrast, the value of R² for the endogenous variables demonstrates a high acceptance level of prediction for empirical research (Cohen & Levin, 1989).

Table 5 *R-square result*

Endogenous Variables	R Square	R Square Adjusted
ESP	0.160	0.137

Note: Substantial > 0.25; Moderate > 0.12, Weak > 0.02 (Cohen & Levin, 1989)

Effect Size (f²). The effect sizes of the predictor constructs were analysed using Cohen's f² (Cohen & Levin, 1989). The results of the f² for this study are presented

in Table 6, where BP, CP, and GTA had a small effect size on ESP; however, SP did not affect ESP.

Multicollinearity (Inner VIF)

According to Henseler et al. (2015), the presence of VIF values higher than ten and lower than 0.1 demonstrate the presence of multicollinearity. Table 7 reveals that the

highest VIF value was 1.237 and the lowest VIF value was 1.058; thus, the absence of multicollinearity among the independent variables is confirmed.

Table 7 Result of multicollinearity—Inner VIF values

Exogenous Variables	ESP
BP	1.181
GI	1.094
GR	1.228
PGTA	1.237
SP	1.172

model demonstrated an adequate fit with

Predictive Relevance (Q² value). The high predictive relevance—the Q² values were higher than zero (Table 8).

Table 8 Result of predictive relevance

Endogenous Variables	Q ² (=1-SSE/SSO)	Q² (=1-SSE/SSO)
ESP	0.119	0.676

Direct Effect (Path Coefficient) Analysis.

The path coefficient assessment shows that out of four direct relationship hypotheses, three have been supported, and one has not been supported (Table 9). Furthermore, the supported hypotheses have been found significant at the 0.05 level, had the expected sign directions (i.e., positive), and consisted of path coefficient values (β) ranging from 0.101 to 0.130.

Table 9 Path coefficient result

Hypotheses	OS	SM	SD	T	P Values	Decision
BP -> ESP	0.111	0.110	0.051	2.202	0.028	Significant
GI -> ESP	0.103	0.107	0.049	2.101	0.036	Significant
GR -> ESP	0.101	0.100	0.051	1.991	0.047	Significant
SP -> ESP	0.014	0.020	0.046	0.311	0.756	Not Significant

Note: Significant: p < 0.05

Moderation Effects. Table 10 shows that among the four moderating hypotheses, one hypothesis was statistically significant ($p \le 0.05$; t > 1.96). SP was found significant,

and BP, GI, GR remained statistically insignificant.

Table 10

Moderation analysis result

Hypotheses	OS	SM	SD	T	P	Decision
BP*PGTA -> ESP	0.039	0.040	0.047	0.846	0.398	Not Significant
GI*PGTA -> ESP	-0.040	-0.034	0.051	0.784	0.434	Not Significant
GR*PGTA -> ESP	0.088	0.085	0.051	1.738	0.083	Not Significant
SP*PGTA -> ESP	-0.117	-0.113	0.054	2.162	0.031	Significant

Note: Significant: p < 0.05

DISCUSSION

The outcomes (Table 9) reveal that BP (t = 2.2, p<0.05); GI (t = 2.1, p<0.05), GR (t = 1.9, p<0.05) display significantly positive impact on ESP across the study sample except for SP (t = 0.3, p>0.05). Thus, H₁, H₂, H₃ were supported, but H₄ was not supported. It indicates that BP plays a crucial role in fostering ESP. Foreign buyers from developed countries tend to trade with companies that practice standard ESP norms (Sarkar et al., 2020). Hence, if a focal company adopts ESP, it will potentially attract purchasing companies, as well as enhance the corporate image of both parties.

GR has a significant positive association with ESP (Table 9); this outcome supports Stakeholder Theory empirically. Governments have significant power and influence to determine the policies and services regarding sustainability maintenance and enforcement—by

imposing laws and codes, governments can achieve sustainable growth. In this regard, governments can promote sustainability practices by encouraging compliance with the LEED Green Building Guidelines (Uddin & Miah, 2020), designing robust sustainability plans, improving sustainable procurement policies, regularly conducting ecological impact measurement audits, building green industrial parks, and recommending innovative ways of meeting sustainability requirements (Busi et al., 2016). A prior study by Fraj-Andrés et al. (2009) has confirmed that GR exerts substantial influence over the industry and that if companies do not comply with the requirements, fines, and penalties would follow as consequences, thus forcing companies to embrace the environmental initiative more comprehensively.

GI evidenced its significant and positive effect on ESP in Table 9. Datta (2019)

has poised two benefits of GI; reducing emissions and partially offsetting carbon taxes to increase profitability. In effect, GI is an essential investment for reducing pollution (Tran et al., 2020); and GI enhances the practical capability of firms to implement ESP. This research finds further support by Partalidou and Kodra (2017), who found that GI impacts environmental performance. As a developing country, Bangladesh highly depends on foreign countries for its technology; consequently, GI can enhance the financial resources and, at the same time, foster green practices. However, Tran et al. (2020) show that GI can be costly. It is why GI requires higher returns in comparison to conventional investments. Therefore, the level of profitability of GIs should be supported by government and financial institutions through price mechanisms or other instruments, such as green certificates, green awards, or tax exemptions on importing expensive green technologies. Moreover, investors tend not to invest in GT unless the risk-return becomes stable; thus, financial institutions should provide the necessary instruments to mitigate risks. The non-significant relationship between SP and ESP suggests that the supplier has less interaction of implanting ESP in Bangladesh. For SMEs, not only is the loan process quite complex, even the payback for green investments can take as long as three years, which is difficult for many textile suppliers to bear. Other problems besetting the industry are the lack of preparation for sustainability and a general low sense of priority (Wang et

al., 2018). Unquestionably, cost reductions are a top priority of suppliers, followed by quality enhancement and on-time delivery; consequently, implementing ESP by suppliers is not a priority (Tran et al., 2020).

Table 10 has depicted the indirect relationship of the GTA on constructs. The moderation analysis has revealed that the moderating effect of GTA on SP and ESP is significant (t = 2.1, p<0.05). It suggests that when suppliers are empowered with the technology, their eco-proactivity should correspondingly increase. Also, GTA has shown a negative moderating influence on the relationships among BP, GR, and GI. A possible explanation for this finding is that few Bangladeshi SMEs consider the implementation of GT as an important issue, and therefore, they do not have any green strategy. This finding is consistent with Sakamoto et al. (2019). The number of LEED-Certified green garments factories in Bangladesh is only 91, though the garments industry is the largest GDP contributing industry of the country, and the market size is around 28 billion dollars (Sarkar et al., 2020).

To some extent, some buyers, particularly foreign buyers, do put pressure on suppliers and strictly monitor them; but they do not provide investment or technological support. The TCE theory shows that the transaction cost and frequency of the transaction are key demotivation factors for the stakeholders to invest in green projects. Most of the contacts between Bangladeshi textile suppliers and foreign buyers are short-term (Sarkar et al., 2020). Opportunistic behaviour is also

responsible for short-term contacts (Yang et al., 2020). Merely putting pressure is not sufficient and sometimes creates adverse effects. On the shade of stakeholders' theory, as stakeholders benefit from the firms' performance and profitability, they would show supporting behaviour with the other stakeholders on environmental initiatives, which leads to improving the brand value and competitiveness. Most stakeholders' limits within the "Dialogue and issues advisory" have limited decision-making influence. Nevertheless, lack of engagement and influence can lead to frustration of stakeholders (Schaltegger et al., 2019).

In this aspect, the government can come forward and play an important role as a catalyst. However, research also found that the Department of Environment (DoE) officials of Bangladesh still lack knowledge, investment, and human resources (Sakamoto et al., 2019) of various aspects of Effluent Treatment Plant (ETP) and pollution control methods. Lack of enforcement political instability, high corruption (Sakamoto et al., 2019), are several constraints. In addition, Bangladesh depends on developed countries for high-end technology. Thus, the high cost of importing green technology into Bangladesh remains a major constraint. This situation is compounded by the bureaucracy, or 'red tape', that causes unexpected delays in the approval of applications by SMEs (Hossain et al., 2020). Notably, the Global Innovation Index (GII) 2019 rankings evidenced the poor standing of Bangladesh in green technology adoption. Bangladesh ranked 116 out of 129 third-world countries in the world; moreover, on environmental issues, Bangladesh ranked 126. It has evidenced the lower level of technological adoption from a country perspective.

The inherent risks in each emerging green technology are related to the issues of usefulness and functionality; thus, implementing emerging technology tends to be more complicated, but the risk can be mitigated by support from the public and/ or private institutions. In general, investors are reluctant to finance projects unless the risk-return relationship becomes stable.

CONTRIBUTIONS, IMPLICATIONS, AND CONCLUSION

Theoretical Contributions

This research contributes to the literature on sustainability by elucidating and providing nuanced information about the state of Green Technology Adoption and green investment opportunities among the textile SMEs in Bangladesh. To the best of the researchers' knowledge, GTA and GI are incorporated as two new contributing variables previously not empirically investigated with ESP. It is the first theoretical contribution.

The second theoretical implication is to apply the Stakeholder Theory and Transaction Cost Economics theories in relation to GTA and ESP among the SMEs of Bangladesh, thus broadening their usefulness and applicability. This theoretical contribution sheds light on how stakeholders implement GTA and ESP within their firms and other stakeholders, which enriches the application of organisational context. The

findings conclude that suppliers become more proactive when they are empowered with green investment and green technology due to their proximity with the usages of raw materials and technologies. Furthermore, the study confirms that transaction cost plays an important and key role in small-medium suppliers' decisions, particularly green technology adoption behaviour.

Thirdly, this study contributes to advancing ST and TCE theories and the extant literature by extending the existing conceptual framework of both theories and by investigating the pivotal role of green technology adoption. The existing conceptual model of ST and TCE is generic and does not encompass the green technology adoption on small-medium firms, which are significantly different from large firms due to resource availability, sufficient investment, and many more factors. The findings provide an overview and guidelines to the Southeast Asian developing and textile manufacturing countries regarding which stakeholders deserve the priority and to which extent. Other countries from geography also can take lessons on this aspect.

Empirical Implications

The first empirical implication extends the perspective from the firm-level green technology adoption in textiles, particularly SMEs. Most studies focused on technological adoption in large companies. However, it has been recognised that SMEs differ from large companies in terms of their size and possess unique characteristics, such as an informal management style, owner-

manager domination in all decision-making, and strong community ties. However, their combined impact on the environment is significantly higher than big companies (Dey et al., 2018; Ong & Teh, 2009).

The second empirical implication is identifying factors that influenced ESP in the textile industry and providing beneficial information to managers in the green industry. As a result, future development on green technology usages could be encouraged. Finally, the study depicts that financial institutions and governments must consolidate effort from policy level to implementation. Since our conclusion was established from Bangladeshi respondents' profiles, it makes a stronger and more sensible viewpoint of evaluative antecedent on green technology adoption and environmental sustainability practices easier.

Above all, this study filled the gap to empirically examine the green technology adoption and green investment in the Bangladeshi textile SMEs. It complements the literature on sustainability in SMEs and enriches the literature on sustainability implementation in the textiles manufacturing industry.

Practical Contributions and Implications

The study offers considerable practical contributions and implications. Firstly, increasing stakeholders' awareness of the environmental impact of their performance and their willingness to reduce their ecological footprint has created new market

opportunities as well as stakeholders' pressure. Green adoption by one stakeholder naturally influences the other stakeholders (Hossain et al., 2020; Ong et al., 2019). The regulatory bodies and concerned authorities, institutions should set their priority, policies, and strategies by identifying key pollution-creating stakeholders.

Secondly, this study can assist companies to reshape their strategies and restructuring their commitment towards green practices. Implementing ESP improves own performance besides supply chain partners' performance. It is a win-win situation. Since importing green technologies requires huge investment, so, stakeholders, financial institutions should consolidate their effort to tackle this challenge. Knowledge and resource sharing among neighbouring SMEs or stakeholders can improve the resource constraint.

Thirdly, this research inspires and creates awareness on government and policymakers about the importance of emphasising ESP among stakeholders and developing collaborative relationship among stakeholders in the textile industry of Bangladesh. At the same time, we argue that it is not sufficient for the government, associations, and investors to stick to the stage of dialogue rather than engage on the implementation level impactful.

Recommendations

In response to the significant relationship among SP, GTA, and ESP, suppliers and multinational buyers would engage in long-term purchasing contracts, which can resolve the concerns about the high cost of high-end technology and longer paybacks. The government can follow the following recommendations to support this: 1) Credit guarantee schemes in the forms of mortgages and guaranteed free loans to stimulate acceptance; 2) Dutyfree importation facilities on various green machinery and equipment; 3) Tax incentives for green initiatives; 4) Create investment instruments, such as green bonds and green fund shares reasonable interest rates; 5) Bangladeshi suppliers should build their negotiating skills with international buyers and convince them to invest in sustainable initiatives to create joint win-win investments in green technology adoption. Developing nations are under pressure to raise economic standards and enhance their global position by encouraging foreign customers, particularly Bangladesh. With this in mind, sustainable solutions in all applications, including the manufacturing sector, should be mandatory.

Limitations and Future Research Directions

Although this study provides significant theoretical, practical, and empirical contributions regarding ESP, GTA, SI, and GI, it is not without its limitations. In response to the limitations, researchers can consider those as directions for future studies. Firstly, the low response rate is an issue. Collecting data is a daunting task, especially on the issue of sustainability due to confidentiality concerns and company image. In addition, data were collected

during the Covid-19 pandemic, which resulted in a low response rate. Secondly, this study focused on textile SMEs situated in a single district named Dhaka. Widening the scope by investigating other districts, such as Chittagong, Rajshahi, Khulna, where a large number of textile SMEs are situated, will lead to a better understanding with more interesting findings and enhance generalizability. Thirdly, this research uses a quantitative and cross-sectional sample; thus, a qualitative or mixed-method with a longitudinal study would be appropriate for this research. Fourthly, the moderating effect of GTA is the prime focus of this study with three independent variables. Finally, the inclusion of other exogenous and interacting variables, such as the organisational capability for green technology adoption or the impact of green technology on textile innovation, should be investigated to enhance the efficacy of this model.

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REFERENCES

Adedeji, B. S., Ong, T. S., Uzir, M. U. H., & Hamid, A. B. A. (2020). Corporate governance and performance of medium-sized firms in Nigeria: Does sustainability initiative matter? *Corporate Governance: The International Journal of Business in Society, 20*(3), 401-427. https://doi.org/10.1108/CG-09-2019-0291

- Ahmed, W., Ahmed, W., & Arsalan, N. (2018). Developing and analysing framework for understanding the effects of GSCM on green and economic performance. *Management of Environmental Quality, 29*(4), 740-758. https://doi.org/10.1108/MEQ-11-2017-0140
- Ardito, L., Carrillo-Hermosilla, J., del Río, P., & Pontrandolfo, P. (2018). Corporate social responsibility and environmental management invite contributions for a special issue on 'Sustainable innovation: Processes, strategies, and outcomes'. Corporate Social Responsibility and Environmental Management, 25(1), 106-109. https://doi.org/10.1002/csr.1487
- Awan, U. (2017). Mediation analysis of environmental training: Perceived stakeholder pressure and environmental supply chain management practices. *International Journal of Research Studies in Management*, 6(1), 1-21. https://doi.org/10.5861/ijrsm.2016.1656
- Bangladesh Textile Mills Association. (n.d.). List of yarn manufacturing member mills of BTMA. http://www.btmadhaka.com/downloads/A-Yarn-Manufacturing-Spinning-Mill-List-2017-Final-List.pdf
- Bhanot, N., Rao, P. V., & Deshmukh, S. G. (2017). An integrated approach for analysing the enablers and barriers of sustainable manufacturing. *Journal of Cleaner Production*, 142(4), 4412-4439. https://doi.org/10.1016/j.jclepro.2016.11.123
- Birken, S. A., Bunger, A. C., Powell, B. J., Turner, K., Clary, A. S., Klaman, S. L., Yu, Y., Whitaker, D. J., Self, S. R., Rostad, W. L., Chatham, J. R. S., Kirk, M. A., Shea, C. M., Haines, E. E., & Weiner, B. J. (2017). Organizational theory for dissemination and implementation research. *Implementation Science*, *12*(1), 1-15. https://doi.org/10.1186/s13012-017-0592-x
- Bollinger, B. (2015). Green technology adoption: An empirical study of the Southern California garment cleaning industry. *Quantitative*

- *Marketing and Economics*, *13*(4), 319-358. https://doi.org/10.1007/s11129-015-9163-0
- Brace, I. (2018). Questionnaire design: How to plan, structure and write survey material for effective market research. Kogan Page Publishers.
- Busi, E., Maranghi, S., Corsi, L., & Basosi, R. (2016). Environmental sustainability evaluation of innovative self-cleaning textiles. *Journal of Cleaner Production*, 133, 439-450. https://doi. org/10.1016/j.jclepro.2016.05.072
- Chong, P., Ong, T., Abdullah, A., & Choo, W. (2019). Internationalisation and innovation on balanced scorecard (BSC) among Malaysian small and medium enterprises (SMEs). *Management Science Letters*, 9(10), 1617-1632. http://dx.doi.org/10.5267/j.msl.2019.5.025
- Ciravegna, L., Fitzgerald, R., & Kundu, S. (2013). Operating in emerging markets: A guide to management and strategy in the new international economy (1st ed.). FT Press.
- Clarkson, M. (1995). Stakeholder framework for analysing and evaluating corporate social performance. *Academy of Management Review*, 20(1), 92-117.
- Cohen, W. M., & Levin, R. C. (1989). Empirical studies of innovation and market structure *Handbook of Industrial Organization*, 2, 1059-1107. https://doi.org/10.1016/S1573-448X(89)02006-6
- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, *16*, 297-334. https://doi.org/10.1007/BF02310555
- D'Amato, D., Korhonen, J., & Toppinen, A. (2019). Circular, green, and bio economy: How do companies in land-use intensive sectors align with sustainability concepts? *Ecological Economics*, 158, 116-133. https://doi.org/10.1016/j.ecolecon.2018.12.026
- Datta, R. (2019). Sustainability: Through crosscultural community garden activities. *Local Environment*, 24(8), 762-776. https://doi.org/10 .1080/13549839.2019.1641073

- Dey, P. K., Petridis, N. E., Petridis, K., Malesios, C., Nixon, J. D., & Ghosh, S. K. (2018). Environmental management and corporate social responsibility practices of small and medium-sized enterprises. *Journal of Cleaner Production*, 195, 687-702. https://doi.org/10.1016/j.jclepro.2018.05.201
- Eyraud, L., Clements, B., & Wane, A. (2013). Green investment: Trends and determinants. *Energy Policy*, 60, 852-865. https://doi.org/10.1016/j.enpol.2013.04.039
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39-50. https://doi.org/10.1177%2F002224378101800104
- Fraj-Andrés, E., Martinez-Salinas, E., & Matute-Vallejo, J. (2009). A multidimensional approach to the influence of environmental marketing and orientation on the firm's organizational performance. *Journal of Business Ethics*, 88(2), 263. https://doi.org/10.1007/s10551-008-9962-2
- Freeman, R. E. (2015). Stakeholder theory. *Wiley Encyclopedia of Management*, 1-6. https://doi.org/10.1002/9781118785317.weom020179
- González, J. d. B., & Barba-Sánchez, V. (2020). The mediating effect of environmental proactivity on the influence of stakeholder pressure and environmental strategy of wineries in Spain. *International Journal of Environmental Research*, 1-13. https://doi.org/10.1007/s41742-020-00281-2
- Gouda, S. K., & Saranga, H. (2020). Pressure or premium: What works best where? Antecedents and outcomes of sustainable manufacturing practices. *International Journal of Production Research*, 58(23), 7201-7217. https://doi.org/10.1080/00207543.2020.1717010
- Grover, V., & Malhotra, M. K. (2003). Transaction cost framework in operations and supply chain management research: Theory and measurement.

- Journal of Operations Management, 21(4), 457-473. https://doi.org/10.1016/S0272-6963(03)00040-8
- Hafezi, M., & Zolfagharinia, H. (2018). Green product development and environmental performance: Investigating the role of government regulations. *International Journal of Production Economics*, 204(C), 395-410. https://doi.org/10.1016/j.ijpe.2018.08.012
- Hall, J. (2006). Environmental supply chain innovation. In J. Sarkis (Ed.), *Greening the* supply chain (pp. 233-249). Springer. https://doi. org/10.1007/1-84628-299-3_13
- Helmig, B., Spraul, K., & Ingenhoff, D. (2016). Under positive pressure: How stakeholder pressure affects corporate social responsibility implementation. *Business and Society*, 55(2), 151-187. https://doi. org/10.1177%2F0007650313477841
- 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.
- Hossain, M. I., San, O. T., Ling, S. M., & Said, R. M. (2020). The role of environmental awareness and green technological usage to foster sustainable green practices in Bangladeshi manufacturing SMEs. *International Journal of Advance Science and Technology*, 29(7s), 3115-3124. http://sersc.org/journals/index.php/IJAST/article/view/17392/8789
- Hossain, S., Rahman, M. A., Chowdhury, M. A., & Mohonta, S. K. (2021). Plastic pollution in Bangladesh: A review on current status emphasizing the impacts on environment and public health. *Environmental Engineering Research*, 26(6), 210-231. https://doi. org/10.4491/eer.2020.535
- Iamrenew. (2019, July 2). Bangladesh's polluted waters: Rivers dying due to dyeing. https://

- www.iamrenew.com/environment/bangladeshs-polluted-waters-rivers-dying-due-to-dyeing/
- Islam, M. A., & Deegan, C. (2008). Motivations for an organisation within a developing country to report social responsibility information: Evidence from Bangladesh. *Accounting, Auditing and Accountability Journal, 21*(6), 850-874. https:// doi.org/10.1108/09513570810893272
- Jajja, M. S. S., Asif, M., Montabon, F. L., & Chatha, K. A. (2019). The influence of institutional pressures and organization culture on Supplier Social Compliance Management Systems. *International Journal of Physical Distribution & Logistics Management*, 49(5), 552-574. https://doi.org/10.1108/JJPDLM-11-2017-0359
- Kasbun, N. F., Teh, B. H., & Ong, T. S. (2016). Sustainability reporting and financial performance of Malaysian public listed companies. *Institutions and Economies*, 8(4), 78-93.
- Klassen, R. D., & Whybark, D. C. (1999). The impact of environmental technologies on manufacturing performance. Academy of Management Journal, 42(6), 599-615. https:// doi.org/10.5465/256982
- Kumar, D., & Rahman, Z. (2015). Sustainability adoption through buyer supplier relationship across supply chain: A literature review and conceptual framework. *International Strategic Management Review*, 3(1-2), 110-127. https://doi.org/10.1016/j.ism.2015.04.002
- Lamming, R., & Hampson, J. (1996). The environment as a supply chain management issue. *British Journal of Management*, 7, S45-S62. https://doi.org/10.1111/j.1467-8551.1996.tb00147.x
- Liu, P., Zhou, Y., Zhou, D. K., & Xue, L. (2017). Energy Performance Contract models for the diffusion of green-manufacturing technologies in China: A stakeholder analysis from SMEs' perspective. *Energy Policy*, 106, 59-67. https:// doi.org/10.1016/j.enpol.2017.03.040

- Matthews, R. L., Tse, Y. K., Wallis, M. O., & Marzec, P. E. (2019). A stakeholder perspective on process improvement behaviours: Delivering the triple bottom line in SMEs. *Production Planning* and Control, 30(5-6), 437-447. https://doi.org/1 0.1080/09537287.2018.1501809
- Meixell, M. J., & Luoma, P. (2015). Stakeholder pressure in sustainable supply chain management: A systematic review. *International Journal of Physical Distribution & Logistics Management*, 45(1/2), 69-89. https://doi.org/10.1108/ IJPDLM-05-2013-0155
- Ministry of Industries. (2016). *National Industrial Policy 2016*. http://projectsprofile.com/info/
 Policy Industry%202016%20Final.pdf
- Mitchell, R. K., Agle, B. R., & Wood, D. J. (1997).
 Toward a theory of stakeholder identification and salience: Defining the principle of who and what really counts. *Academy of Management Review*, 22(4), 853-886. https://doi.org/10.5465/amr.1997.9711022105
- Ogiemwonyi, O., Harun, A. B., Alam, M. N., Karim, A. M., Tabash, M. I., Hossain, M. I., Aziz, S., Abbasi, A., & Ojuolape, M. A. (2020). Green product as a means of expressing green behaviour: A cross-cultural empirical evidence from Malaysia and Nigeria. *Environmental Technology & Innovation*, 20, 101055. https://doi.org/10.1016/j.eti.2020.101055
- Ong, T. S., & Teh, B. H. (2009). Factors influencing the design and use of performance measurement systems in the Malaysian electrical and electronics industry. *International Journal of Economics and Management*, 2(2), 437-457. http://eprints.intimal.edu.my/id/eprint/205
- Ong, T. S., Lee, A. S., & Teh, B. H. (2021). Turning environmental strategies into competitive advantage in the Malaysian manufacturing industry: Mediating role of environmental innovation. *Pertanika Journal of Social Science and Humanities*, 29(2), 1293-1312. https://doi.org/10.47836/pjssh.29.2.29

- Ong, T. S., Lee, A. S., Teh, B. H., & Magsi, H. B. (2019). Environmental innovation, environmental performance and financial performance: Evidence from Malaysian environmental proactive firms. *Sustainability*, 11(12), 3494. https://doi.org/10.3390/su11123494
- Parker, C. M., Redmond, J., & Simpson, M. (2009).

 A review of interventions to encourage SMEs to make environmental improvements. *Environment and Planning C: Government and Policy*, 27(2), 279-301. https://doi.org/10.1068/c0859b
- Partalidou, K., & Kodra, A. (2017). *Do markets* reward green investing? [Master's thesis, Lund University]. https://lup.lub.lu.se/student-papers/search/publication/8912392
- Plaza-Úbeda, J. A., de Burgos-Jiménez, J., & Carmona-Moreno, E. (2010). Measuring stakeholder integration: Knowledge, interaction and adaptational behavior dimensions. *Journal of Business Ethics*, *93*(3), 419-442. https://doi.org/10.1007/s10551-009-0231-9
- Przychodzen, W., Gómez-Bezares, F., & Przychodzen, J. (2018). Green information technologies practices and financial performance The empirical evidence from German publicly traded companies. *Journal of Cleaner Production*, 201, 570-579. https://doi.org/10.1016/j.jclepro.2018.08.081
- Rahman, K. M., & Chowdhury, E. H. (2020). Growth trajectory and developmental impact of ready-made garments industry in Bangladesh. In Bangladesh's economic and social progress (pp. 267-297). Palgrave Macmillan. https://doi.org/10.1007/978-981-15-1683-2_9
- Rao, P., & Holt, D. (2005). Do green supply chains lead to competitiveness and economic performance? *International Journal of Operations* and Production Management, 25(9), 898-916. https://doi.org/10.1108/01443570510613956
- Reza, A. K., Islam, M. S., & Shimu, A. A. (2017). Green industry in Bangladesh: An

- overview. *Environmental Management and Sustainable Development*, 6(2), 124-143. https://doi.org/10.5296/emsd.v6i2.11027
- Romero, S., Ruiz, S., & Fernandez-Feijoo, B. (2019). Sustainability reporting and stakeholder engagement in Spain: Different instruments, different quality. *Business Strategy and the Environment*, 28(1), 221-232. https://doi.org/10.1002/bse.2251
- Roxas, B., & Chadee, D. (2012). Environmental sustainability orientation and financial resources of small manufacturing firms in the Philippines. *Social Responsibility Journal*, 8(2), 208-226. https://doi.org/10.1108/17471111211234842
- Sakamoto, M., Ahmed, T., Begum, S., & Huq, H. (2019). Water pollution and the textile industry in Bangladesh: Flawed corporate practices or restrictive opportunities? *Sustainability*, 11(7), 1951. https://doi.org/10.3390/su11071951
- Sarkar, A., Qian, L., & Peau, A. K. (2020). Overview of green business practices within the Bangladeshi RMG industry: Competitiveness and sustainable development perspective. *Environmental Science* and Pollution Research, 27(18), 22888-22901. https://doi.org/10.1007/s11356-020-08816-y
- Saudi, M. H. M., Sinaga, G. O., & Zainudin, Z. (2019).
 The effect of green innovation in influencing sustainable performance: Moderating role of managerial environmental concern. *International Journal of Supply Chain Management*, 8(1), 303-310.
- Saunders, M., Lewis, P., & Thornhill, A. (2016). Research methods for business students (7th ed.). Pearson.
- Schaltegger, S., Hörisch, J., & Freeman, R. E. (2019). Business cases for sustainability: A stakeholder theory perspective. *Organization and Environment*, 32(3), 191-212. https://doi.org/10.1177%2F1086026617722882

- Shumon, R., Halim, Z., Rahman, S., & Ahsan, K. (2019). How do suppliers address stringent environmental requirements from buyers? An exploratory study in the Bangladesh ready-made garment industry. *International Journal of Physical Distribution and Logistics Management*, 49(9), 921-944. https://doi.org/10.1108/JJPDLM-08-2018-0305
- Simpson, A. (2007). The environment-energy security nexus: Critical analysis of an energy 'love triangle'in Southeast Asia. *Third World Quarterly*, 28(3), 539-554. https://doi.org/10.1080/01436590701192710
- Simpson, D., Power, D., & Klassen, R. (2012). When one size does not fit all: A problem of fit rather than failure for voluntary management standards. *Journal of Business Ethics, 110*(1), 85-95. https://doi.org/10.1007/s10551-011-1149-6
- Taghizadeh-Hesary, F., & Yoshino, N. (2019). The way to induce private participation in green finance and investment. *Finance Research Letters*, 31, 98-103.
- Tatoglu, E., Bayraktar, E., & Arda, O. A. (2015). Adoption of corporate environmental policies in Turkey. *Journal of Cleaner Production*, 91(C), 313-326. https://doi.org/10.1016/j.jclepro.2014.12.039
- Tran, T., Do, H., Vu, T., & Do, N. (2020). The factors affecting green investment for sustainable development. *Decision Science Letters*, 9(3), 365-386. http://dx.doi.org/10.5267/j. dsl.2020.4.002
- Uddin, M. A., Biswas, S. R., Bhattacharjee, S., Dey, M., & Mahmood, M. (2021). Inspiring employees' ecological behaviors: The roles of corporate environmental strategy, biospheric values, and eco-centric leadership. *Business Strategy and the Environment*, 1-15. https://doi.org/10.1002/bse.2751
- Uddin, N., & Miah, M. (2020). Effects of green technology on firms' profitability and solvency:

- A study on textiles industry of Bangladesh. *Asian Business Review*, 10(2), 109-114. https://doi.org/10.18034/abr.v10i2.472
- Wang, J., Zhang, Y., & Goh, M. (2018). Moderating the role of firm size in sustainable performance improvement through sustainable supply chain management. Sustainability, 10(5), 1654. https:// doi.org/10.3390/su10051654
- Waste Concern. (2016, May 2). Prospects of plastics waste recycling in Bangladesh. https://wasteconcern.org/prospects-of-plastics-waste-recycling-in-bangladesh/
- Williamson, O. E. (2008). Outsourcing: Transaction cost economics and supply chain management. Journal of Supply Chain Management, 44(2), 5-16. https://doi.org/10.1111/j.1745-493X.2008.00051.x
- Wong, V., Turner, W., & Stoneman, P. (1996).
 Marketing strategies and market prospects for environmentally-friendly consumer products

 British Journal of Management, 7(3), 263-281. https://doi.org/10.1111/j.1467-8551.1996. tb00119.x
- Yacob, P., Wong, L. S., & Khor, S. C. (2019). An empirical investigation of green initiatives and environmental sustainability for manufacturing SMEs. *Journal of Manufacturing Technology Management*, 30(1), 2-25. https://doi.org/10.1108/JMTM-08-2017-0153

- Yang, Y., Lau, A. K., Lee, P. K., & Cheng, T. C. E. (2020). The performance implication of corporate social responsibility in matched Chinese small and medium-sized buyers and suppliers. *International Journal of Production Economics*, 230, 107796. https://doi.org/10.1016/j.ijpe.2020.107796
- Yu, Y., & Huo, B. (2019). The impact of environmental orientation on supplier green management and financial performance: The moderating role of relational capital. *Journal of Cleaner Production*, 211, 628-639. https://doi.org/10.1016/j.jclepro.2018.11.198
- Zhang, X., Jin, Y., & Shen, C. (2020). Manufacturers' green investment in a competitive market with a common retailer. *Journal of Cleaner Production*, 276, 123164. https://doi.org/10.1016/j.jclepro.2020.123164
- Zhu, Q., & Sarkis, J. (2006). An inter-sectoral comparison of green supply chain management in China: Drivers and practices. *Journal of Cleaner Production*, 14(5), 472-486. https://doi. org/10.1016/j.jclepro.2005.01.003





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Review Article

The Future of Oil Palm Smallholders Toward Greater Sustainability: A Systematic Literature Review

Zaifalaila Zakaria^{1*}, Abdul Rahman Abdul Rahim² and Zaki Aman³

¹Faculty of Business and Management, Universiti Teknologi MARA, 40450 Shah Alam, Malaysia ²Arshad Ayub Graduate Business School, Universiti Teknologi MARA, 40450 Shah Alam, Malaysia ³Malaysian Palm Oil Board, 43000 Kajang, Malaysia

ABSTRACT

Oil palm (*Elaeis guineensis*) has been widely used in various products, namely, food, fuel, feed, and pharmaceuticals (4Fs), ultimately cementing the significant roles of the palm oil sector in Malaysia's economic growth, extensive rural development, political stability, and now directly in sustainable development agenda. In the context of the palm oil sector, smallholders significantly contribute to almost 30% of the total oil palm planted areas in Malaysia. However, the participation of oil palm independent smallholders (OPISH) has remained limited and far behind compared to private business entities in achieving greater sustainability. Due to the unforeseeable global trends and rising public concern over this sector's sustainability issues, smallholders are now urged to produce certified sustainable palm oil. These issues have motivated this systematic literature review to be undertaken by critically analysing existing studies on sustainability efforts implemented by

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E-mail addresses:
zaifalaila@outlook.my (Zaifalaila Zakaria)
aman@uitm.edu.my (Abdul Rahman Abdul Rahim)
zaki@mpob.gov.my (Zaki Aman)
*Corresponding author

the smallholders according to the PRISMA (Preferred Reporting Items Systematic Reviews and Meta-Analysis) guidelines. As per the findings of this systematic review, four main themes emerged: land settlement schemes, agricultural policy and strategies, heterogeneity of the smallholders, and sustainability certifications. The theoretical implication of this study is that these crucial themes are highly relevant in providing a foundation for a conceptual framework

that portrays a complete picture of holistic sustainability practices amongst OPISH. Concerning practical implication, these identified themes provide significant insights in designing effective strategies and specific incentives as the palatable solutions for OPISH to implement sustainability practices that will transform the palm oil sector towards a sustainable future.

Keywords: Malaysia, oil palm smallholders, PRISMA, sustainability, systematic literature review

INTRODUCTION

The contribution of the palm oil sector to Malaysia's economy is indisputable. It drastically helped reduce the country's poverty rate by lifting smallholders' income and reducing rural-urban disparities by providing comprehensive resettlement opportunities, especially in the rural areas (Alain & Patrice, 2014; Cramb & McCarthy, 2017). On average, the palm oil industry contributed 5% to 7% of Malaysia's GDP, with annual export revenue averaging RM 64.24 billion for the last five years (Nambiappan et al., 2018). Over the last century, this golden crop has been the bedrock of Malaysia's economy, while innovations are widely acknowledged for the palm oil sector's future frontier expansion.

However, the success story of this sector had been negated by numerous sustainability issues concerning labour wellbeing, periodic haze, loss of biodiversity, and deforestation (Cramb & Curry, 2012; Cramb & McCarthy, 2017; Kushairi et al.,

2018; Nambiappan et al., 2018; Pye, 2019). Recently, citing the alleged use of forced labour, the United States had announced its ban from importing palm oil from the Malaysian company Sime Darby Plantation Berhad, which led to an immediate fall of 3.5% of shares in the company (Nikkei Asia, 2021). To mitigate these issues, Malaysia has now geared to make the entirety of oil palm growers operating in the country to be sustainability certified by upholding its commitments to responsible agriculture and human rights through the Malaysian Sustainable Palm Oil (MSPO) certification scheme (Kumaran, 2019).

The oil palm independent smallholders (OPISH) is often characterised as the Achilles heel of the palm oil sector because they are economically vulnerable groups lacking financial, compliance, and technical capacities (Jelsma et al., 2019). However, they are also under great pressure to adhere to and obtain the sustainability certification scheme for their oil palm farms (Senawi, 2019). In the context of Malaysia, OPISH is defined as oil palm growers who own or are the legal occupier or lawful representative of oil palm plantations less than 100 acres (Senawi, 2019). It is well recognised that OPISH is significantly contributing to palm oil production in Malaysia as well as other palm oil-producing countries such as Indonesia (Abazue et al., 2015; Choy & Albanya, 2017; Santika et al., 2019). Therefore, this study focuses on OPISH given their significant roles, vulnerabilities, and challenges in the palm oil sector development.

In facilitating a comprehensive systematic literature review, this present study is guided by the question: What themes influence sustainability practices amongst OPISH? Thus, the objective of this study is to systematically and critically identify the themes that will help enhance sustainability practices amongst OPISH. This study is among the first to systematically review studies in finding the themes pertaining to OPISH and their sustainability practices by selecting targeted scholarly works using the Preferred Reporting Items Systematic Reviews and Meta-Analysis (PRISMA) method. Furthermore, the themes that emerged from this thematic analysis demonstrate the need to place equal importance on all themes that will help the OPISH, policymakers, authorities, and industry stakeholders in moving forward to sustain the palm oil industry ecosystem. Importantly, these relevant themes are sustainability certification, agricultural policy and strategies, smallholders heterogeneity, and land settlement schemes.

This study consists of seven sections. After the brief introduction, the second section describes the evolution of the palm oil sector and the conceptualisation of the sustainability dimension in the context of OPISH. The third section specifies the PRISMA method. The fourth section systematically reviews, synthesises, and discusses the literature on sustainability practices implemented by OPISH. The fifth section crystallises the theoretical and practical implications. The sixth section describes the limitations and future research

agenda. Lastly, the conclusion of this study and recommendations are drawn.

BACKGROUND OF THE STUDY

Research Context: The Evolution of the Palm Oil Sector in Malaysia

In Malaysia, oil palm manufacturing could be traced back to 1871, when the oil palm seed was introduced from West Africa and was later planted in Malaysia as an ornamental plant (Basiron & Chan, 2004). Henri Fauconnier planted the first commercial palm oil estates in Tennamaran Estate, Selangor, Malaysia, in 1917 and laid the foundation for the development of the palm oil sector (Basiron & Chan, 2004; Nambiappan et al., 2018). According to the Ministry of Plantation Industries and Commodities (MPIC) data, as shown in Figure 1, the gradual growth of oil palm planted areas from 2010 till 2018 ranged between 1% and 3% per year. This data reflects the consistent government policy to sustain the industry while protecting the natural forest from massive expansions of oil palm plantations. In this connection, the planted areas have productively reached 5.8 million hectares, reflecting the palm oil sector's significant role in the country's socio-economic development, particularly in the rural areas.

Presently, OPISH in Malaysia is grouped through the Sustainable Palm Oil Cluster (SPOC). There are two-pronged missions of SPOC; the first mission is to assist OPISH in obtaining the MSPO certification. The second mission is to facilitate the establishment of cooperatives

or "Sustainable Oil Palm Growers Cooperative (KPSM)" (Omar et al., 2012). As of December 2020, 63 KPSMs were established in Malaysia with core activities including (i) group selling of oil palm to the

mills and (ii) group purchase of agricultural inputs, especially fertilisers, to reduce the cost of production (Malaysian Palm Oil Board [MPOB], 2020; Senawi, 2019).

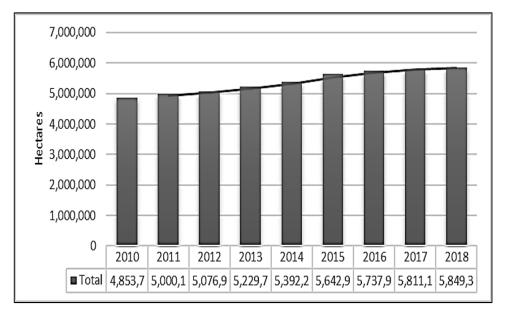


Figure 1. Malaysia oil palm planted areas in hectares from 2010 till 2018 Source: MPIC (2019)

The Conceptualisation of Sustainability

Dimensions in the Context of Oil Palm

Independent Smallholders (OPISH)

The emergent attention and fundamental theory of a sustainable development concept began three decades ago, during the high-level meeting of the World Commission on Environment and Development in 1987. After ten years since the Brundtland Report, Elkington (1998) coined the sustainable development phenomenon as the triple bottom line (TBL) approaches that emphasised the needs of long-term

balance initiative between people (equality

in society), the planet (the quality of the environment), and profit (a prosperous economy).

In the context of sustainability in the palm oil sector, it is generally defined based on a set of principles and criteria that are agreed and discussed upon in meetings with various stakeholders to balance the three multidimensional sustainability elements, which are economic growth, social well-being, and environmental protection (Senawi, 2019; Silva-Castañeda, 2012). Therefore, in this systematic review, sustainability practices are conceptualised

to balance the three of Elkington's TBL dimensions: social, economic, and environmental.

Concerning the social dimension of sustainability in an oil palm plantation, it positively and significantly influenced the OPISH's social position, the quality of life, health status, and education quality (Abazue et al., 2015). However, it is argued that the social dimension of sustainability practices was being perceived as minimal compared to the economic and environmental dimensions. This argument is due to the difficulties and sensitivities of gaining access to information related to labour practice issues such as forced labour, child labour, passport confiscation and gender discrimination (Jamaludin et al., 2018).

In terms of the economic dimension. most OPISH believed that the smallholding plantation scheme had significantly improved their economic sustainability while reducing poverty through improved employment opportunities and job creation compared to any other economic activity they previously engaged in (Abazue et al., 2015). Besides, oil palm cooperatives establishment by OPISH has contributed to the local economic system by consolidating oil palm production. This oil palm production was then sold to the millers with higher prices by increasing the economies of scale and bargaining power (Ador et al., 2016; Omar et al., 2012). Consequently, the increment prices of oil palm sold by the cooperatives help the OPISH to sustain their income despite the fluctuations of palm oil price in the global market.

The environmental dimension revolved around the extensive conversion of tropical rainforests to oil palm monocultures (Cramb & McCarthy, 2017; Pye, 2019). Besides, the significant loss of biodiversity and endangered species such as orangutans and Malayan tigers were also threatened by unsustainable palm oil production (Cramb & McCarthy, 2017; Pye, 2019). On this matter, it was empirically revealed that the majority of OPISH were concerned about ecosystem destruction (Abazue et al., 2015, 2019). However, they were constrained from doing more to stop it because they must plant and grow oil palm to support and care for their dependents (Abazue et al., 2015). It indicates a major trade-off between economic and environmental aspects associated with the development of oil palm farms or plantations owned by OPISH. The next section describes the methodology used to retrieve evidence about the sustainability practices amongst OPISH.

METHODOLOGY

This section illuminates the method used to retrieve previous studies related to OPISH and sustainability practices examined by previous scholars, as illustrated in Figure 2 (Moher et al., 2009). This study used the PRISMA method, systematically searching studies from electronic journal databases using pertinent keywords. This study affirmatively selected the PRISMA method because it provides advantages in assessing a large database consisting of scientific literature in a specified time (Sierra-Correa &

Kintz, 2015). Thus, this protocol warrants a rigorous search of prevalent literature related to sustainability practices implemented by OPISH. This study heavily relied upon two leading scientific journal databases, namely, Scopus and WOS, on the condition that these databases were accessible to the authors through their institution's library subscription. Thus, these two leading databases permitted a plethora of recent publications such as Wiley, Science Direct, Emerald, and Springer allowing relevant

literature to be synthesised (Munodawafa & Johl, 2019; Shaffril et al., 2018).

PRISMA Review Process

The review process began in May 2020 until June 2020, and the next subsection elucidates the four stages involved, namely identification, screening, eligibility, and inclusion. Figure 2 illustrates the PRISMA flow diagram for the review process and literature search on OPISH and sustainability practices.

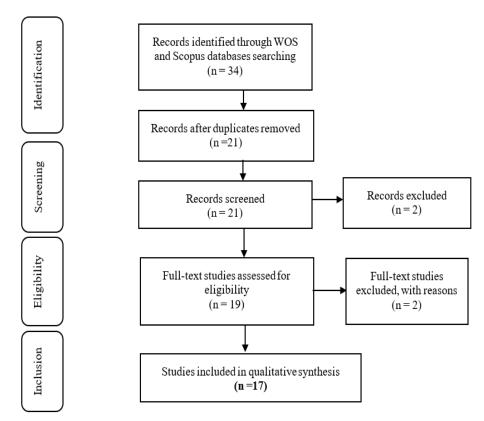


Figure 2. The PRISMA flow diagram for the review process and literature search on OPISH and sustainability practices

Source: Adapted from Moher et al. (2009)

Identification

The summarised keywords for searching information were limited to sustainability practices amongst OPISH and oil palm cooperatives, as exhibited in Table 1. The cooperative establishment and its crucial role for clustering OPISH in Malaysia motivate its selection. Furthermore, the cooperative establishment has often been recommended as the best way for agricultural input distribution, enhancing the deliverability of extension services to

encourage sustainability certification while optimising oil palm productivity (Parveez et al., 2021). After merging the search results from the two databases as of June 2020, the results were recorded into one list in Microsoft Excel format, with 34 studies obtained. Combining both databases' publication records into one list was crucial because duplicate studies were expected to be discovered (Munodawafa & Johl, 2019). Subsequently, 13 duplicated studies were removed.

Table 1

Keywords for searching information

Databases	Keywords used	Total
Scopus	TITLE-ABS-KEY (("oil palm cooperative*s" OR "oil palm co-op*s" OR "oil palm smallholder*s") AND ("sustainability" OR "sustainable" OR "social sustainability" OR "environmental sustainability"))	17
Web of Science	TOPIC: (("oil palm cooperative*s" OR "oil palm co-op*s" OR "oil palm smallholder*s") AND ("sustainability" OR "sustainable" OR "social sustainability" OR "environmental sustainability"))	17

Source: Authors' compilation

Screening

Initial eligibility and exclusion criteria were determined. First, this study only selected peer-reviewed research studies with empirical data, while conference proceedings, book series, and chapters were excluded. Consequent to this, a chapter in the book by Chalil (2013) had to be excluded. Second, this study

excluded non-English publications to avoid ambiguity. Third, the research trend was observed in the Scopus and WOS databases involving the implementation of sustainability practices in the context of OPISH and oil palm cooperatives. Furthermore, in November 2013, the Malaysian Standard, MS 2530:2013 series, or generically called the MSPO Standard,

was launched, which served as a starting point to ensure that Malaysian palm oil was produced responsibly and sustainably (Kumaran, 2019). This line of reasoning justified that a sufficient period to select the studies for this review was seven years from 2013 to June 2020. Subsequently, one study by Susila and Bourgeois (2006) pertaining to the contribution of the oil palm production to economic development, poverty alleviation, and income distribution in Indonesia had to be excluded as it was published in 2006 in Moussons: Recherche en Sciences Humaines sur l'Asie du Sud-Est, but was updated as 2013 publication. Finally, studies indexed in social science, business, management and accounting, economics, finance, multidisciplinary, environmental science, and agricultural science were selected. As a result, 19 studies were included to assess the title and abstract.

Abstract Assessment

At this stage, only the remaining 19 studies as identified in the review protocol were chosen for this abstract analysis. Out of the 19 studies selected, two studies were excluded as they did not comply with the objective of this study (Nchanji et al., 2016; Ngan et al., 2019). One study was conducted by Nchanji et al. (2016), who investigated the efficacy of intercropping method by OPISH rather than sustainability practices. The other study by Ngan et al. (2019) examined sustainability indicators for promoting circular economy in the palm oil industry as the case study. Therefore, 17 studies were reviewed for the final in-depth

qualitative synthesis and thematic analysis, summarised in Appendix A.

Data Abstraction and Analysis

The remaining 17 studies were assessed and analysed based on their objectives relevant to achieving this study's aim. For quality assessment, the journal impact factor and citation frequency had been considered, reflecting the quality of the selected studies that went through rigorous review to be accepted into publications (Silva & Memon, 2017). Next, after quality assessment, the selected studies were synthesised to gather the data from these studies. The data were extracted by reading through the abstracts. The full-length review of studies (in-depth) was then conducted using a content analysis approach to distinguish themes related to sustainability practices. The first author curated the themes established based on the factors that support the sustainability practices amongst OPISH, while other coauthors coded selected studies randomly. Finally, the authors discussed the results to address any discrepancies during the analysis (Haider et al., 2018; Shaffril et al., 2020). Once data had been synthesised, organised areas around the themes would be drawn and presented as the results and discussion of this study.

RESULTS AND DISCUSSION

The 17 selected studies have been organised according to the method of data collection: nine studies conducted field surveys (Begum et al., 2018; Choy & Albanya,

2017; Hutabarat et al., 2019; Jelsma et al., 2017, 2019; Moulin et al., 2017; Sarwosri et al., 2020; Schoneveld et al., 2019a, 2019b), while five studies conducted case studies, expert interviews and semistructured interviews (Ernah et al., 2020; Hidayat et al., 2015, 2018; Hutabarat et al., 2018; Martens et al., 2020), one study employed both survey and semi-structured interviews (Brandi et al., 2015), one study used a matching method (Santika et al., 2019) and one study reviewed empirical research projects (Glasbergen, 2018). Concerning geographical context, 15 studies were conducted in Indonesia, and two were performed in Malaysia, given that these two countries were identified as the two largest palm oil-producing countries (refer to Appendix A). Drawing from the thematic analysis of the 17 selected studies from 2013 to 2020, we discovered that four themes, namely, sustainability certification, agricultural policy and strategies, the heterogeneity of the smallholders, and land settlement schemes, had influenced the sustainability practices amongst the OPISH.

As a result of this thematic analysis, the first theme that emerged was sustainability certification that influenced sustainability practices amongst OPISH (Brandi et al., 2015; Ernah et al., 2020; Glasbergen, 2018; Hidayat et al., 2015, 2018; Hutabarat et al., 2018, 2019; Martens et al., 2020). Ernah et al. (2020) revealed that OPISH, which adopted sustainability certification, yielded more than 15% with fewer pesticides and chemical fertilisers compared to OPISH who applied the conventional agricultural

practices. It was asserted that implementing the best practices in the agricultural sector could be demonstrated through third-party independent certification systems (Jelsma et al., 2019; Kumaran, 2019). However, OPISH was often neglected in certification systems, given that most of them in poverty were usually not reached by certification schemes, and they were located in an area where a cooperative did not exist (Hidayat et al., 2018; Martens et al., 2020). Thus far, voluntary certification schemes have reached approximately 30% of the oil palm cultivated area globally, which indicated that its footprint would never completely reach 100% of the certification system (Kumaran, 2019). It was suggested that sustainability certification must balance economic interests, social benefits, and environmental protection harmoniously; therefore, OPISH who were vulnerable should be given additional incentives to prevent marginalisation (Glasbergen, 2018; Hidayat et al., 2018). Based on their suggestions (Glasbergen, 2018; Hidayat et al., 2018), the government and private entities are urged to consistently assist OPISH, who lack resources to reduce transaction costs and improve their awareness and understanding. Thus, they can be better integrated into the certification process.

Based on this thematic analysis finding, it revealed that the agricultural policy and strategies emerged as the second theme that influenced sustainability practices amongst OPISH (Choy & Albanya, 2017; Jelsma et al., 2019; Moulin et al., 2017;

Santika et al., 2019; Sarwosri et al., 2020). Among the most critical agricultural policy and strategies were the use of high-quality fertilisers and the adoption of the latest technology, which could improve the productivity of oil palm plantations, leading to the economic sustainability of OPISH (Choy & Albanya, 2017). However, it was argued that the surrounding community with the oil palm development was associated with the reduced rate of social and environmental well-being, although the economic sustainability of OPISH increased due to oil palm development (Santika et al., 2019).

Concerning economic sustainability in terms of the financial capacity of smallholders, it is generally expected that smallholders with larger farms and more capital tend to invest in good agricultural practices (GAP) and sustainability practices. These practices will also improve the social and environmental well-being of the surrounding community. However, this sentiment did not hold because smallholders who owned larger farms and had access to financial capital were not more likely to invest in GAP (Jelsma et al., 2019). This scenario was due to the complex amalgam of factors, namely, lack of access to labour and knowledge, inadequate quality of infrastructure, the illegal status of plantations, and other risks (Hidayat et al., 2015; Jelsma et al., 2019). Consequently, these factors signify that although the agricultural policy allocates substantial financial assistance to OPISH, they are locked in these difficulties that

are not amenable to investment toward sustainability, which leads to limited yield potential.

Importantly, OPISH must be strengthened with knowledge, skills, infrastructure, facilities, advanced agricultural technology, and strong institutional structures with adequate incentives to enhance their capacities toward sustainability. Thus, it is crucial to design robust and feasible agricultural policies and strategies that target OPISH. This step is necessary for building and strengthening their capacities to create significant changes in agricultural practices amongst OPISH for higher productivity and better livelihood. Specifically, the existing agricultural policy has to be improved in terms of intensifying and prioritising the transformation of agricultural extension services, collection and redistribution of revenues from the palm oil industry, regulation of tax compliance, the price premium for sustainable palm oil, and engagements in pro-environmental behaviour (Moulin et al., 2017; Santika et al., 2019; Sarwosri et al., 2020).

The third theme that emerged from this thematic analysis was the heterogeneity of the smallholders (Jelsma et al., 2017; Schoneveld et al., 2019a, 2019b). The OPISH typology was often segmented and identified based on their farms' characteristics such as land size, distance from the road, land legality, and acquisition (Schoneveld et al., 2019a). However, OPISH had diverse socioeconomic characteristics depending on their migration status, gender, income sources, and aspirations (Schoneveld et al., 2019a).

For classifying OPISH diversity, Jelsma et al. (2017) examined the differences and similarities of OPISH typology based on the role of oil palm in their livelihoods, land legality, market linkages, and production practices. Building upon these diverse characteristics shows that OPISH is not a uniform population. Therefore, it warrants the urgent need to design intervention support by focusing on their socio-economic characteristics, livelihood portfolios, socioeconomic status, and aspirations, instead of their farms' characteristics (Jelsma et al., 2017; Schoneveld et al., 2019b). Thus, a solution that will increase OPISH sustainability should be specifically tailored to their diverse characteristics (Jelsma et al., 2017; Schoneveld et al., 2019a, 2019b).

The fourth theme that influenced sustainability practices was the land settlement schemes. It is important, however, to distinguish between land settlement schemes and OPISH in Malaysia. Regarding the land settlement schemes, it is composed of organised smallholders supervised by the government, regional, or state agencies where the organised smallholders receive a monthly income depending on their development and business model (Kushairi et al., 2018; Shaufique, 2017). In contrast, OPISH managed and financed their oil palm farms independently (Omar et al., 2012; Shaufique, 2017). In this connection, Begum et al. (2018) claimed that the improvement of the social, environmental, and economic dimensions of sustainability could be accomplished through the land settlement schemes. This accomplishment indicates that OPISH should also be given equal supervision and assistance similar to the organised smallholders in the land settlement schemes to achieve social, economic, and environmental benefits.

Based on this discussion, these four identified themes are central to improving sustainability practices in responding to contemporary sustainability issues and mandatory sustainability certification standards. However, the holistic sustainability practices that are effective and beneficial to OPISH must be implemented beyond the sustainability certification standards. The implementation of the holistic sustainability practices requires inclusion and cooperation of the surrounding community of the palm oil development with strong government support (Santika et al., 2019). Therefore, the conventional and inherited agricultural practices that OPISH commonly applies must be changed toward holistic sustainability practices. In order to ensure no OPISH are neglected toward achieving greater sustainability while attaining higher productivity and better livelihood, it is important to provide specific assistance according to their diverse characteristics.

IMPLICATIONS OF THIS STUDY

This present study provides one significant theoretical implication. The results confirmed that Elkington's (1987) TBL sustainability theoretical framework is an effective and relevant approach to identify themes for improving sustainability practices amongst OPISH. These identified themes

simultaneously portray a complete picture of holistic sustainability practices along the economic, social, and environmental dimensions. Through the PRISMA method, these identified themes will serve as a foundation in developing a conceptual framework for evaluating sustainability practices amongst OPISH by emphasising their important roles, characteristics, and challenges.

Concerning practical implication, these identified themes, sustainability certification, agricultural policy and strategies, the heterogeneity of smallholders and land settlement schemes, are highly relevant and related to implementing holistic sustainability practices amongst OPISH. These relevant themes provide significant insights for policymaking in designing effective strategies and specific incentives toward achieving greater sustainability. In policymaking, these themes offer inclusive perspectives and suggestions to the agricultural policymakers in finding palatable solutions in mitigating challenges that may hinder sustainability practices. These relevant themes will provide guidance to the effective implementation of a mandatory national sustainability certification scheme or MSPO for the entire oil palm planted area, as well as the provision of motivational and financial incentives. Prioritising these themes in policymaking and implementation will help the transformation of the palm oil sector toward a sustainable future.

LIMITATIONS AND FUTURE RESEARCH AGENDA

This study has two limitations. First, the four themes related to sustainability practices amongst OPISH were obtained from secondary data based on a sample of 17 selected studies from 2013 till 2020 from two major Southeast Asia palm oil-producing countries, Malaysia and Indonesia. Second, the PRISMA analysis method on the selected studies identified only four themes along with economic, social, and environmental dimensions. They are sustainability certification, agricultural policy, and strategies, the heterogeneity of the smallholders, and land settlement schemes.

Due to the above limitations, there are three critical areas for future research. First, since this present study involved secondary data, it is recommended that future research focus on primary data such as surveys or interviews for more explicit and in-depth explanations on sustainability practices amongst OPISH. Second, for wider global perspectives on sustainability practices, research is encouraged to be undertaken on bigger samples of relevant palm oilproducing countries in Southeast Asia (Thailand), South America (Colombia and Brazil), and Africa (Nigeria). Comparative research involving cross-countries samples is crucial for identifying similarities and differences in sustainability practices that will reveal the effective and best practices in the palm oil sector, particularly in OPISH. Third, future research should consider other relevant aspects significantly related to sustainability practices and OPISH. Such aspects are the governance of the palm oil industry, the organisation level of OPISH, the effectiveness of training and skills development for strengthening OPISH capacity, the trade-offs between economic, social, and environmental dimensions when implementing sustainability practices, and the cost for acquiring sustainability certification.

CONCLUSION

Using the PRISMA method, this systematic literature review effectively identifies themes that influence sustainability practices among OPISH in line with the TBL sustainability theoretical framework. These four identified themes from this thematic analysis are not new aspects related to OPISH in improving yield and livelihood. However, these central themes are highly relevant in providing information on the complete picture of holistic sustainability practices amongst OPISH that revolve around the economic, social, and environmental dimensions. Hence, these specific themes provide significant insights on characteristics, challenges, and suggestions in enhancing sustainability practices compatible with OPISH toward optimising productivity and reducing negative environmental externalities. These significant insights will guide policymaking by formulating important measures and interventions that are not focused only on financial incentives but also on strengthening the capacities of OPISH. Consequently, the capacities of OPISH will enhance through productive

collaboration with other stakeholders in the palm oil sector, namely ministry, agencies, research institutions, industries, and non-government organisations. This collaboration will avoid conflicts by enabling environments for funding, robust infrastructures, capacity building, and skills development for OPISH to enhance sustainability practices.

This study has highlighted the important themes in influencing sustainability practices among OPISH in mitigating sustainability issues and challenges that affect productivity. In response to these issues, two recommendations are highlighted to help OPISH implement holistic sustainability practices. First, OPISH must consistently empower themselves with knowledge and skills through training and education by the agricultural extension officers. The transfer of the latest knowledge and skills from research institutions to extension officers and then to OPISH are crucial in encouraging sustainability practices. Hence, this study agreed with Ernah et al. (2020), who posited that the roles of extension officers in building the capacities of OPISH are important to promote GAP, sustainability certification standards, and influence the best and emerging practices on sustainability. Second, although OPISH is heavily reliant on the traditional ways of doing things in their farming activities, OPISH should focus on innovative technology such as the adoption of advanced industrial drones, application of precision farming, and mechanisation of harvesting tools. These innovations will help OPISH achieve higher performance in quality, quantity, and income.

Notes:

- 1. Oil palm, scientifically known as *Elaeis guineensis*, is an indigenous West African plant grown commercially in Malaysia since 1917 (Nambiappan et al., 2018).
- 2. Palm oil is the oil derived from the fruits of the oil palm tree, including crude palm oil and palm kernel oil.

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REFERENCES

- Abazue, C. M., Choy, E. A., Alam, A. S. A. F., & Begum, H. (2015). Oil palm smallholders and its sustainability practices in Malaysia. *Mediterranean Journal of Social Sciences*, 6(6), 482-488. https://doi.org/10.5901/mjss.2015. v6n6s4p482
- Abazue, C. M., Choy, E. A., & Lydon, N. (2019).

 Oil palm smallholders and certification:

 Exploring the knowledge level of independent oil palm smallholders to certification. *Journal of Bioscience and Agriculture Research*, 19(1), 1589-1596. https://doi.org/10.18801/jbar.190119.193
- Ador, S. F., Siwar, C., & Ghazali, R. (2016). A review of palm oil impact on sustainability dimension: SPOC initiative for independent smallholders.

- International Journal of Agriculture, Forestry and Plantation, 2, 104-110.
- Alain, R., & Patrice, L. (2014). Palms of controversies:
 Oil palm and development challenges. In *Palms of controversies: Oil palm and development challenges*. Center for International Forestry Research (CIFOR). https://doi.org/10.17528/cifor/004860
- Basiron, Y., & Chan, K. W. (2004). The palm oil and its sustainability. *Journal of Oil Palm Research*, *16*(1), 1-10. http://palmoilis.mpob.gov.my/publications/joprv16n1-yusof.pdf
- Begum, H., Siwar, C., Alam, L., Choy, E. A., Ishak, S., & Alam, A. S. A. F. (2018). Enhancing sustainability amongst oil palm smallholders in Malaysia. *International Journal of Agricultural Resources, Governance and Ecology*, 14(1), 62. https://doi.org/10.1504/IJARGE.2018.10011894
- Brandi, C., Cabani, T., Hosang, C., Schirmbeck, S., Westermann, L., & Wiese, H. (2015). Sustainability standards for palm oil: Challenges for smallholder certification under the RSPO. *Journal of Environment and Development*, 24(3), 292-314. https://doi.org/10.1177/1070496515593775
- Chalil, D. (2013). Assessment of smallholders' barriers to adopt sustainable practices. In *Cases on the diffusion and adoption of sustainable development practices* (pp. 439-467). IGI Global. https://doi.org/10.4018/978-1-4666-2842-7. ch016
- Choy, E. A., & Albanya, A. (2017). Economic sustainability of palm oil plantations among smallholders in Lahad Datu, Sabah. *Journal of Fundamental and Applied Sciences*, 4(1), 9-10. https://doi.org/10.4314/jfas.v9i7s.8
- Cramb, R., & Curry, G. N. (2012). Oil palm and rural livelihoods in the Asia-Pacific region: An overview. *Asia Pacific Viewpoint*, *53*(3), 223-239. https://doi.org/10.1111/j.1467-8373.2012.01495.x

- Cramb, R., & McCarthy, J. F. (2017). The oil palm complex smallholders, agribusiness and the state in Indonesia and Malaysia. NUS Press Pte Ltd. http://www.jstor.org/stable/10.2307/j. ctv1xz0km.7
- Elkington, J. (1998). Cannibals with forks. The triple bottom line of 21st century business. *New Society Publishers*. https://doi.org/0865713928
- Ernah, Parvathi, P., & Waibel, H. (2020). Will teaching sustainability standards to oil palm smallholders in Indonesia pay off? *International Journal of Agricultural Sustainability*, 18(2), 196-211. https://doi.org/10.1080/14735903.2020.1744899
- Glasbergen, P. (2018). Smallholders do not eat certificates. *Ecological Economics*, 147(January), 243-252. https://doi.org/10.1016/j.ecolecon.2018.01.023
- Haider, L. J., Boonstra, W. J., Peterson, G. D., & Schlüter, M. (2018). Traps and sustainable development in rural areas: A review. World Development, 101, 311-321. https://doi. org/10.1016/j.worlddev.2017.05.038
- Hidayat, N. K., Glasbergen, P., & Offermans, A. (2015). Sustainability certification and palm oil smallholders' livelihood: A comparison between scheme smallholders and independent smallholders in Indonesia. *International Food and Agribusiness Management Review*, 18(3), 25-48. https://doi.org/10.22004/ag.econ.208400
- Hidayat, N. K., Offermans, A., & Glasbergen, P. (2018). Sustainable palm oil as a public responsibility? On the governance capacity of Indonesian Standard for Sustainable Palm Oil (ISPO). Agriculture and Human Values, 35(1), 223-242. https://doi.org/10.1007/s10460-017-9816-6
- Hutabarat, S., Slingerland, M., & Dries, L. (2019).
 Explaining the "Certification Gap" for different types of oil palm smallholders in Riau Province, Indonesia. The Journal of Environment & Development, 28(3), 253-281. https://doi.org/10.1177/1070496519854505

- Hutabarat, S., Slingerland, M., Rietberg, P., & Dries, L. (2018). Costs and benefits of certification of independent oil palm smallholders in Indonesia. *International Food and Agribusiness Management Review*, 21(6), 681-700. https://doi.org/10.22434/IFAMR2016.0162
- Jamaludin, N. F., Hashim, H., Muis, Z. A., Zakaria, Z. Y., Jusoh, M., Yunus, A., & Murad, S. M. A. (2018). A sustainability performance assessment framework for palm oil mills. *Journal of Cleaner Production*, 174, 1679-1693. https://doi. org/10.1016/j.jclepro.2017.11.028
- Jelsma, I., Schoneveld, G. C., Zoomers, A., & van Westen, A. C. M. (2017). Unpacking Indonesia's independent oil palm smallholders: An actor-disaggregated approach to identifying environmental and social performance challenges. *Land Use Policy*, 69, 281-297. https://doi.org/10.1016/j.landusepol.2017.08.012
- Jelsma, I., Woittiez, L. S., Ollivier, J., & Dharmawan, A. H. (2019). Do wealthy farmers implement better agricultural practices? An assessment of implementation of good agricultural practices among different types of independent oil palm smallholders in Riau, Indonesia. *Agricultural Systems*, 170, 63-76. https://doi.org/10.1016/j. agsy.2018.11.004
- Kumaran, S. (2019). The dynamics for mandatory MSPO certification scheme to be successfully implemented. *Journal of Oil Palm, Environment and Health*, 10(1), 1-7. https://doi.org/10.5366/jope.2019.01
- Kushairi, A., Loh, S. K., Azman, I., Hishamuddin, E., Ong-Abdullah, M., Izuddin, Z. B. M. N., Razmah, G., Sundram, S., & Parveez, G. K. A. (2018). Oil palm economic performance in Malaysia and R&D progress in 2017. *Journal* of Oil Palm Research, 30(2), 163-195. https:// doi.org/10.21894/jopr.2018.0030
- Martens, K., Kunz, Y., Rosyani, I., & Faust, H. (2020). Environmental governance meets reality: A micro-scale perspective on sustainability

- certification schemes for oil palm smallholders in Jambi, Sumatra. *Society and Natural Resources*, 33(5), 634-650. https://doi.org/10.1080/089419 20.2019.1674436
- Moher, D., Liberati, A., Tetzlaff, J., & Altman, D. G. (2009). Preferred reporting items for systematic reviews and meta-analyses: The PRISMA statement. *BMJ*, 339, b2535-b2535. https://doi. org/10.1136/bmj.b2535
- Moulin, M., Wohlfahrt, J., Caliman, J. P., & Bessou, C. (2017). Deciphering agricultural practices and environmental impacts in palm oil plantations in Riau and Jambi provinces, Indonesia. *International Journal of Sustainable Development and World Ecology*, 24(6), 512-523. https://doi.org/10.1080/13504509.2016.1 239232
- Ministry of Plantation Industries and Commodities. (2019). *Data sets for agricommodities industry in Malaysia* (sheet 2-1). https://www.mpic.gov.my/mpi/statistik/stats-data-set
- Malaysian Palm Oil Board. (2020). Sustainable
 Oil Palm Growers Cooperatives (KPSM) and
 Extension Officer (TUNAS) data. Smallholder
 Development Research Division, Malaysian
 Palm Oil Board. https://mpob.gov.my/pejabattunas-mpob
- Munodawafa, R. T., & Johl, S. K. (2019). A systematic review of eco-innovation and performance from the resource-based and stakeholder perspectives. *Sustainability*, *11*(21), 1-23. https://doi.org/10.3390/su11216067
- Nambiappan, B., Ismail, A., Hashim, N., Ismail, N., Shahari, D. N., Idris, N. A. N., Omar, N., Salleh, K. M., Hassan, N. A. M., & Kushairi, A. (2018). Malaysia: 100 years of resilient palm oil economic performance. *Journal of Oil Palm Research*, 30(1), 13-25. https://doi.org/10.21894/ jopr.2018.0014
- Nchanji, Y. K., Nkongho, R. N., Mala, W. A., & Levang, P. (2016). Efficacy of oil palm intercropping by smallholders. Case study in

- South-West Cameroon. *Agroforestry Systems*, 90(3), 509-519. https://doi.org/10.1007/s10457-015-9873-z
- Ngan, S. L., How, B. S., Teng, S. Y., Promentilla, M. A. B., Yatim, P., Er, A. C., & Lam, H. L. (2019). Prioritization of sustainability indicators for promoting the circular economy: The case of developing countries. *Renewable and Sustainable Energy Reviews*, 111, 314-331. https://doi.org/10.1016/j.rser.2019.05.001
- Nikkei Asia. (2021, January 1). US blocks palm oil imports from Malaysia's Sime Darby Nikkei Asia. Nikkei Asia. https://asia.nikkei.com/Economy/Trade/US-blocks-palm-oil-imports-from-Malaysia-s-Sime-Darby
- Omar, W., Jaafar, N. C., & Mansor, N. H. (2012).

 Smallholder palm oil cluster: Sharing MPOB's experience by definition of smallholder [PowerPoint slides]. https://www.rt10.rspo.org/ckfinder/userfiles/files/PCPM2_4 Tn Hj Wahid Omar Presentation .pdf
- Parveez, G. K. A., Tarmizi, A. H. A., Sundram, S., Loh, S. K., & Ong-Abdullah, M. (2021). Oil palm economic performance and R&D progress in 2020. *Journal of Oil Palm Research*, 33(2), 181-214. https://doi.org/10.21894/jopr.2021.0026
- Pye, O. (2019). Commodifying sustainability: Development, nature and politics in the palm oil industry. *World Development*, *121*(1), 218-228. https://doi.org/10.1016/j.worlddev.2018.02.014
- Santika, T., Wilson, K. A., Budiharta, S., Law, E. A., Poh, T. M., Ancrenaz, M., Struebig, M. J., & Meijaard, E. (2019). Does oil palm agriculture help alleviate poverty? A multidimensional counterfactual assessment of oil palm development in Indonesia. *World Development*, 120, 105-117. https://doi.org/10.1016/j. worlddev.2019.04.012
- Sarwosri, A. W., Wegmann, J., & Mußhoff, O. (2020). Discouraging rainforest transformation: An ex-ante policy impact analysis. *Journal of*

- *Agricultural Economics*, 71(1), 219-238. https://doi.org/10.1111/1477-9552.12336
- Schoneveld, G. C., Ekowati, D., Andrianto, A., & van der Haar, S. (2019). Modeling peat- and forestland conversion by oil palm smallholders in Indonesian Borneo. *Environmental Research Letters*, 14(1), 014006. https://doi.org/10.1088/1748-9326/aaf044
- Schoneveld, G. C., van der Haar, S., Ekowati, D., Andrianto, A., Komarudin, H., Okarda, B., Jelsma, I., & Pacheco, P. (2019). Certification, good agricultural practice and smallholder heterogeneity: Differentiated pathways for resolving compliance gaps in the Indonesian oil palm sector. Global Environmental Change, 57, 101933. https://doi.org/10.1016/j. gloenvcha.2019.101933
- Senawi, R. (2019). Transformation of oil palm independent smallholders through Malaysian sustainable palm oil. *Journal of Oil Palm Research*, 31(3), 496-507. https://doi.org/10.21894/jopr.2019.0038
- Shaffril, H. A. M., Ahmad, N., Samsuddin, S. F., Samah, A. A., & Hamdan, M. E. (2020). Systematic literature review on adaptation towards climate change impacts among indigenous people in the Asia Pacific regions. *Journal of Cleaner Production*, 258, 120595. https://doi.org/10.1016/j.jclepro.2020.120595
- Shaffril, H. A. M., Krauss, S. E., & Samsuddin, S. F. (2018). A systematic review on Asian's farmers' adaptation practices towards climate change. *Science of the Total Environment*, 644, 683-695. https://doi.org/10.1016/j.scitotenv.2018.06.349

- Shaufique, S. F. (2017). Independent smallholders in the global palm oil value chain: A case study of Malaysia [Paper Presentation]. Conference and Congress of the Indonesian Society and Agricultural Economics (ICC ISAE). http://www.perhepi.org/wp-content/uploads/2017/08/22.-Dr.-Shaufique-F.-Siddique_ICC-ISAE_Speaker-Session-5.pdf
- 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(1), 385-393. https://doi.org/10.1016/j.marpol.2014.09.013
- Silva-Castañeda, L. (2012). A forest of evidence: Third-party certification and multiple forms of proof-a case study of oil palm plantations in Indonesia. *Agriculture and Human Values*, 29(3), 361-370. https://doi.org/10.1007/s10460-012-9358-x
- Silva, J. A. T., & Memon, A. R. (2017). CiteScore: A cite for sore eyes, or a valuable, transparent metric? *Scientometrics*, *111*(1), 553-556. https://doi.org/10.1007/s11192-017-2250-0
- Susila, W. R., & Bourgeois, R. (2006). In the name of growth and equity: The future of oil palm smallholders in Indonesia. *Moussons*, 9-10, 87-107. https://doi.org/10.4000/moussons.1981

APPENDIX

Appendix A

The 17 selected studies were included in the thematic analysis of this systematic literature review. The references are listed together with their themes, methods and main findings

Theme	Authors	Methodology	Main Finding	Recommendation
Sustainability certification	Ernah et al. (2020)	Panel data set and interview on 185 oil palm smallholders collected in 2010, 2012, and 2013 in the District of Merangin, Indonesia.	From the economic dimension perspective, it is shown that the yields of sustainability adopters have been noted to increase between 10 % and 15 % in 3 years. While, from the environmental dimension, it is signified that the application of pesticides was deemed more efficient by the sustainability adopters.	Provision of adequate investment for extension services to promote sustainability certification standards among smallholders by implementing small-scale extension projects.
	Hutabarat et al. (2018)	Case study on Oil Palm Smallholders Association in Ukui District, Pelalawan Regency, Riau Province, Indonesia.	Results have shown that certification generated up to 21 % higher revenues from sales, a certification created up to an 8 % loss of net income per hectare on average per smallholder in the first year after certification, compared to the situation before accreditation.	Minor positive impacts on yields after sustainability certification.

Theme	Authors	Methodology	Main Finding	Recommendation
	Brandi et al. (2015)	The survey was conducted with 196 independent smallholders and 71 semi-structured interviews with smallholders, heads of small smallholder groups, mill and plantation company staff, and experts in Indonesia.	The findings showed three types of relevant antecedent variables for smallholder certification, namely at the level of individual smallholders, smallholder organisations, and at the institutional level. Further, the requirements that are difficult for smallholders to comply with are the land titles, seedlings, pesticides and fertiliser usage, and documentation of certain activities.	It is suggested that extensive and well-structured training should be provided to address the certification gaps, and group certification is found to offer more accessible and feasible for smallholders.
	Hutabarat et al. (2019)	Survey data of 829 smallholders both (certified and noncertified) in Riau, Sumatra, Indonesia.	Significant factors related to smallholders' yields are tree age, plantation on mineral soils, use of good plant material, and applying good harvesting practice.	Certified sustainable smallholders were determined to have a higher annual yield per hectare compared to noncertified smallholders.
	Martens et al. (2020)	This case study involved expert interviews and semi-structured interviews with 25 smallholders in Jambi, Sumatra, Indonesia.	Independent smallholders' motivation to participate in certification schemes seems a proactive risk-reduction approach rather than a reactive one that could help smallholders become sustainable.	Roundtable on Sustainable Palm Oil (RSPO) has failed to meet good governance conditions toward sustainability.

Theme	Authors	Methodology	Main Finding	Recommendation
	Hidayat et al. (2015)	This study conducted semi-structured interviews with 66 certified smallholders (34 scheme smallholders and 32 OPISH) in Indonesia.	Certification encourages the transformation of the fragmented and uncontrolled plantation into an organised one. Certification requires organisational changes which are needed in the process. Consequently, the new organisational structure provides solidarity, training, and innovations, which secures their ability to comply with the production methods.	It concurs that the smallholders do not fully understand certification as a tool to create more sustainable agriculture. Instead, certification is regarded as an economic tool for a better livelihood. The smallholders are less valued at non-economic benefits from certification, such as social and environmental improvements, unless they lead to economic benefits.
	Hidayat et al. (2018)	This study used a policy-driven and problem-driven approach based on the interviews with 45 informants involved in oil palm production and/or Indonesian Sustainable Palm Oil (ISPO) certification.	Different types of smallholders have various reactions to ISPO enforcement. It is worthwhile for ISPO to diversify its strategies and implementation for smallholders.	ISPO's certification process needs a redesign, particularly if it aims to include smallholders who need incentives to comply with the scheme. ISPO requires a more balance between sustainability objectives and economic interests, combined with a more authoritative and better-equipped implementation and enforcement mechanism.

Theme	Authors	Methodology	Main Finding	Recommendation
	Glasbergen (2018)	This paper reflects on various empirical research projects from Indonesia and the Netherlands based on diverse methodologies, including surveys, case studies, interviews, tens of focus groups and observations.	This study emphasised the problems posed to smallholders in the certification process, namely different preferences in certification outcomes that are primarily economically driven rather than social and environmental aspects, smallholder's understanding of certification is low, premium fees from certified commodities are uncertain, and farmers' organisation structures are weak.	Economic sustainability needs to be the basis of sustainable change in palm oil production. Incentives that improve smallholders' output and income are crucial given that low price premiums and unstable prices. Thus, better environmental and social conditions can only be achieved with better economic prospects.
Agricultural policy and strategies	Choy and Albanya (2017)	Survey data of 58 smallholder respondents in Lahad Datu, Sabah, Malaysia.	From the economic dimension perspective, it has shown that the majority of the smallholders have income above the national poverty income level.	Given that their agricultural activities are carried out via sustainable practices, the smallholder's income is viable based on continuous courses, training, and seminars by the agency.
	Jelsma et al. (2019)	Survey data of 231 smallholders included 30–40 smallholders based in Riau, Sumatra, Indonesia.	Results have shown that yields remained poor, and the implementation of good agricultural practices (GAP) are limited based on plantation assessment.	Strategies must be tailored to specific farmers' characteristics to be effective.

Theme	Authors	Methodology	Main Finding	Recommendation
	Sarwosri et al. (2020)	A framed field experiment with 636 smallholders who managed oil palm, rubber, or both were carried out in Jambi Province, Indonesia.	Results have shown that a price premium of 50% has successfully reduced the tradeoff, and providing information on environmental conditions to smallholders has been found to affect their decisions about rainforest conservation positively.	Certain policies could mitigate trade-offs between sustainability dimensions at the smallholder level.
	Moulin et al. (2017)	Survey data of 45 oil palm plantation blocks belonging to the oil palm company and 88 smallholders' oil palm plantations in Indonesia (19 scheme, 69 independent). Industrial practices and fresh fruit bunch (FFB) yields were extracted from records of the 2012 inflows and outflows records.	The results have shown that smallholders' practices notably differed regarding the number of agricultural inputs (i.e.: glyphosate and paraquat annual rates). The low inputs were associated with very low yields in smallholders' plantations, and such low yields are not sustainable in economic prospects.	The agronomic knowledge regarding the oil palm cropping system for smallholders is essential to improve oil palm cultivation sustainability. However, increasing this access should increase extension services and capacity building by the relevant agencies to hinder the overuse of fertilisers and herbicides that can pose environmental impacts.

Theme	Authors	Methodology	Main Finding	Recommendation
	Santika et al. (2019)	This study employed a matching method to select villages with no oil palm plantations and villages where plantations had been developed in Indonesia. The five dimensions are used for measuring villagers' well- being, namely basic, physical, financial, social, and environmental.	Results have shown that plantations developed in villages with low to moderate forest cover were associated with improved socioeconomic well-being compared to villages without oil palm development. However, the results were contradicted for plantations developed in remote villages with higher forest cover. This finding signified that villages with oil palm plantations were more associated with a reduced rate of social and environmental well-being rather than villages without oil palm development.	This study revealed that villagers are burdened with unsustainable livelihoods, increased socioeconomic disparity and environmental issues due to oil palm development, while a small number of elites may take the largest share of economic benefit. Thus, the government is urged to improve spatial land policy for palm oil, fiscal policy on collection and redistribution of revenues, monitoring and regulation of tax compliance, and data sharing and transparencies among different ministries involved in this sector.
The heterogeneity of the smallholders	Jelsma et al. (2017)	Survey data of 231 smallholders in Riau, Sumatra, Indonesia.	Findings demonstrated the seven unique groups of smallholders, which affirmed they are not a uniform population.	This diversity warrants adoption of more actor- disaggregated intervention approaches to promote the upgrading of practices and standards compliance.

Zaifalaila Zakaria, Abdul Rahman Abdul Rahim and Zaki Aman

Theme	Authors	Methodology	Main Finding	Recommendation
	Schoneveld et al. (2019a)	Plot survey of converted lands containing peat and natural forests for oil palm in Indonesian Borneo.	Results showed how oil palm plantation plots are based on socio-economic characteristics and prior experiences of oil palm growers.	Smallholders on both forested and non-forested peatlands experience the highest regulatory noncompliance levels, the lowest adoption rates of GAP, and the highest fire hazard rates.
	Schoneveld et al. (2019b)	Survey data of 947 randomly selected independent smallholder plots in Kalimantan.	The heterogeneity of independent oil palm smallholders reveals structural compliance gaps, which threatens to restrict smallholder access to formal markets in the future.	Intervention strategies to resolve these compliance gaps can be more impactful when these are adapted to smallholder livelihood assets, portfolios, and processes.
Land settlement schemes	Begum et al. (2018)	Survey data of 50 smallholders in Jerangau, Dungun, FELDA Terengganu, Malaysia.	Environmental –70% of respondents practice a high level of awareness to protect the environment. Economic –80% of the respondents have strongly agreed that it has brought meaningful economic development.	The government's land settlement schemes have facilitated the sustainability practices, which, in turn, led to a positive outcome for the smallholders.

Source: Researchers' compilation



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Maintenance of Tobacco Abstinence—Effect of Anti-Tobacco Propaganda (Media) Messages

Laxmi Kumari1*, Meenakshi Sood2 and Sandhya Gupta3

¹School of Health Sciences, Chitkara University, Punjab, 173212, India

ABSTRACT

Anti-tobacco propaganda media (Television, radio, print media and internet media) messages promote knowledge regarding the ill effect of tobacco on the human body as well as increase the negative attitude towards tobacco. However, their role in maintaining tobacco abstinence is not explored much. This review summarizes the effect of anti-tobacco propaganda (media) messages on the maintenance of tobacco abstinence; the influence of different types of anti-tobacco propaganda (media) messages on tobacco users and non-users. Tobacco users and recent quitters are not benefiting from these anti-tobacco propaganda and media messages. The graphic pictorial warnings were found to have more influence over increasing knowledge, changing attitude, enhancing quit attempts, quit intentions, and motivation to quit. However, it is also noticed that these anti-tobacco propaganda media messages have a boomerang effect on tobacco users. These media propaganda messages sometimes act as a cue for tobacco users and make them relapse. Many studies in the past have shown that these media messages positively impact the quitting process but, again, remained significant to the first attempt only. Hence, these messages have not been found to be very effective in maintaining tobacco abstinence among tobacco users. The

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E-mail addresses: laxmisainivd@gmail.com (Laxmi Kumari) meenakshi.sood@gmail.com (Meenakshi Sood) drsandhyag407@gmail.com (Sandhya Gupta) *Corresponding author exposure and frequency of the anti-tobacco propaganda (media) messages matter. Protobacco advertisements can neutralize the effect of anti-tobacco propaganda messages. Although, anti-tobacco propaganda (media) messages play a crucial role in modifying tobacco-related behaviour.

Keywords: Abstinence maintenance, adolescents, anti-tobacco advertisements, anti-tobacco campaign, cessation, quit attempts

²Chitkara School of Health Sciences, Chitkara University, Punjab, 173212, India

³All India Institute of Medical Sciences, New Delhi, 110029, India

INTRODUCTION

India comes under the third major producer and the second-largest consumer of tobacco. Tobacco is used in India in its two forms, i.e., smoking and smokeless, for example, bidi, cigarette, cigar, hukkas and gutkha, pan, kaini, jarda, respectively. In India, tobacco consumption is not considered a social taboo; even in some cultures. tobacco is used as a medicinal herb for minor ailments like headache, toothache, and stomachache. Globally, tobacco kills seven million people and accounts for the death of more than one million Indians every year (Chhabra et al., 2021). Due to the very addictive characteristic of tobacco and its potentially harmful health consequences, morbidity and mortality related to tobacco have become a manufactured epidemic. However, all these deaths and morbidity could be prevented if the government and individuals take the correct steps at the right time. In order to fight tobacco and its related complexities, India made a significant attempt by endorsing the WHO Framework Convention on Tobacco Control (FCTC) on February 5th, 2005 (CareerRide.com, n.d.).

Although, under section 5 of the COTPA Act, already there is a prohibition on protobacco advertisements and sponsorship of any tobacco product in India. Still, tobacco use is a major problem in this country. In view of this, the anti-tobacco propaganda (media) messages can play a vital role in tobacco control. It is proven through various studies that anti-tobacco propaganda (media) messages play a crucial role in moulding

tobacco-related health behaviour among tobacco users and non-users. These changes could be either positive (helps in initiating tobacco quitting and maintaining tobacco abstinence) or negative (tobacco initiation and relapses) depending upon the frequency, intensity, and type of message. Several studies were done in the past indicating the importance of anti-tobacco Propaganda (media) messages and their significant role in tobacco initiation, cessation, and changing attitude towards tobacco (Elser et al.,2019; Gadiyar et al., 2018; Hair et al., 2021; Singh et al., 2018). Anti-tobacco propaganda (media) messages are available to the general public on various platforms, and they can be audio (Radio), visual (posters, billboards, signboards, pictorial and text warnings over tobacco products), or audio-visual (Television). Anti-tobacco propaganda (media) messages can be divided into different categories according to their themes. For example, personal testimonial messages, health warning messages, public and service announcements. According to physical appearances, these advertisements are available to the public in various means like text messages, pictorial or graphical messages, pictorial cum text messages etc. In the case of content, it is further studied as real stories, fear arousal message's, disgustful messages, or a combo of these two. The effect of a particular type of anti-tobacco propaganda (media) message is different for every individual as every individual is unique. This difference can be due to various socio-demographic and other factors

like gender, educational status, financial status, place of residence, the influence of family and tobacco consumption and level of dependence of the individual itself (Divinakumar et al., 2017; Elser et al., 2019; Majumdar et al., 2017; So & Popova, 2018). The warnings placed over tobacco products and broadcasted in media are not understood in a correct way by all as the general public included not only tobacco non-users but also users. In India, no one can ignore the literacy rate (73%). It means that more than 25% of countries population is still illiterate (Chandra, 2019; Katiyar, 2016). It must be noticed that most of the written and textual anti-tobacco propaganda (media) messages are in the English language, which makes them ineffective for the public not knowing the English language (Bincy et al., 2018). Earlier surveys reported that cautionary graphical/pictorial health warnings on tobacco products are most beneficial in educating the general public regarding negative impacts to tobacco on their health and help tobacco users to initiate quit attempts by modifying their tobacco-related behaviour (Bincy et al., 2018; Brewer et al., 2016) Although according to the GATS-2 report and some studies, a large percentage of smokers do not notice the tobacco products warning or if noticed at all not get motivated to quit (Gravely et al., 2016; Kemp et al., 2019; Kumar & Puranik, 2017).

OBJECTIVES

1. To assess the effect of anti-tobacco propaganda (media) messages on maintaining tobacco abstinence.

2. To assess the influence of different types of anti-tobacco propaganda (media) messages on overpopulation

REVIEW OF LITERATURE

Knowledge and Attitude Towards Tobacco Use

A total of five studies reported the effect of anti-tobacco propaganda (media) messages on knowledge regarding the ill effects of tobacco (Nogueira et al., 2018; Obeidat et al., 2016; Petersen et al., 2018; Sharma et al., 2018; Xu et al., 2015) and, effect of this anti-tobacco propaganda (media) messages on attitude related to tobacco is studied in seven studies (Cho et al., 2017; Gadiyar et al., 2018; Kowitt et al., 2018; Springvloet et al., 2015; Vallone et al., 2017). All the studies were crosssectional surveys except one (Springvloet et al., 2015). Anti-tobacco propaganda (media) messages are effective in increasing knowledge and raising a negative attitude regarding tobacco products. On the other hand, only one study reported that antitobacco propaganda (media) messages are ineffective in increasing knowledge and unhelpful in generating negative attitudes towards tobacco products.

Anti-tobacco propaganda (media) messages with text and graphic health warnings are effective in increasing knowledge of the general public regarding the ill effects of tobacco on their health and on others (Bansal et al., 2021; Hammond et al., 2018; Lee et al., 2020; Mannocci et al., 2019; Magnan et al., 2021; Murukutla et al., 2015; Mutti et al., 2016; Owusu et al., 2019;

Wang et al., 2019). However, the smokers and recent quitters remain unaffected because they found this anti-tobacco propaganda (media) messages aversive, inappropriate to them, and knowingly ignored them (Bourque et al., 2016; Clayton et al., 2017; Drovandi et al., 2018; Gendall et al., 2018; Harris et al., 2014; Hwang & Cho, 2020; Li et al., 2021; Schensul et al., 2018; Xu et al., 2015). In addition, positive public service announcements are effective in generating a negative attitude towards tobacco products (Cho et al., 2017; Clayton et al., 2020).

Quit Behaviour: Tobacco Use

The effectiveness of any anti-tobacco propaganda (media) message can be evaluated by its efficiency to generate quit attempts. The effect of these attempts, motivation to quit behaviour was measured by many studies. All the mentioned studies reported that anti-tobacco propaganda (media) messages are effective in increasing quit intentions, quit attempts, and quit behaviour among tobacco users (Brennan et al., 2019; Chauhan & Sharma, 2017; Davis et al., 2018; Durkin et al., 2018; Duke et al., 2020; Elser et al., 2019; Gadiyar et al., 2018; Kar et al., 2018; Kar et al., 2020; Lee et al., 2020; Leas et al., 2015; Nagelhout et al., 2016; Nguyen et al., 2019; Nonnemaker et al., 2015; Nogueira et al., 2018; Park et al., 2019; Springvloet et al., 2015; Xu et al., 2015; Yang et al., 2019). However, it is also reported that the anti-tobacco propaganda (media) messages are not found

to be effective in maintaining a long-term quitting attitude (Chido-Amajuoyi et al., 2020; Nonnemaker et al., 2015; Nogueira et al., 2018; Schensul et al., 2018).

Cessation, Abstinence, and Relapse Prevention: Tobacco Use

The cessation process, prevention of relapse, and maintenance of abstinence are interlinked with each other. However, studies are scarce on the impact of antitobacco propaganda (media) messages on maintaining tobacco abstinence, cessationoriented behaviour, or cessation. Many studies also reported that tobacco users willingly and knowingly ignore the antitobacco propaganda (media) messages and do not find them relevant. However, studies are there found that the anti-tobacco propaganda (media) messages have some positive impact on the cessation or cessationoriented behaviour of an individual (Chauhan & Sharma, 2017; Veeraiah et al., 2018). The cessation-oriented behaviour mostly dealt with quit attempts and quit intentions of an individual. It is to be noted that most of the studies reported here are cross-sectional, and cessation cannot be measured in one instance as behaviour change is a long-term process.

Very interestingly, very few studies assessed the maintenance of abstinence or the effect of the anti-tobacco propaganda (media) messages on the prevention of relapse. Anti-tobacco propaganda (media) messages do not affect tobacco abstinence among tobacco users and are found unhelpful

in preventing relapses. Furthermore, the Boomerang effect of the anti-tobacco propaganda (media) messages cannot be ignored. If not used judiciously, the anti-tobacco propaganda (media) messages can make frequent relapse among tobacco users (Clayton et al., 2017; Liu & Bailey, 2019), as these propaganda messages do not have any impact on subsequent quit attempts but only on initial quit attempts (Colston et al., 2021; Nonnemaker et al., 2015).

Initiation of Tobacco: Impact of Anti-Tobacco Propaganda (Media) Messages

Studies reported that pro-tobacco advertisements and non-exposure of antitobacco propaganda media messages in early developmental ages are a major factor for smoking initiation among adolescents and adult population (Cantrell et al., 2016; Dunbar et al., 2019; Gendall et al., 2018; Hwang & Cho, 2020; Johnson et al., 2019; Kranzler et al., 2017; Mishu et al., 2020; Nan & Zhao, 2016; Rao et al., 2014; Zhu et al., 2019). However, smokers as well as recent quitters found these anti-tobacco propaganda media messages unhelpful and reported having a boomerang effect on them. 'No smoking' hoardings, signboards, and the anti-tobacco propaganda media messages on television act as smoking cues for tobacco users and recent quitters and make them relapse very frequently (Clayton et al., 2017; Harris et al., 2014). Tobacco non-users are much influenced by the anti-tobacco propaganda (media) messages compared to tobacco users. The

anti-tobacco propaganda (media) messages built a negative attitude towards tobacco non-users and hence prevented tobacco initiation in this group. Among all other categories (text-only messages, celebrity influenced messages, personal testimonial messages, public service announcements) of anti-tobacco propaganda (media) messages, the graphical/pictorial health warnings over tobacco products are found to be more effective in decreasing tobacco initiation among tobacco non-users (Hwang & Cho, 2020; Niederdeppe et al., 2016).

Socio-Demographic Variables: Tobacco Users

Studies reported that females (Gantiva et al., 2021; Shahina et al., 2017; Verma et al., 2021) higher educational status, higher socioeconomic status, and increasing age were found to have a positive effect on anti-tobacco advertisements on smoking prevalence, quit behaviour and attitude towards tobacco. Om the other hand, adolescents found anti-tobacco propaganda (media) messages more effective for them, especially the pictorial health warning messages (Murukutla et al., 2015; Mutti et al., 2016). However, a number of studies illustrated that the anti-tobacco propaganda (media) messages are not getting any response from tobacco users (Bhat et al., 2018; Durkin et al., 2018; Drovandi et al., 2018; Hwang & Cho, 2020; Maynard et al., 2014). However, it is also reported that tobacco users and recent quitters found anti-tobacco propaganda media messages effective that focused on why to quit strategies and based on personal testimonial contents (Brennan et al., 2019; Huang et al., 2018; McKinley & Limbu, 2021).

The anti-tobacco propaganda (media) messages sometimes act as triggers and cues for tobacco users to make them relapse. The boomerang effect of these anti-tobacco propaganda media messages cannot be ignored (Clayton et al., 2017). The primary channel to effectively reach and influence the general public is movies and cinema theatres, television, and radio, while smokers, as well as non-smokers, much appreciate other channels like newspapers, magazines, and posters. Adolescents who are non-tobacco users found anti-tobacco propaganda media messages effectively, particularly the graphical and pictorial health warning messages, which creates fear about the ill effects of tobacco. Contrary to that, adolescent tobacco users found these inappropriate to their age group (Unal et al., 2016). Therefore, it requires immediate considerations about the content of antitobacco propaganda (media) messages. These messages must be age-appropriate to be worthful. Studies also reported that the effectiveness of anti-tobacco propaganda (media) messages decreases with the smoking status or tobacco dependence level of an individual (Hwang & Cho, 2020; Niederdeppe et al., 2016). Achievement of sufficient population exposure is vital, especially for tobacco users, males, and individuals with lower socioeconomic status.

RESEARCH GAP

Available research mostly focused on quit attempts, motivation to guit, and intentions to quit tobacco. The effect of the antitobacco propaganda (media) messages on the cessation-oriented behaviour of tobacco users are still not studied well (Nonnemaker et al., 2015). Previous studies were mostly quantitative and used the data from the Global Youth Tobacco Survey (GYTS). There is a need to re-assess antitobacco propaganda (media) messages to be effective. The message must be frequently updated according to the need and current trends of the target population. Many studies indicate that youths exposed to antitobacco propaganda (media) messages are less likely to be current smokers. However, data does not determine which type of advertisements had the highest impact on a specific population.

"What is already known about the topic?"

- Anti-tobacco media messages play a crucial role in amending tobacco-related knowledge and behaviour of the general public.
- Television is the most common, influential, and cost-effective media.
- Pictorial and personal testimonial antitobacco messages are most effective among all other types of messages.
- Anti-tobacco media messages are effective in generating increasing quit attempts, quit intentions, and decreasing overall smoking prevalence.

"What does this paper add?"

- Anti-tobacco media messages majorly affect the non-tobacco user group.
 Tobacco users remain unaffected by most media messages except pictorial health warnings and personal testimonial stories.
- Anti-tobacco media messages, if not conveyed properly or if not understood by the users, can have a negative impact too.
- The effect of these anti-tobacco media messages on complete cessation and maintenance of abstinence is still not known.
- The maximum effect of anti-tobacco media messages must be delivered properly, with intensity and duration.

METHODS

The present paper updates the studies based on anti-tobacco propaganda (media) messages on tobacco-related behaviour. A comprehensive review of the literature was done. Original articles reporting the effect and impact of anti-tobacco advertisements, campaigns on adults and adolescents were included. Articles in languages other than English as well as letters, editorials reviews of pieces of literature were excluded. Abstracts were evaluated, articles that focused on populations other than children, adolescents, and adults excluded, the impact of anti-tobacco propaganda media messages on the sample population and comparing

the message types were included resulting in 65 studies. Citation databases included: PubMed, Google Scholar, and Embase from 2014 to January 2021 (see Figure 1 for the flow of study). Search terms encompassed all types of tobacco (smoking or smokeless), media messages included T.V., radio, posters, text or pictorial warnings over tobacco products, and tobacco-related behaviour included; cessation, quit attempt, quit intentions, relapse, abstinence, or cessation.

Studies focused on the effect of antitobacco propaganda media message on knowledge, attitude, and tobacco-related behaviour like quit intentions, quit attempts, quit behaviour, cessation-oriented behaviour, abstinence and motivation to quit, smoking behaviour, and relapse included in this review. In addition, the effect of different types of messages like graphical, text, personal testimonial, the fear generated, and public service announcements on smokingrelated behaviour were also included. Study design, sample population, type of media messages, data collection tools methods of data collection and effect of the message on knowledge, attitude, quit intentions, quit attempts, quit behaviour, cessation-oriented behaviour, cessation, abstinence, motivation to quit, smoking behaviour, relapse and smoking intentions smoking behaviour and overall findings pertinent to all studies are provided in Table 1.

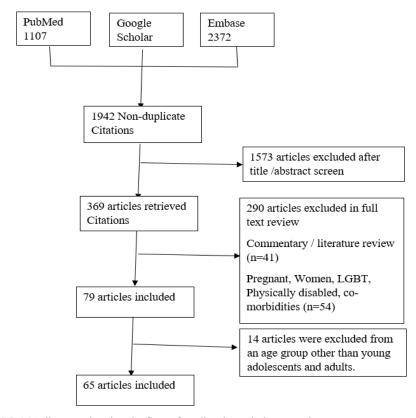


Figure 1. PRISMA diagram showing the flow of studies through the screening process

Table 1
Studies taken in review after screening

S.No.	Author and Year	Type of study and Population Studied	Type of Media messages Studied	Data collection tools.	Data collection method	K, A and EoAds(+/-) towards tobacco use and findings	QA, QB, QI, COB, C, AB MoQ, SB, R and SI
1	Bansal et al. (2021)	Cross- sectional study 15–17 years old school students	Pictorial health warnings	Impact over knowledge and attitude related to gender	On-line data collection	Graphic warnings are effective in changing tobacco-related attitudes more in females K in both genders increases.	NS

Table 1 (Continue)

QA, QB, QI, COB, C, AB MoQ, SB, R and SI	NS S	C↓ SB not effected	QA↑	SI↑
K, A and EoAds(+/-) towards tobacco use and findings	EoAds. + Effective for non-tobacco users	Appetitive messages increase craving among current and abstinent smokers. Aversive messages have no effect on SB	Basic text message with a picture of a real person is most effective.	NS
Data collection method	Face to face interviews.	In-person data collection	In-person interviews and observation.	In-person interview
Data collection tools	Thematic appreciation test, sentence completion test and inkblot test	Questionnaire regarding the effect on smoking behaviour and smoking cessation	Self-reports, behavioural responses post-exposure and quit attempts.	Self-reports on tobacco outlet density and smoking behaviour
Type of Media messages Studied	Government initiated anti-tobacco advertisements.	Exposure to aversive and appetitive smoking-related stimuli	Pictorial warnings and basic text warnings on tobacco products.	Tobacco outlets in residential areas.
Type of study and Population Studied	Cross-sectional survey; 18–25 young adults. Tobacco users and non-users.	Cross-sectional study Current and abstinent smokers	Experimental study. Adult smokers.	Cross-sectional survey. Adults 18–24 years.
Author and Year	Bhat et al. (2018)	Bourque et al. (2016)	Brennan et al. (2019)	Cantrell et al. (2016)
S.No.	2	es .	4	ν.

able 1 (Continue)

QA, QB, QI, COB, C, AB MoQ, SB, R and SI	QA↑ QI↑ C↑	QA no effect	s	SI↓
K, A and EoAds(+/-) towards tobacco use and findings	NS	SN	A- EoAds.+ Positive anti- smoking public service announcements are more effective.	EoAds (-) Smoking cues in anti-tobacco messages can have a boomerang effect. Recent quitters need disgust content in ads to remain sober.
Data collection method	In-person data collection	Household survey. Data from Health Information National Trends Survey	Face to face interviews.	Face to face interviews
Data collection tools	Questions regarding the smoking status and exposure to anti-tobacco advertisements	Self-reports on exposure to anti-smoking ads and effect on quit intentions and attempts	Self-reports Videos of PSA's	Bio-physical data; cardiac rhythm. Recall method. Self-reports. Questionnaire regarding Nicotine dependence and Nicotine withdrawal symptoms. Craving is accessed via a questionnaire of smoking urges.
Type of Media messages Studied	State-sponsored T.V. anti-tobacco advertisements	Exposure to anti- tobacco media messages	Public service announcements.	Anti-tobacco PSAs with disgust and smoking cues
Type of study and Population Studied	Cross-sectional survey.	Cross- sectional survey Adults	Cross-sectional survey College students	Experimental study. Adult smokers.
Author and Year	Chauhan et al. (2017)	Chido- Amajuoyi et al. (2020)	Cho et al. (2017)	Clayton et al. (2017)
S.No.	9		∞	6

Table 1 (Continue)

Author and Year	hor Year	Type of study and Population Studied	Type of Media messages Studied	Data collection tools	Data collection method	K, A and EoAds(+/-) towards tobacco use and findings	QA, QB, QI, COB, C, AB MoQ, SB, R and SI
layt . (2	Clayton et al. (2020)	Experimental study Young adults ever vaper users	Anti-vaping PSA's with Dogmatic vs Suggestive languages	Self-reports	Computer-based data collection in Lab.	Dogmatic language increases perceived freedom threats and state psychological reactance compared to suggestive language.	SZ
Colst	Colston et al. (2021)	Longitudinal cohort study Young adults	Anti-tobacco media and state sponsored messages	Questionnaire regarding the effect of anti-tobacco media messages on smoking behaviour	In-person data collection National Longitudinal Data set 2002- 2017	SN	No long term effect on SB
Davis et al. (2018)	Davis et al. (2018)	Longitudinal survey. Adult smokers and recent quitters.	T.V. based TIPS advertisement	Self-reports on quit attempts and quit intentions. Exposure measured via GRP's	Telephonic	EoAds.+ Graphical and emotional ads encourage more QA and QI	QI↑ QA↑
Drovandet al. (2018)	Drovandi et al. (2018)	Cross-sectional survey. Adolescents 15–18 years; Tobacco users and nonusers.	Cigarette package warnings.	Self-reports. Pictures of health warnings on cigarette packages.	Face to face interview.	EoAds- Not effective for tobacco users but non-users.	SX
Duke et al. (2020)	e et 1. 20)	Cross-sectional survey. Adults current and recent quitters	T.V. anti-tobacco advertisements	Self-reports on quit attempts and exposure via TRP's	Telephonic survey.	EoAds. (+)	QA ↑ SB ↓

Table 1 (Continue)

			l l	
QA, QB, QI, COB, C, AB MoQ, SB, R and SI	SI↑	QI↓	MoQ↑ SI↓↓	NS
K, A and EoAds(+/-) towards tobacco use and findings	Pictorial warnings over cigarette packs are not effective.	NS	A-	GHW's not producing cravings. Size of pictorial warnings matters.
Data collection method	Pen paper-based assessment.	Online	Face to face interviews	In-person data collection
Data collection tools	Questions regarding future smoking susceptibility and perceived harms	Questionnaire regarding exposure to media and its effect on QI	Tobacco usage status, questions related to awareness about anti-tobacco advertisements, and influence on attitude toward tobacco use.	Questionnaire regarding aversive effect, effect on craving
Type of Media messages Studied	Cigarette packs warning.	Exposure to media (pro and anti-tobacco messages)	Anti-tobacco advertisements.	Graphical health warnings over tobacco products
Type of study and Population Studied	Experimental study, Adolescents.	Longitudinal Survey 18 years and above smokers	Cross-sectional survey. 16–18 years old adolescents.	Cross-sectional survey Adolescents, young and adult females
Author and Year	Dunbar et al. (2019)	Elser et al. (2019)	Gadiyar et al. (2018)	Gantiva et al. (2021)
S.No.	15	16	17	18

Table 1 (Continue)

ZI, RB R				
QA, QB, QI, COB, C, AB MoQ, SB, R and SI	SZ.	NS NS	SI↑	MoQ ↑
K, A and EoAds(+/-) towards tobacco use and findings	EoAds Graphical health warnings are not effective for tobacco users	Pictorial warnings are most effective thanthe rest of the others. Among pictorial themes, "graphic" health effect warnings are most effective.	EoAds, Antismoking campaigns can increase the immediate SB.	EoAds.+ Testimonial messages based on graphic and emotionally evocative content are effective
Data collection method	In-depth interviews. Face to face interviews	Self-reports		Paper-pen method, recall method and focus group interview
Data collection tools	Self-reports. Tobacco warning messages and images. Juster scale to assess change in behaviour due to warning labels.	Questionnaire regarding the effectiveness of various types of ads	Behavioural assessment post- PSA's	Self-reports on the effectiveness of ads.
Type of Media messages Studied	Health warnings on, Health, social, financial and cosmetic themes.	Health warnings and themes NHE-a text- only warning NHE- pictorial (graphic, lived experiences or symbolic) NHE-pictorial+ testimonials vs didactic text	T.V. based PSA's. Three different PSA's on T.V	T.V. based advertisements.
Type of study and Population Studied	Mixed method study. Adult smokers and susceptible nonsmokers 16–30 years.	Cross-sectional survey. Smokers and non-smokers	Experimental study. Adult smokers.	Mixed method approach. Adult smokers.
Author and Year	Gendall et al. (2018)	Hammond et al. (2018)	Harris et al. (2014)	Huang et al. (2018)
S.No.	19	20	21	22

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QA, QB, QI, COB, C, AB MoQ, SB, R and SI	→ IS	Pro-tobacco T.V ads with celebrity SI ↑	QI↑	QI ↑
K, A and EoAds(+/-) QA towards tobacco use CO and findings Mc	Health warnings are effective. Exposure of antismoking ads. Graphic health warnings are positively associated with no smoking.	Celebrity has a Prosignificant effect on T.V smoking behaviour cele K is low regarding health effects	EoAds. +	EoAds+
K, A antowards		Celel signific smokin K is lo heal		
Data collection method	Web-based questionnaire	Online	Self-reports Data from GATS 2016- 17	Secondary data analysis GATS 2009- 10
Data collection tools	Recall method. Self-report. Questionnaire regarding the recall and perceived effectiveness of the ads, smoking status and intentions not to start smoking after watching ads.	Questionnaire regarding knowledge about harmful effects of smoking, intention to smoke and refusal skills	Questionnaire regarding Ad. Effectiveness and QI	Questionnaire regarding Tobacco dependence, previous QA and QI
Type of Media messages Studied	Anti-tobacco graphical warnings	Exposure to T.V Effect of celebrity	Anti-Tobacco messages in newspapers, magazines and cinema.	Tobacco dependence, previous attempt to quit and effect anti-tobacco messages
Type of study and Population Studied	Cross-sectional survey. 13–18 years old.	Cross-sectional survey 18–24 years old females	Cross-sectional survey. Persons 15 years and above	Cross- sectional survey. Current smokers
Author and Year	Hwang and Cho (2020)	Johnson et al. (2019)	Kar et al. (2020)	Karr et al. (2018)
S.No.	23	24	25	26

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llection K, A and EoAds(+/-) QA, QB, QI, hod towards tobacco use COB, C, AB and findings MoQ, SB, R and SI	outer- EoAds_Pictorial NS sed warnings do not trigger the attention of adolescents.	honic A- NS vey. EoAds+ eports Recall of scall advertisements titude significantly ards associated with ncco negative feelings lucts towards tobacco products.	on data A- NS ction	o face NS QA ↑ riews.	survey EoAds. (+) QI↑ Graphical MoQ↑ unpleasant images
Data collection Data collection tools method	Questions regarding Computer- attention towards based pictorial warning, risk assessment, behaviour, negative emotions	Questions regarding a Telephonic recall of ads. Attitude survey. towards tobacco Self-reports on recall and attitude towards tobacco products	Questionnaire In-person data regarding a recall of collection ads, anti-smoking beliefs and non-smokers intentions to smoke	Self-reports on Face to face quitting behaviour. interviews. Recall method.	Self-reports on Online survey negative emotions, perceived risks of
Type of Media messages Studied	Graphic health warnings with disgust vs non-disgust content.	Anti-tobacco campaigns targeting adults vs anti-tobacco campaigns targeting adolescents	Anti-smoking T.V ads. Recall	T.V. based emotional narrative anti-tobacco advertisement.	Graphic warnings over cigarette packs.
r Type of study ar and Population Studied	st Experimental study. Adolescents	cross-sectional survey. Adolescents (13–17 years)	cr Cross-sectional survey 13–17 years non-smokers	t Cross- sectional survey. Adult's smokers.	I. Longitudinal survey. Adult smokers
S.No. Author and Year	27 Kemp et al. (2019)	28 Kowitt et al. (2018)	29 Kranzler et al. (2017)	30 Leas et al. (2015)	31 Lee et al. (2020)

Table 1 (Continue)

1		I	 	I
QA, QB, QI, COB, C, AB MoQ, SB, R and SI	SX	NS S	NS	↑g∂
K, A and EoAds(+/-) towards tobacco use and findings	Anti-tobacco advertisements containing both deception and disgust can make users defensive.	Disgust images strengthen smokers' inhibitory control towards smoking-related cues	Graphical warnings are effective K↑ A-	EoAds.+ Pictorial health warnings are effective K↑
Data collection method	In-person interviews	In-person data collection	On-line data collection	In-person data collection
Data collection tools	Psycho- physiological measures, self- report, and a recognition test	Effect of smoking- related cues on cigarette packets	Effect of different types of warnings on knowledge, attitude towards tobacco	Questionnaire regarding change in QB and K
Type of Media messages Studied	Anti-tobacco messages varied in deception (content portraying tobacco companies as dishonest) and disgust (negative graphic images) content.	Disgust images over cigarette packs	Graphical warnings vs text-only warnings	Pictorial health warnings
Type of study and Population Studied	Experimental study. Adults Smokers	Experimental study Male Smokers and nonsmokers	Experimental study Adult smokers, non-smokers and dual users	Quasi experimental study Smokers
Author and Year	Leshner et al. (2018)	Lix et al. (2021)	Magnan et al. (2021)	Mannocci et al. (2019)
S.No.	32	33	34	35

Table 1 (Continue)

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QA, QB, QI, COB, C, AB MoQ, SB, R and SI	NS	QI↓	NS	NS	NS
K, A and EoAds(+/-) towards tobacco use and findings	EoAds. + Regular smokers actively avoid the health warnings	EoAds. (+)	EoAds.+ Pro-tobacco messages exposure is associated with all forms of tobacco use, not anti-tobacco media messages	EoAds+ Graphic health messages are more effective	EoAds. + Pictorial health messages are more effective than text-only messages
Data collection method	Individual computer- based assessment.	In person data collection	Paper-pen survey	Face to face interview.	Face to face interview.
Data collection tools	Eye-tracking method. Recall method.	Questionnaire regarding message effectiveness and anti-smoking attitudes	Self-reports on ads. Effectiveness	Self-report, Questionnaire on effectiveness of advertisements.	Self-report on health warnings over tobacco products
Type of Media messages Studied	Cigarette packs are branded, plain and blank.	Testimonial Anti-smoking messages; gain vs loss, self vs relational concern	Anti-tobacco media messages and pro-tobacco messages.	Second-hand smoking advertisement	Text and pictorial smokeless tobacco health warnings.
Type of study and Population Studied	Cross-sectional survey; Dependent smokers.	Experimental study 19–71 years old General population	Cross-sectional survey. Adolescents.	Cross-sectional survey; Smokers and non-smokers; 18–40 years	Experimental study. Smokeless tobacco users, 16–18 years
Author and Year	Maynard et al. (2014)	McKinley and Limbu (2021)	Mishu et al. (2020)	Murukutla et al. (2015)	Mutti et al. (2016)
S.No.	36	37	38	39	40

Table 1 (Continue)

1	I	I		
QA, QB, QI, COB, C, AB MoQ, SB, R and SI	→ IS	QI ↑ QA ↑	→ IS	QA ↑ C ↑
K, A and EoAds(+/-) towards tobacco use and findings	EoAds.+	NS	PSAs that emphasize the health consequences of smoking (to oneself and others) and contain anti-industry appeals are associated with reduced youth smoking rates.	EoAds.+ Graphical and Emotional anti-smoking media messages. Strong graphic ads. Are effective except for persons with mental health issues.
Data collection method	Data from Legacy Media Tracking Survey III Telephone survey	Paper pen survey	Commercially available data on T. V. antismoking PSA's and data from state tobacco control activity.	Data were taken from New York Adult Tobacco Survey. Telephonic interviews.
Data collection tools	Questionnaire regarding smoking intention, exposure to anti-smoking ads and recall	Questionnaire regarding Q1	Relationship between the volume and content of youth targeted and general/adult targeted anti- smoking PSA's	Gross rating points (GRP's) and Self-reports of recall of advertisements.
Type of Media messages Studied	Anti-smoking ads.	Anti-tobacco industry attitude and the relation between quit intentions and quit attempts	T.V anti- smoking PSA's Youth-targeted, adult/general- targeted. Health consequences ads, graphical and personal testimonial ads.	T.V based Anti-smoking advertisements.
Type of study and Population Studied	Cross-sectional survey 12–17 years old	Cross-sectional survey young adults 18–26 years	Cross-sectional survey. Youth and adults	Cross-sectional survey. Adults 18 years and older are current smokers.
Author and Year	Nan et al. (2016)	Nguyen et al. (2019)	Niederdeppe et al. (2016)	Nonnemaker et al. (2014)
S.No.	41	42	64	44

Table 1 (Continue)

S.No.	Author and Year	Type of study and Population Studied	Type of Media messages Studied	Data collection tools	Data collection method	K, A and EoAds(+/-) towards tobacco use and findings	QA, QB, QI, COB, C, AB MoQ, SB, R and SI
45	Nonnemaker et al. (2015)	Longitudinal survey adult smokers and recent quitters	Media campaigns via T.V., Radio and social media	Self-reports on smoking status. Media exposure measured via TRP's.	Telephonic interview	NS	QA↑ No effect on R and Subsequent QA
46	Noueira et al. (2018)	Cross- sectional survey adult smokers	T.V advertisements.	Questionnaires regarding awareness of advertisements, health risks K and QA	WAVE I data. Face to face interviews	×	QA↑
47	Obeidat et al. (2016)	Cross-sectional survey General public	Anti-tobacco messages and their recall	Questionnaire regarding Recall of anti-tobacco messages and effect on increasing knowledge about associated harms	In-person data collection	Effect of knowledge not satisfactory	NN N
84	Owusu et al. (2019)	Experimental study	Pictorial and text only warnings and Fear appeal messages adaptive vs maladaptive responses	Questionnaire regarding the effect on perceived informativeness, negative emotion and denial	On-line data collection	Pictorial messages are more effective than text-only warnings in increasing QI. Fear appeal messages adaptive responses are better.	QI→
49	Park et al. (2019)	Longitudinal survey	Exposure to anti- tobacco messages on T.V with Quit lines	Quit lines assessed for QA	Quit line data assessment	EoAds.+	QA↑

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QA, QB, QI, COB, C, AB MoQ, SB, R and SI	NS	N N	SI↑	QB; No effect
K, A and EoAds(+/-) towards tobacco use and findings	₩	EoAds. (+) Participants who reported seeing the anti-tobacco advertisement were more likely not to give cigarettes as a gift in the future.	No exposure to anti-tobacco ads related to future smoking behaviour	EoAds. (-) Husband influence; Yes
Data collection method	Household	Face to Face interviews	GYTS secondary data.	Self-reports
Data collection tools	Questionnaire regarding awareness of the risk associated with smoking and SHS	Self-reports on recall of advertisements and effect on future behaviour.	Self-reports on exposure to antitobacco ads.	Questionnaire regarding the influence of media on tobacco behaviour.
Type of Media messages Studied	Anti-tobacco advertisement awareness	T.V. based anti-tobacco advertisements.	Anti-tobacco messages from T.V. radio, billboards, posters, newspapers, magazines and movies. Home, school and any social event	Anti-tobacco media messages on T.V and tobacco products.
Type of study and Population Studied	Cross-sectional survey 18–55 years old females	Cross- sectional survey. 18–45 years old.	Cross-sectional survey. Adolescents 13–15 years.	Cross-sectional survey. Females' smokeless tobacco users (18–40 years)
Author and Year	Petersen et al. (2018)	Qin et al. (2014)	Rao et al. (2014)	Schessul et al. (2018)
S.No.	50	51	52	53

Table 1 (Continue)

S.No.	Author and Year	Type of study and Population Studied	Type of Media messages Studied	Data collection tools	Data collection method	K, A and EoAds(+/-) towards tobacco use and findings	QA, QB, QI, COB, C, AB MoQ, SB, R and SI
54	Shahina et al. (2017)	Cross-sectional survey 18–40 years SLT user females	Anti-tobacco TV messages and tobacco product warnings	Questionnaire regarding effect of QI	In-person data collection	EoAds.+	QI↑ more in T.V messages.
55	Sharma et al. (2018)	Cross-sectional survey. Adults (15–40 years)	Anti-tobacco media messages via T.V., Newspaper	Questions asked about the source of entertainment, information, knowledge regarding the ill effects of tobacco.	Pen-pencil based survey	K+ T.V is the most common, cost-effective and important media among all other	A N
56	Springvloet et al. (2015)	Longitudinal study. Tobacco users	Anti-tobacco advertisements OR information's	Self-reporting Anti-tobacco advertisements recall method	WAVE 2 data computer assisted telephonic/web interview	A(-) with increasing education	QI ↑ with increasing education
57	Tan et al. (2017)	Cross-sectional study. 18–70 years old. Smokers, non-smokers and gender	Anti-smoking warning labels.	Self-reports. Questionnaire regarding smoking habits and beliefs about smoking and effectiveness of the warning labels	Face to face interview.	EoAds.+ Females found all the warning labels effective.	SN
28	Unal et al. (2016)	Cross-sectional survey. Adolescents' students	T.V anti-smoking advertisements	Questionnaires regarding EoAds	In-person data collection	EoAds decreases with smoking status. Health-related anti-tobacco ads are more appreciated.	SN

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QA, QB, QI, COB, C, AB MoQ, SB, R and SI	Ų	COB+	ΦĪ	NS
K, A and EoAds(+/-) towards tobacco use and findings	EoAds.+ K↑ A-	EoAds.+ Pictorial warnings are effective in generating QB	EoAds. (+)	EoAds+ Pictorial warnings with highly emotional content are more effective.
Data collection method	Follow-up interviews	Household	Secondary analysis from GATS-2 DATA	Paper pen-based memory test
Data collection tools	Questionnaire regarding ad awareness, quit intentions, antitobacco attitudes,	Questionnaire regarding the impact of pictorial warnings and anti-tobacco advertisements on tobacco behaviour.	Questionnaire regarding interest in quitting, quitting attempts and successful quitting	Questions regarding effectiveness of ads based on recognition memory task
Type of Media messages Studied	Truth ads effectiveness	Pictorial warnings over tobacco products Radio, newspaper, billboards and T.V.	Anti-smoking media advertisements	Anti-tobacco pictorial warnings on cigarette packs
Type of study and Population Studied	Longitudinal Cohort Study (15–21 years old)	Cross-sectional survey. Tobacco users.	Cross-sectional Survey Age 15 and above Females	Experimental study. Smokers
Author and Year	Vallone et al. (2017)	Vecraiah et al. (2018)	Verma et al. (2021)	Wang et al. (2019)
S.No.	59	09	61	62

Table 1 (Continue)

S.No.	Author and Year	Type of study and Population Studied	Type of Media messages Studied	Data collection tools	Data collection method	K, A and EoAds(+/-) towards tobacco use and findings	QA, QB, QI, COB, C, AB MoQ, SB, R and SI
63	Xu et al. (2015)	Cross-sectional survey. Tobacco users and non-users 18–45 years.	T.V. anti-tobacco advertisements	Self-reports. Questionnaires regarding tobacco- related K and A	Face to face interview	No effect on K and A (smokers)	QI↓
64	Yang et al. (2019)	Cross-sectional study Male smokers	Exposure to anti- tobacco ads	Questionnaire regarding exposure to anti-tobacco ads and effect on QA	In-person data collection	EoAds.+	QA↑
65	Zhu et al. (2019)	Cross-sectional survey students	Exposure to media (pro and anti-tobacco messages)	Questionnaire regarding a recall of ads and susceptibility to smoke in future	In-person interview	Anti-tobacco ads neutralize the effect of pro- tobacco ads.	iΩ

Note: K, knowledge; A, attitude; EoAds., the effectiveness of anti-tobacco advertisements; QA, quit attempts; QB, quit behaviour; QI, quit behaviour; QI, quit intentions; COB, cessation-oriented behaviour; Cessation; AB, abstinence; MoQ, motivation to quit; SI, smoking intentions; R, relapse; SB, smoking behaviour; NS, not studied.

RESULTS

The Effect of Anti-Tobacco Propaganda (media) Messages on Maintenance of Tobacco Abstinence

The majority of studies assessing the effect of the anti-tobacco propaganda (media) messages are cross-sectional designs; hence, we can make an association between variables but, the causal relations cannot be explained through these studies. These messages can increase the quit behaviour and decrease smoking behaviour, but gender influence is seen in most studies as females are much more influenced by the antitobacco propaganda (media) messages and more receptive than male respondents. On the other hand, the impact of anti-tobacco propaganda (media) message on knowledge and attitude regarding tobacco is also assessed and found to be effective enough.

Contrary to knowledge and attitude findings, the effect on quit intentions is not positive in all studies. Some of the studies reported very low effects, and some reported no effect on the quit intentions of current smokers. These findings indicate a low to a medium association between increased knowledge and attitude with quit. It should be considered that antitobacco propaganda (media) messages with pictorial warnings with text have more power to motivate the current smokers to quit. Anti-tobacco propaganda (media) messages with fear factors have the power to motivate individuals for trying to quit smoking. It must be noted that peer pressure is not considered as the main barrier in quitting tobacco but the uncomfortable

sensations (withdrawal effects) due to quitting, as reported by many studies. The government must also include content in the advertisements that support this issue of withdrawal management. Tobacco users and recent quitters do not benefit from the anti-tobacco propaganda (media) messages as they find them irrelevant and generally misinterpret the warnings placed over tobacco products.

Some studies reported the exposure and frequency of the anti-tobacco propaganda (media) messages on individuals that matter. The effect does not come in one instance but is a gradual process. Also, the age of an individual when exposed to the anti-tobacco propaganda (media) messages decides the future consequences or tobacco behaviour of an individual, as reported by many studies. An adolescent, if in his/her early developmental stages, get exposed to pro-tobacco advertisements like via retail advertisements in a shop, tobacco-company sponsored events, indirect exposure via movies or media programs then it is estimated that they may indulge in tobacco consuming behaviour in the near future, on the other hand, the nonexposure of anti-tobacco propaganda (media) messages is a major factor for smoking initiation among adolescents and adult population. Non-exposure to these anti-tobacco advertisements and exposure to pro-tobacco marketing advertisements significantly amends the tobacco-related behaviour of a person.

On the whole, findings suggest that anti-tobacco propaganda (media) messages

have a major impact on quitting behaviour of tobacco users. Although quit intentions and quit attempts evaluated by a few longitudinal surveys reported that the antitobacco propaganda (media) messages do not have any major impact over successive quitting attempts of tobacco users but the initial. It is also reported that the antitobacco propaganda (media) messages have a positive influence over cessation-oriented behaviour of tobacco users. However, maintenance of this cessation-oriented behaviour is still questionable as a few longitudinal studies suggest that antitobacco propaganda media messages have no impact on the maintenance of abstinence or help in the prevention of relapse.

The Influence of Different Types of Anti-Tobacco Propaganda (media) Messages Over Population

A number of studies reported that pictorial and graphical health warnings with fearful messages have a great influence over tobacco non-users, especially among females and adolescents. Although, in general, the antitobacco propaganda (media) messages are effective in making an impact on the whole population. Research studies focused on tobacco users illustrated that most antitobacco propaganda (media) messages are not getting any response from tobacco users. It is a major issue of concern and cannot be ignored. For tobacco users, it is the antitobacco (media) messages based on 'why to quit' strategies (messages which justify why it is necessary to quit) and based on personal testimonial content (real stories of persons who are affected badly by tobacco use) are found effective. However, some studies also reported that lived experiences, symbolic or testimonial warnings are less effective in generating a positive response from current smokers. A few studies also reported that the effectiveness of antitobacco propaganda (media) messages decreases with the smoking status or level of tobacco dependence of an individual. Most of the anti-tobacco propaganda (media) messages give information about negative health effects of tobacco on consumer and their family (second-hand smoking) not taken positively by tobacco users, and they find them irrelevant and ignore them consciously. Few studies reported that advertisements that arouse fear and guilt effectively change smoking behaviour among tobacco users as well as non-tobacco users. Graphical anti-tobacco propaganda (media) messages are considered more efficient than anti-tobacco propaganda (media) messages showing negative health effects in text-only formats. Non-smokers seem to be more touched by the negative health effects of anti-tobacco propaganda (media) messages than fellow smokers.

The celebrity influence plays an important role in any anti-tobacco propaganda (media) message. These messages are more effective for adolescents, females, and the tobacco non-user group. Some studies reported that the high prevalence of tobacco use is related to lower socioeconomic, educational status, rural residence, and maturity. The reason for this higher prevalence might be the difference in

the level of understanding or non-relevance of particular advertisements in these specific groups. Few studies reported the effect of anti-tobacco propaganda (media) messages on quitting behaviour, and their results are not consistent with each other. Few studies suggested that pictorial health warnings create a very low effect on quit behaviour; contrary to this, some studies reported that graphic advertisements have a universal appeal and help in changing smokingrelated behaviour. This difference in their findings might be due to the variations in the study sample and study design as the former study included the smokers only and reported that quitting behaviour is very low after seeing the pictorial warnings on cigarette packs while the latter one consists of respondents from both groups. Overall quitting behaviour is not influenced by one factor but many factors like age, socioeconomic status, place of residence and type of family, age of initiation, and level of dependence.

DISCUSSION

This review concludes that anti-tobacco propaganda (media) messages play a crucial role in modifying tobacco-related behaviour among the general population. A total of 65 research papers were included in the review. A total of 41 cross-sectional studies, eight longitudinal studies, 14 experimental studies, two mixed studies demonstrated the distinct impact of anti-tobacco advertisements on tobacco behaviour of tobacco users, recent quitters, as well as to non-users. Overall findings indicate that anti-tobacco

propaganda (media) messages are effective in reducing tobacco use prevalence if used judiciously. In order to be more effective and comprehensive, government-sponsored anti-tobacco propaganda (media) messages must be prepared with appropriate content and should cover other sections of the population, not only non-tobacco users and females. It is to be noted that almost all the studies assessed the effect of these antitobacco media messages on the smoking form of tobacco. However, a smokeless form of tobacco is used by females, especially in India. The influence of celebrity on quit behaviour or smoking behaviour is studied by a few studies and gave a mixed effect. This finding can guide states while making future anti-tobacco advertisements.

Among the different categories of anti-tobacco propaganda (media) messages available, lived experiences, symbolic or testimonial warnings are less effective in generating a positive response from current smokers. On the other hand, non-smokers seem to be more touched by the negative health effects of anti-tobacco propaganda (media) messages. Graphic health warnings and media messages with anti-tobacco industry themes are more effective in decreasing smoking initiation among tobacco non-users than any other category of anti-tobacco propaganda (media) messages. However, some studies also reported that the anti-tobacco propaganda (media) messages might have a boomerang effect on tobacco users. The 'No smoking' hoardings, 'Stop Smoking' signboards, and the anti-tobacco propaganda (media) messages can act as

smoking cues for tobacco users and recent quitters and make them relapse. The antitobacco propaganda (media) messages can be important investments in successful tobacco control programmes. Therefore, the anti-tobacco propaganda (media) messages help educate the public about the harms of tobacco use, change attitudes and beliefs regarding tobacco use, increase quitting intentions and quit attempts among tobacco users, and reduce overall tobacco use prevalence.

The content of the anti-tobacco propaganda (media) messages must be assessed at infrequent intervals to make the time and trend appropriate. Furthermore, adolescents' age is vulnerable to tobacco initiation, and they are considering advertisements as inappropriate to their age group. Therefore, it requires immediate considerations about the content of antitobacco health messages. Health messages must be age appropriate. Presently, the effect of this anti-tobacco propaganda (media) message over maintaining tobacco abstinence is still under doubt. Achievement of sufficient population exposure is vital, especially for tobacco users, males, individuals with lower socioeconomic status. The primary channel to effectively reach and influence the general public is movies and cinema theatres, television, and radio, while smokers and non-smokers do not much appreciate other channels like newspapers, magazines, and posters. Therefore, longitudinal and qualitative studies are required to find the appropriate need-based content for future anti-tobacco propaganda (media) messages.

CONCLUSION

Anti-tobacco (media) messages effectively reduce the overall prevalence of tobacco use among tobacco users. They are equally beneficial in decreasing the incidence rates of tobacco use hence effective for the nonsmoker group. Anti-tobacco media messages must be tailored or customized for a better and deeper reach for certain groups, which to date remained resistant. The smoking form of tobacco remains the main focus of almost all the studies. It is due to its negative consequences on others' health. However, the smokeless form of tobacco is equally or more harmful for tobacco users. Antitobacco (media) messages must address all the sections of society, and to be effective messages, one must not feel offended after watching or listening to them. Otherwise, the boomerang effect of these anti-tobacco (media) messages, as discussed in many studies, could not be ignored.

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REFERENCES

- Bansal, S., Malhotra, S., Krishna, M., Chaudhary, S., & Agarwal, G. (2021). Effectiveness of pictorial health warnings on tobacco products in creating awareness among 15-17 years old school children in Lucknow. *Indian Journal of Forensic Medicine & Toxicology*, 15(2), 774-780. https://doi.org/10.37506/ijfmt.v15i2.14407
- Bhat, S. S., Bhadranna, A., Prasad, S. R., Rao, S. G., & Pai, A. (2018). Are the media enabled anti-tobacco campaigns effective? A pilot study. *Journal of Clinical and Diagnostic Research*, 12(11). https://doi.org/10.7860/JCDR/2018/35140.12308
- Bincy, M., Vidhubala, E., & Priyadharshini, R. (2018). Does 85% pictorial health warning on the tobacco products have the impact among tobacco users in India? *Tobacco Induced Diseases*, 16(1), 1617-9623 https://doi.org/10.18332/tid/84498
- Bourque, J., Dinh-Williams, L.-A., & Potvin, S. (2016). The role of appetitive and aversive smoking cues in tobacco use disorder with a focus on fMRI. In V. R. Preedy (Ed.), *Neuropathology of drug addictions and substance misuse* (pp. 291-304). Academic Press. https://doi.org/10.1016/B978-0-12-800213-1.00028-6
- Brennan, E., Maloney, E., Ophir, Y., & Cappella, J. N. (2019). Designing effective testimonial pictorial warning labels for tobacco products. *Health Communication*, *34*(12), 1383-1394. https://doi.org/10.1080/10410236.2018.1493417
- Brewer, N. T., Hall, M. G., Noar, S. M., Parada, H., Stein-Seroussi, A., Bach, L. E., Hanley, S., & Ribisl, K. M. (2016). Effect of pictorial cigarette pack warnings on changes in smoking

- behavior: A randomized clinical trial. *JAMA Internal Medicine*, *176*(7), 905-912. https://doi.org/10.1001/jamainternmed.2016.2621
- Cantrell, J., Pearson, J. L., Anesetti-Rothermel, A., Xiao, H., Kirchner, T. R., & Vallone, D. (2016). Tobacco retail outlet density and young adult tobacco initiation. *Nicotine & Tobacco Research*, 18(2), 130-137. https://doi.org/10.1093/ntr/ntv036
- Chandra, T. (2019). Literacy in India: The gender and age dimension [ORF Issue Brief, No. 322].

 Observer Research Foundation. https://www.orfonline.org/wp-content/uploads/2019/10/ORF_IssueBrief_322_Literacy-Gender-Age.pdf
- Chauhan, A., & Sharma, R. (2017). Impact of anti smoking campaigns on youth. *Procedia Computer Science*, 122, 941-948. https://doi.org/10.1016/j.procs.2017.11.458
- Chhabra, A., Hussain, S., & Rashid, S. (2021). Recent trends of tobacco use in India. *Journal of Public Health*, 29(1), 27-36. https://doi.org/10.1007/s10389-019-01091-3
- Chido-Amajuoyi, O. G., Agaku, I., Mantey, D. S., Yu, R. K., & Shete, S. (2020). Association of exposure to court-ordered tobacco industry antismoking advertisements with intentions and attempts to quit smoking among US adults. *JAMA Network Open*, 3(7), e209504. https://doi. org/10.1001/jamanetworkopen.2020.9504
- Cho, K. W., Lee, J., Ryu, J., & Kim, S. J. (2017). Effects of anti-smoking public service announcements on the attitudes of Korean college students toward smoking. *Osong Public Health and Research Perspectives*, 8(6), 397-404. https://doi.org/10.24171/j.phrp.2017.8.6.07
- Clayton, R. B., Leshner, G., Sanders-Jackson, A., & Hendrickse, J. (2020). When counterarguing becomes the primary task: Examination of dogmatic anti-vaping messages on psychological reactance, available cognitive resources, and

- memory. *Journal of Communication*, 70(4), 522-547. https://doi.org/10.1093/joc/jqaa010
- Clayton, R. B., Leshner, G., Tomko, R. L., Trull, T. J., & Piasecki, T. M. (2017). Countering craving with disgust images: Examining nicotine withdrawn smokers' motivated message processing of antitobacco public service announcements. *Journal* of Health Communication, 22(3), 254-261. https://doi.org/10.1080/10810730.2016.1268222
- Colston, D. C., Xie, Y., Thrasher, J. F., Emery, S., Patrick, M. E., Titus, A. R., Elliott, M. R., & Fleischer, N. L. (2021). Exploring how exposure to truth and state-sponsored antitobacco media campaigns affect smoking disparities among young adults using a national longitudinal dataset, 2002-2017. International Journal of Environmental Research and Public Health, 18(15), 7803. https://doi.org/10.3390/ijerph18157803
- Davis, K. C., Patel, D., Shafer, P., Duke, J., Glover-Kudon, R., Ridgeway, W., & Cox, S. (2018). Association between media doses of the tips from former smokers campaign and cessation behaviors and intentions to quit among cigarette smokers, 2012-2015. *Health Education & Behavior: The Official Publication of the Society for Public Health Education*, 45(1), 52-60. https://doi.org/10.1177/1090198117709316
- Divinakumar, K. J., Patra, P., Prakash, J., & Daniel, A. (2017). Prevalence and patterns of tobacco use and nicotine dependence among males industrial workers. *Industrial Psychiatry Journal*, 26(1), 19-23. https://doi.org/10.4103/ipj.ipj_14_17
- Drovandi, A., Teague, P.-A., Glass, B., & Malau-Aduli, B. (2018). Australian school student perceptions of effective anti-tobacco health warnings. Frontiers in Public Health, 6, 297. https://doi.org/10.3389/fpubh.2018.00297
- Duke, J. C., Woodlea, R., Arnold, K. Y., MacMonegle, A. J., Nonnemaker, J. M., & Porter, L. (2020). Effect of a statewide media campaign on smoking cessation among Florida adults.

- *Preventing Chronic Disease*, *17*, 190271. https://doi.org/10.5888/pcd17.190271
- Dunbar, M. S., Setodji, C. M., Martino, S. C., & Shadel, W. G. (2019). Graphic health warning posters increase some adolescents' future cigarette use susceptibility by changing normative perceptions of smoking: A case of mediated moderation. Psychology of Addictive Behaviors: Journal of the Society of Psychologists in Addictive Behaviors, 33(7), 649-658. https://doi.org/10.1037/adb0000503
- Durkin, S., Bayly, M., Brennan, E., Biener, L., & Wakefield, M. (2018). Fear, sadness and hope: Which emotions maximize impact of antitobacco mass media advertisements among lower and higher SES groups? *Journal of Health Communication*, 23(5), 445-461. https://doi.org/10.1080/10810730.2018.1463320
- Elser, H., Hartman-Filson, M., Alizaga, N. M., & Vijayaraghavan, M. (2019). Exposure to pro- and anti-tobacco messages online and off-line among people experiencing homelessness. *Preventive Medicine Reports*, *15*, 100944. https://doi.org/10.1016/j.pmedr.2019.100944
- Gadiyar, A., Ankola, A., & Rajpurohit, L. (2018).
 Awareness of anti-tobacco advertisements and its influence on attitude toward tobacco use among 16 to 18-year-old students in Belgaum city: A Cross-sectional study. *Journal of Education and Health Promotion*, 7, 85. https://doi.org/10.4103/jehp.jehp 27 18
- Gantiva, C., Sotaquirá, M., Chaparro, V., Colorado, L., & Gómez, A. (2021). Emotional impact of graphic health warnings on tobacco packaging. *PsychArchives*. https://doi.org/10.23668/ psycharchives.4626
- Gendall, P., Eckert, C., Hoek, J., & Louviere, J. (2018). Estimating the effects of novel on-pack warnings on young adult smokers and susceptible non-smokers. *Tobacco Control*, 27(5), 519-525. https://doi.org/10.1136/tobaccocontrol-2017-053719

- Gravely, S., Fong, G. T., Driezen, P., Xu, S., Quah, A. C. K., Sansone, G., Gupta, P. C., & Pednekar, M. S. (2016). An examination of the effectiveness of health warning labels on smokeless tobacco products in four states in India: Findings from the TCP India cohort survey. *BMC Public Health*, 16(1), 1246. https://doi.org/10.1186/s12889-016-3899-7
- Hair, E. C., Kreslake, J. M., Rath, J. M., Pitzer, L., Bennett, M., & Vallone, D. (2021). Early evidence of the associations between an anti-ecigarette mass media campaign and e-cigarette knowledge and attitudes: Results from a crosssectional study of youth and young adults. *Tobacco Control*. https://doi.org/10.1136/ tobaccocontrol-2020-056047
- Hammond, D., Reid, J. L., Driezen, P., Thrasher, J. F., Gupta, P. C., Nargis, N., Li, Q., Yuan, J., Boudreau, C., Fong, G. T., Cummings, K. M., & Borland, R. (2018). Are the same health warnings effective across different countries? An experimental study in seven countries. *Nicotine & Tobacco Research*, 21(7), 887-895. https://doi.org/10.1093/ntr/nty248
- Harris, J. L., Pierce, M., & Bargh, J. A. (2014).
 Priming effect of antismoking PSAs on smoking behaviour: A pilot study. *Tobacco Control*, 23(4), 285-290. https://doi.org/10.1136/tobaccocontrol-2012-050670
- Huang, L.-L., Friedman, D. B., Lin, F.-C., & Thrasher, J. F. (2018). Which types of anti-smoking television advertisements work better in Taiwan? *Health Promotion International*, 33(3), 545-555. https://doi.org/10.1093/heapro/daw085
- Hwang, J., & Cho, S. (2020). The association between new graphic health warning labels on tobacco products and attitudes toward smoking among South Korean adolescents: A national crosssectional study. *BMC Public Health*, 20(1), 748. https://doi.org/10.1186/s12889-020-08638-0

- Johnson, E. K., Len-Ríos, M., Shoenberger, H., & Han, K. J. (2019). A fatal attraction: The effect of TV viewing on smoking initiation among young women. *Communication Research*, 46(5), 688-707. https://doi.org/10.1177/0093650216641183
- Kar, S. S., Reddy, M. M., Kanungo, S., & Naik, B. N. (2018). Willingness to quit tobacco smoking and its correlates among Indian smokers—Findings from GATS India, 2009—10. *Tobacco Induced Diseases*, 16(1), 1617-9625. https://doi.org/10.18332/tid/83881
- Kar, S. S., Sivanantham, P., Rehman, T., Chinnakali, P., & Thiagarajan, S. (2020). Willingness to quit tobacco and its correlates among Indian tobacco users—Findings from the Global Adult Tobacco Survey India, 2016–17. *Journal of Postgraduate Medicine*, 66(3), 141-148. PMID:32675450
- Katiyar, S. P. (2016). Gender disparity in literacy in India. *Social Change*, 46(1), 46-69. https://doi. org/10.1177/0049085715618558
- Kemp, D., Niederdeppe, J., & Byrne, S. (2019).
 Adolescent attention to disgust visuals in cigarette graphic warning labels. The Journal of Adolescent Health: Official Publication of the Society for Adolescent Medicine, 65(6), 769-775.
 https://doi.org/10.1016/j.jadohealth.2019.07.007
- Kowitt, S. D., Lazard, A. J., Queen, T. L., Noar, S. M., & Goldstein, A. O. (2018). Adolescents' aided recall of targeted and non-targeted tobacco communication campaigns in the United States. International Journal of Environmental Research and Public Health, 15(11), 2363. https://doi.org/10.3390/ijerph15112363
- Kranzler, E. C., Gibson, L. A., & Hornik, R. C. (2017).
 Recall of "the real cost" anti-smoking campaign is specifically associated with endorsement of campaign-targeted beliefs. *Journal of Health Communication*, 22(10), 818-828. https://doi.org/10.1080/10810730.2017.1364311

- Kumar, A., & Puranik, M. (2017). Pictorial health warnings on tobacco packs-a knowledge, attitude and practice survey among Indian engineering students. *International Journal of Health* Sciences & Research, 7(5), 116-122.
- Leas, E. C., Myers, M. G., Strong, D. R., Hofstetter, C. R., & Al-Delaimy, W. K. (2015). Recall of anti-tobacco advertisements and effects on quitting behavior: Results from the California smokers cohort. *American Journal of Public Health*, 105(2), e90-e97. https://doi.org/10.2105/ AJPH.2014.302249
- Lee, S. M., Chun, S., & Lee, J. S. (2020). The role of negative emotions pre- and post-implementation of graphic health warnings: Longitudinal evidence from South Korea. *International Journal of Environmental Research and Public Health*, 17(15), 5393. https://doi.org/10.3390/ijerph17155393
- Li, X., Li, W., Chen, H., Cao, N., & Zhao, B. (2021). Cigarette-specific disgust aroused by smoking warning images strengthens smokers' inhibitory control under smoking-related background in Go/NoGo task. *Psychopharmacology*, 238(10), 2827-2838. https://doi.org/10.1007/s00213-021-05898-5
- CareerRide.com. (n.d.). *Highlights of draft Bill 2015* and its advantages. https://www.careerride.com/ view/limitations-of-cotpa-2003-highlights-ofdraft-bill-2015-and-its-advantages-18974.aspx
- Liu, J., & Bailey, R. L. (2019). Effects of substance cues in negative public service announcements on cognitive processing. *Health Communication*, 34(9), 964-974. https://doi.org/10.1080/104102 36.2018.1446251
- Magnan, R. E., Hamilton, W. K., Shorey-Fennell, B., & Cameron, L. D. (2021). Experimental test of the educational impact of the newly proposed FDA graphic cigarette warnings among U.S. adults. *Annals of Behavioral Medicine*, 55(4), 298-307. https://doi.org/10.1093/abm/kaaa071

- Majumdar, A., Kumar, S. G., & Selvaraj, R. (2017).
 Awareness of health warnings and factors predicting awareness and perceived effectiveness of pictorial health warnings on tobacco products among adults in rural Puducherry, India. *Journal of Education and Health Promotion*, 6, 23. https://doi.org/10.4103/jehp.jehp 72 15
- Mannocci, A., Mipatrini, D., Troiano, G., Milazzo,
 F., Langiano, E., Ferrara, M., Firenze, A.,
 Provenzano, S., Gualano, M. R., Fiore, M.,
 Boccia, G., Messina, G., Vito, E. D., Siliquini,
 R., Villari, P., & Torre, G. L. (2019). The impact of pictorial health warnings (PHW) on tobacco packages: The first quasi-experimental field trial after the implementation of the law in Italy.
 Annali Dell'Istituto Superiore Di Sanità, 55(2), 186-194.
- Maynard, O. M., Attwood, A., O'Brien, L., Brooks, S., Hedge, C., Leonards, U., & Munafò, M. R. (2014). Avoidance of Cigarette pack health warnings among regular cigarette smokers. *Drug and Alcohol Dependence*, *136*, 170-174. https://doi.org/10.1016/j.drugalcdep.2014.01.001
- McKinley, C. J., & Limbu, Y. (2021). The role of conditional factors in testimonial health messaging: Re-examining the influence of self vs. relational goals. *Atlantic Journal of Communication*, 1-18. https://doi.org/10.1080/15456870.2021.1890593
- Mishu, M. P., Siddiqui, F., Shukla, R., Kanaan, M., Dogar, O., & Siddiqi, K. (2020). Predictors of cigarette smoking, smokeless tobacco consumption, and use of both forms in adolescents in South Asia: A secondary analysis of the global youth tobacco surveys. *Nicotine & Tobacco Research*, ntaa202. https://doi.org/10.1093/ntr/ntaa202
- Murukutla, N., Bayly, M., Mullin, S., Cotter, T., Wakefield, M., & International Anti-SHS Advertisement Rating Study Team. (2015). Male smoker and non-smoker responses to television advertisements on the harms of secondhand smoke in China, India and Russia. *Health*

- Education Research, 30(1), 24-34. https://doi.org/10.1093/her/cyu044
- Mutti, S., Reid, J. L., Gupta, P. C., Pednekar, M. S., Dhumal, G., Nargis, N., Hussain, A. G., & Hammond, D. (2016). Perceived effectiveness of text and pictorial health warnings for smokeless tobacco packages in Navi Mumbai, India, and Dhaka, Bangladesh: Findings from an experimental study. *Tobacco Control*, 25(4), 437-443. https://doi.org/10.1136/tobaccocontrol-2015-052315
- Nagelhout, G. E., Heijndijk, S. M., Cummings, K. M., Willemsen, M. C., van den Putte, B., Heckman, B. W., Hummel, K., de Vries, H., Hammond, D., & Borland, R. (2016). E-cigarette advertisements, and associations with the use of e-cigarettes and disapproval or quitting of smoking: Findings from the International Tobacco Control (ITC) Netherlands Survey. *International Journal of Drug Policy*, 29, 73-79. https://doi.org/10.1016/j.drugpo.2015.12.015
- Nan, X., & Zhao, X. (2016). The mediating role of perceived descriptive and injunctive norms in the effects of media messages on youth smoking. *Journal of Health Communication*, 21(1), 56-66. https://doi.org/10.1080/10810730.2015.1023958
- Nguyen, N., Lisha, N. E., Neilands, T. B., Jordan, J. W., & Ling, P. M. (2019). Differential associations between anti-tobacco industry attitudes and intention to quit smoking across young adult peer crowds. *American Journal of Health Promotion*, 33(6), 876-885. https://doi.org/10.1177/0890117119829676
- Niederdeppe, J., Avery, R., Byrne, S., & Siam, T. (2016). Variations in state use of antitobacco message themes predict youth smoking prevalence in the United States, 1999-2005. *Tobacco Control*, 25(1), 101-107. https://doi.org/10.1136/tobaccocontrol-2014-051836
- Nogueira, S. O., McNeill, A., Fu, M., Kyriakos, C. N., Mons, U., Fernández, E., Zatoński, W. A., Trofor,

- A. C., Demjén, T., Tountas, Y., Przewoźniak, K., Quah, A. C. K., Fong, G. T., Hitchman, S. C., & Vardavas, C. I. (2018). Impact of anti-smoking advertising on health-risk knowledge and quit attempts across 6 European countries from the EUREST-PLUS ITC Europe Survey. *Tobacco Induced Diseases*, 16 (Suppl 2), A5. https://doi.org/10.18332/tid/96251
- Nonnemaker, J. M., Dench, D., Homsi, G., MacMonegle, A., & Duke, J. (2015). The effect of exposure to media campaign messages on adult cessation. *Addictive Behaviors*, 49, 13-19. https://doi.org/10.1016/j.addbeh.2015.05.006
- Obeidat, N. A., Ayub, H. S., Shtaiwi, A. S., & Hawari, F. I. (2016). Rethinking anti-tobacco health education in an Eastern Mediterranean country with growing tobacco use. *Asian Pacific Journal of Cancer Prevention*, 17(2), 527-533. https://doi.org/10.7314/APJCP.2016.17.2.527
- Owusu, D., So, J., & Popova, L. (2019). Reactions to tobacco warning labels: Predictors and outcomes of adaptive and maladaptive responses. *Addiction Research & Theory*, 27(5), 383-393. https://doi.org/10.1080/16066359.2018.1531127
- Park, J., Minh, L. N., Shin, S. H., Oh, J.-K., Yun, E. H., Lee, D., & Lim, M. K. (2019). Influence of new tobacco control policies and campaigns on Quitline call volume in Korea. *Tobacco Induced Diseases*, 17, 21. https://doi.org/10.18332/tid/104674
- Petersen, A. B., Thompson, L. M., Dadi, G. B., Tolcha, A., & Cataldo, J. K. (2018). An exploratory study of knowledge, attitudes, and beliefs related to tobacco use and secondhand smoke among women in Aleta Wondo, Ethiopia. *BMC Women's Health*, 18(1), 154. https://doi.org/10.1186/ s12905-018-0640-y
- Rao, S., Aslam, S. K., Zaheer, S., & Shafique, K. (2014). Anti-smoking initiatives and current smoking among 19,643 adolescents in South Asia: Findings from the Global Youth Tobacco Survey. *Harm Reduction Journal*, *11*, 8. https://doi.org/10.1186/1477-7517-11-8

- Schensul, J. J., Begum, S., Nair, S., & Oncken, C. (2018). Challenges in Indian women's readiness to quit smokeless tobacco use. Asian Pacific Journal of Cancer Prevention, 19(6), 1561-1569. https://doi.org/10.22034/APJCP.2018.19.6.1561
- Shahina, B., Schensul, J., & Nair, S. (2017). Effect of Indian women's exposure to warning messages on intention to quit smokeless tobacco. *International Journal of Reproduction, Contraception, Obstetrics and Gynecology*, 6(12), 5354-5358. https://doi.org/10.18203/2320-1770. ijrcog20175241
- Sharma, A., Kinra, M., Tiwari, A., Dubey, M., & Todkar, M. (2018). The role of media in reducing tobacco use: A cross-sectional study on 18-40 age group people in Bhopal city. *International journal of Applied Dental Sciences*, 4, 36-39.
- Singh, S. K., Schensul, J. J., & Kashyap, G. C. (2018). The reach of media to smokers and smokeless tobacco users in India: Evidence from the Global Adult Tobacco Survey (GATS). *Journal of Population and Social Studies*, 26(1), 42-52.
- So, J., & Popova, L. (2018). A profile of individuals with anti-tobacco message fatigue. *American Journal of Health Behavior*, 42(1), 109-118. https://doi.org/10.5993/AJHB.42.1.11
- Springvloet, L., Willemsen, M. C., Mons, U., van den Putte, B., Kunst, A. E., Guignard, R., Hummel, K., Allwright, S., Siahpush, M., de Vries, H., & Nagelhout, G. E. (2015). Educational differences in associations of noticing antitobacco information with smoking-related attitudes and quit intentions: Findings from the International Tobacco Control Europe Surveys. *Health Education Research*, 30(5), 719-730. https://doi.org/10.1093/her/cyv037
- Tan, A. S., Bigman, C. A., Nagler, R. H., Minsky, S., & Viswanath, K. (2017). Comparing perceived effectiveness of FDA-proposed cigarette packaging graphic health warnings between sexual and gender minorities and heterosexual adults. Cancer Causes & Control, 28(10),

- 1143-1155. https://doi.org/10.1007/s10552-017-0954-3
- Unal, E., Gokler, M. E., Metintas, S., & Kalyoncu, C. (2016). Effect of anti-smoking advertisements on Turkish adolescents. *Eastern Mediterranean Health Journal* 22(9), 654-661.
- Vallone, D., Greenberg, M., Xiao, H., Bennett, M., Cantrell, J., Rath, J., & Hair, E. (2017). The effect of branding to promote healthy behavior: Reducing tobacco use among youth and young adults. *International Journal of Environmental Research and Public Health*, 14(12), 1517. https://doi.org/10.3390/ijerph14121517
- Veeraiah, S., Elangovan, V., Sudhakar, R., Chidambaram, S., & Subramani, D. (2018). Impact of pictorial warning and advertisement among tobacco users in India. *Tobacco Induced Diseases*, 16 (Suppl 1), A753. https://doi. org/10.18332/tid/84558
- Verma, M., Bhatt, G., Nath, B., Kar, S. S., & Goel, S. (2021). Tobacco consumption trends and correlates of successful cessation in Indian females: Findings of global adult tobacco surveys. *Indian Journal of Tuberculosis*, 68, S29-S38. https://doi.org/10.1016/j.ijtb.2021.08.037
- Wang, A.-L., Shi, Z., Fairchild, V. P., Aronowitz, C. A., & Langleben, D. D. (2019). Emotional salience of the image component facilitates recall of the text of cigarette warning labels. *The European Journal of Public Health*, 29(1), 153-158. https://doi.org/10.1093/eurpub/cky059
- Xu, X., Gong, T., Zhang, Y., Wu, C., Xie, Y. J., Wang, H. H., Zhu, R., Li, W., An, L., & Zhao, Y. (2015). Evaluation of anti-smoking television advertising on tobacco control among urban community population in Chongqing, China. *Tobacco Induced Diseases*, 13, 31. https://doi. org/10.1186/s12971-015-0057-4
- Yang, T., Zhu, Z., Barnett, R., Zhang, W., & Jiang, S. (2019). Tobacco advertising, antitobacco information exposure, environmental

smoking restrictions, and unassisted smoking cessation among Chinese male smokers: A population-based study. *American Journal of Men's Health*, 13(3) 1-13. https://doi.org/10.1177/1557988319856152

Zhu, J., Li, J., He, Y., Li, N., Xu, G., & Yu, J. (2019). The influence and interaction of exposure to pro-smoking and anti-smoking messaging on youth smoking behaviour and susceptibility. *Tobacco Induced Diseases*, 17, 86. https://doi.org/10.18332/tid/114066



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Personal Values Perceptions on Involvement and Attitude Towards Discount Sales Promotion - Individualistic and Collectivist Values Perspective

Teck Weng Jee^{1*}, Wee Ming Lau², Jati Kasuma³ and Rashidah Kamarulzaman²

ABSTRACT

This study explores the effect of personal values (individualistic and collectivist values) on consumers' involvement and attitude towards discount sales promotion. In order to create and test a more parsimonious predictive-based research model, this study used a closed-ended survey and a two-stage technique using partial least square structural equation modelling. The findings imply that individualistic and collectivist beliefs influence consumer involvement and attitude toward discount sales promotions. Furthermore, the findings of this study expand current knowledge on similar sales promotion areas where this study details the effect of personal value (from both the lens of individualistic and collectivist values perspective) on involvement and attitude towards discount sales promotion, as well as the mediating effect of involvement on personal values (individualistic

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E-mail addresses: tjee@swinburne.edu.my (Teck Weng Jee) Lau.wee.ming@uts.edu.my (Wee Ming Lau) jati@uitm.edu.my (Jati Kasuma) rashidah@uts.edu.my (Rashidah Kamarulzaman) *Corresponding author and collectivist values) and attitude towards sales promotion. Understanding the impact of personal values, involvement, and attitude toward discount sales promotion is crucial, according to this study, especially when selecting appropriate strategies for better market segmentation and targeting.

Keywords: Attitude, collectivist, discount, individualistic, involvement, personal value, sales promotion

¹Swinburne University of Technology, Sarawak Campus, 93350 Kuching, Sarawak, Malaysia

²University Technology Sarawak, 96000 Sibu, Sarawak, Malaysia

³Universiti Teknologi MARA Malaysia, Samarahan Branch, 94300, Kota Samarahan, Sarawak, Malaysia

INTRODUCTION

One of the main reasons propounded for sales promotion is to gain immediate and direct responses from consumers (Jee & De Run, 2016; Ndubisi & Chiew, 2006; Sinha & Verma, 2020). Nevertheless, this does not necessarily turn into sales as not all sales promotions are equally effective in helping retailers and marketers move their products from the shelves to the carts of their consumers. Furthermore, past studies in retailing and consumer behaviour field indicated that consumers' spending correlates with the perceptions they hold against using a specific sales promotion (Jee, 2021; Sinha & Verma, 2020).

While merchants frequently employ favoured promotional tactics to entice customers to buy a specific product or brand, consumers place a high value on perceptions and involvement with product purchases encouraged by retailers who utilise a specific sales promotion, while other factors are sometimes overlooked (Jee, 2021). It is especially true for consumers in Asian nations like Malaysia, where sales promotion strategies frequently capitalise on attitudinal responses (Jee et al., 2016; Jee & De Run, 2013; Ndubisi & Chiew, 2006), the notion of value reinforcement, and involvement (Jee et al., 2016; Inoue et al., 2017).

In relation to consumers' sales promotion techniques preferences, retailers and marketers often create and shape the extrinsic attributes that motivate consumers' attitudes, most notably personal values (Jee, 2018; Rønnow-Rasmussen, 2007,

2011). Additionally, studies have shown the need to contextualise personal values towards involvement to deliver intended attitudes towards specific sales promotion preferences, particularly price discount sales promotion (Jee, 2018; Roux, 2014). However, little is known about which type of personal values are the most pertinent towards attitude towards discount sales promotion preferences, including whether there are any mediating effects of involvement on the relationship between personal values and attitude towards price discount sales promotion techniques or not. As a result, it is uncertain whether personal values and involvement are linked. If so, how the personal value (as seen through the lenses of individualistic and collectivist values) might be controlled to influence consumers' attitudes toward sales promotion preferences. Given the widespread use of discount sales promotions by merchants and marketers in Malaysia, knowing this effect is extremely relevant and might be highly valuable (Jee, 2018). The current paper argues that more research is needed to better understand the impact of personal values, from both individualistic and collectivist perspectives, on specific sales promotion and consumer responses (i.e., involvement and attitude) towards it.

Hence, this paper aims to address the gaps in understanding sales promotion by developing and testing a more parsimonious predictive-based research model that can better explain the effects of personal values (individualistic and collectivist values) on involvement and attitude towards discount

sales promotion. The next section will review the relevant literature, followed by discussions on the hypotheses development, before outlining the conceptual framework. The remaining sections will cover the methods used in this study as well as the research findings before moving on to the theoretical implications and managerial implications. The conclusion and limitations of the study and future research directions are covered in the final section of this study.

LITERATURE REVIEW

Sales Promotion

Studies on consumers' responses towards sales promotion have progressed over the years due to the increasing growth of its importance in the retail marketing environment (McNeill, 2012; Sinha & Verma, 2020). These sales promotions also impact consumers' brand choices (Joseph et al., 2020). However, it mainly results from the effectiveness of using sales promotion as a part of retailers' and manufacturers' integrated marketing (Fam et al., 2019a).

In Asian countries such as Malaysia, sales promotion techniques such as price discounts, free samples, and bonus packs are preferred (Iranmanesh et al., 2016; Jee & De Run, 2013). These sales promotion techniques have been generally accepted as monetary-based benefits or utilitarian-based sales promotions that give consumers the monetary benefits they seek. Such a condition is mainly due to the materialistic nature of the consumers from these countries (Moschis et al., 2009). Such monetary-based benefits sales promotion will result in short-

term benefits and an increase in sales to the retailers and manufacturers (Ganesha & Aithal, 2020).

Among the many sales promotion techniques used by retailers as marketing tools to simulate promotional-prone consumers, monetary-based sales promotion such as discounts, free samples, coupons, and bonus packs are more preferred by consumers and widely implemented by retailers (Jee et al., 2016; Ndubisi & Chiew, 2005, 2006). In Asian countries such as Malaysia, sales promotion techniques such as price discounts, free samples, and bonus packs are more preferred (Iranmanesh et al., 2016; Jee & De Run, 2013). Such sales promotional techniques are not just prevalently sought by monetary savings and values seeking consumers (Jee et al., 2016; McNeill, 2012, 2013), but even retailers incessantly use such monetary-based sales promotion techniques to reinforce monetary savings and values enticed with the uses of it in purchases (Tellis, 1998). These sales promotion techniques have been generally accepted as monetary-based benefits or utilitarian-based sales promotions that give consumers the monetary benefits they seek. Such a condition is mainly due to the materialistic nature of the consumers from these countries (Moschis et al., 2009).

Personal Values and Involvement

Personal values refer to the motivational conditions consumers possess to achieve their goals (Schwartz, 2012). In physical service settings, personal values can be controlled and designed to create positive

appeals in the delivery of services and thus be used to encourage desired behaviour (Jee, 2018; Jee & De Run, 2013; Kaveh et al., 2021). The contribution of values studies comes primarily from social marketing and cause-related marketing (Jee, 2018), consumers' ethics and behaviours (Chen et al., 2019; Nonis & Swift, 2001), international business typecasting (Ariail et al., 2020), and salesperson performance (Ismail et al., 2019)

Studies on values are also documented in human psychological settings to predict and explain behaviours and attitudes (Kropp et al., 2005). The fundamental foundations of researchers' concentration on value studies in the respective field were based on strong potential values explanations of human behaviours (Kamakura & Mazzon, 1991; Munson & McIntyre, 1979). When values are used in different cultural contexts, situations, and behavioural guiding codes, it was shown to affect consumers' involvement (Ganesha & Aithal, 2020) and attitudes and behaviours formation in various crosscultural research across countries (Sagiv & Schwartz, 2000; Schwartz, 2012). These personal values include power, achievement, hedonism, stimulation, self-direction, universalism, benevolence, tradition, conformity, security, and spirituality (Schwartz, 1992, 2012).

Personal values have been the topic of substantial research due to their ability to give retailers and marketers competitive advantages (Jee, 2018; Kaveh et al., 2021). As a result, the ability to categorise different personal values into individualist and

collectivist values (Kapoor et al., 1995), as well as the impact of different personal values on involvement, can help to break down deadlocks caused by discount sales promotion techniques in highly competitive marketplaces (Jee, 2021). Such personal values are also widely documented to serve individuals' or groups' interests (Jee, 2018; Jee & De Run, 2013; Kaveh et al., 2021). Within the individualistic values perceptive, it tends to drive the notion of power, achievement, hedonism, stimulation, and self-direction, whereas the perspective of the collectivist values mainly drives the values associated with benevolence, tradition, and conformity towards widely accepted societal norms practices (Kapoor et al., 1995).

Previous studies have shown that personal values can be associated with sales promotion technique preferences (Jee, 2018; Sheth & Uslay, 2007). Thus, when consumers engage with such preferences, they are more likely to derive values from them (Kaveh et al., 2021; Vivek et al., 2012). In this regard, consumers' conformance to either individualistic or collectivist values impacts their participation in a preferred sales pitch. It led to the following hypotheses:

H1: Individualistic values perceptions influence consumers' involvement with preferred sales promotion techniques (i.e., discount).

H2: Collectivist values perceptions influence consumers' involvement with preferred sales promotion techniques (i.e., discount).

Involvement and Attitude

Involvement is generally understood by the degree of relevance and its importance (Sharma & Klein, 2020). It has been continuously reviewed over the years on its impact on organisational behaviour (Nnadozie et al., 2019), psychology (Brewster et al., 2020; Qian et al., 2017), and marketing (Yang et al., 2019). Previous studies on involvement were predominantly done to explain consumers' purchase intention (McClure & Seock, 2020) and as a mediating construct (Lim et al., 2019).

Involvement, on the other hand, can also be used to explain attitude (Zhu et al., 2017; Pressca et al., 2019). For example, consumers' involvement with price discount sales promotion techniques often creates convivial experiences that facilitate preferable attitudes (Jee, 2018), such as those described in the landscape of attitude change (Chandon et al., 2000; Fam et. al, 2019b; Leong et al., 2020). It led to the following hypothesis:

H3: Involvement with price discount sales promotion techniques is positively related to its attitude.

Past studies conducted in retailing settings has shown that consumers' involvement enhances consumers' attitude more favourably (Liu et al., 2020; McClure & Seock, 2020). Therefore, this study further hypothesises that involvement will mediate the relationship between personal

values and attitude. Furthermore, past studies done by Inoue et al. (2017) indicated that involvement plays a mediating effect between values and attitude. Nevertheless, limited studies were done to test the mediating effect of involvement on attitude towards specific sales promotion techniques (Jee, 2018, 2021; Jee & De Run, 2013). It led to the following hypotheses:

H4: Individualistic values perceptions influence consumers' attitude toward sales promotion techniques (i.e., discount), mediated by involvement towards it.

H5: Collectivist values perceptions influence consumers' attitude toward sales promotion techniques (i.e., discount), mediated by involvement towards it.

CONCEPTUAL FRAMEWORK

Building on the extant of Schwartz and Bilsky's (1987) universal values theory alongside Kapoor et al.'s (1995) conceptualization of individualistic and collectivist values, this study hypothesizes the relationships between the various personal values dimension (refer to Figure 1) and its impact on involvement and attitude towards discount sales promotion This can be seen in Figure 1.

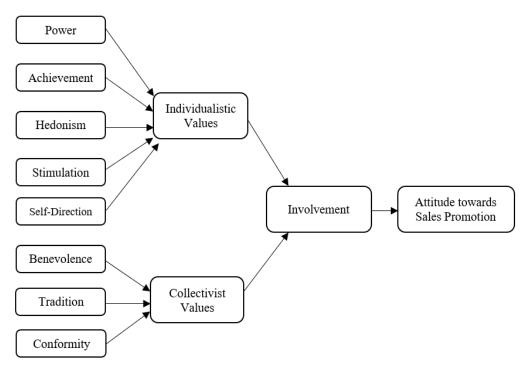


Figure 1. Individualistic and Collectivist Values Influence on Discount Sales Promotion Technique Preference Source: Jee (2018); Kapoor et al. (1995); Schwartz and Bilsky (1987)

Methodology

This research used quantitative methodology and a purposive sampling method for individual selection of respondents with established criteria. The criteria used to choose the respondents are as follows; (1) had used at least once sales promotion techniques in the recent purchases [not more than two months], (2) and are conscious of the uses of the sales promotion techniques in their purchases [e.g., uses of price discount sales promotion in the recent purchases].

Respondents were selected from a cross-section of the 'purchasing enabled' in Malaysia. Consumers in the 21 to 55-years-old age group were identified as sampling

targets, estimated at 16 million (Department of Statistics Malaysia, 2016). As such, 501 respondents were surveyed to allow for meaningful statistics to be calculated from responses. The minimum sample size for the study stage is based on the power analysis procedures through the G*Power algorithm, which is mainly recommended for the model testing procedure (Akter et al., 2011). Therefore, the recommended minimum sample size is calculated at 111 respondents.

The self-administered survey questionnaire was used to capture the underlying constructs in the conceptual framework. The self-administered survey questionnaire is divided into two parts. Part one comprises items relating to the respondents' latest purchase with price discount sales promotion and their attitude towards price discount sales promotion used. The attitude variables consist of 8 items on attitude adopted from Kraft et al. (2005). Part two comprises 20 items from the 56 items on personal value adopted from Schwartz and Bilsky (1987) and four items related to involvement adopted from Zaichkowsky (1985) regarding their current purchase. In addition, respondents were asked to respond to a 6-point Likert scale where the level of agreement was on a scale of 1 to 6, with six being strongly agreed. A 6-point Likert scale was used in the questionnaires to ensure an answer that is not median-based (Chang, 1994).

A two-stage approach technique in PLS-SEM was used (Becker, 2012) to cater to the impact of the higher-order constructs (HOCs) in the model tested in this study. Such an approach enabled the researchers to avoid both the Type 1 and Type 2 models, resulting in inaccurate modelling (Ting et al., 2015). It was done by employing the reflective-formative HOCs model based on Kapoor et al. (1995) and Schwartz and Bilsky (1987) to accommodate the distinct individualistic values (INDV) and collectivist values (COLV). While the model is reflective in the lower order component model, they form individualistic values (INDV) and collectivist values (COLV). Lastly, both involvement and attitude use reflective measurement.

Table 1

Descriptive findings for personal values, involvement, and attitude

Variables	Mean	Standard Deviation
Personal Value		
Power	3.93	1.18
Achievement	4.62	1.00
Hedonism	4.96	0.96
Stimulation	4.75	0.99
Self-direction	4.54	1.12
Benevolence	5.00	0.91
Tradition	4.59	1.01
Conformity	4.49	1.31
Involvement	4.35	0.98
Attitude	4.97	0.82

Findings

The discount sales promotion technique was chosen as the focal point of this study. It is the most likely used and preferred sales promotion technique in Malaysia by both retailers and consumers (Jee, 2021; Jee et al., 2016). Table 1 presents the descriptive findings for all the personal value construct tested, as well as involvement and attitude towards price discount sales promotion techniques.

Manipulation Checks

Common method bias was first examined using Harman's Single Factor technique (Podsakoff et al., 2012). The factor analysis result shows that the largest variance explained by the first factor was 37.12% of the total variance, which indicated that no general factor emerged. Therefore, common method bias is not a significant problem for this study.

Table 2 Convergent validity and reliability

Constructs	Items	Loading	AVE	CR
Power (POW)	POW1	0.887	0.793	0.884
	POW2	0.894		
Achievement (ACH)	ACH1	0.780	0.640	0.780
	ACH2	0.819		
Hedonism (HED)	HED1	0.868	0.747	0.855
	HED2	0.861		
Stimulation (STI)	STI1	0.822	0.694	0.819
	STI2	0.843		
Self-direction (SD)	SD1	0.738	0.605	0.753
	SD2	0.815		

Measurement Model Assessments

Multiple reflective items are used in the structural model, which shows the relationship between the construct and the items (Hair et al., 2014). Since all items are reflective, items with a factor loading of below 0.40–0.70 and contribute to low Average Variance Extracted (AVE) are removed from the model. No items are deleted from the measurement model as all items indicate factor loading of 0.70 and above.

In order to check the convergent validity of all the constructs in the measurement model, the requirement of composite reliability (CR) was tested (Hair et al., 2014). CR is tested with a threshold predetermined at 0.50 for each factor loading and Average Variance Extracted (AVE) as shown in Table 2. (Fornell & Larcker, 1981; Wong, 2013)

Table 2 (Continue)

Constructs	Items	Loading	AVE	CR
Benevolence (BEN)	BEN1	0.885	0.783	0.878
	BEN2	0.885		
Tradition (TRA)	TRA1	0.866	0.741	0.852
	TRA2	0.856		
Conformity (CON)	CON1	0.940	0.564	0.703
	CON2	0.945		
Involvement (INV)	INV1	0.729	0.572	0.842
	INV2	0.740		
	INV3	0.779		
	INV4	0.776		
Attitude (ATT)	ATT1	0.771	0.613	0.905
	ATT2	0.777		
	ATT3	0.823		
	ATT4	0.793		
	ATT5	0.802		
	ATT6	0.727		

Note: a Average variance extracted (AVE) b Composite Reliability (CR)

Table 3 and Table 4 depict the results of the discriminant validity of the measurement model based on the Fornell and Larcker (1981) criterion and Henseler's heterotraitmonotrait (HTMT) (2015) criterion.

The findings in Table 3 show that multicollinearity was not found because the square of the root of AVE using is greater than each correlation coefficient. The findings in Table 4 shows that all the constructs are distinctively different at the HTMT_{0.90} threshold, which indicates that discriminant validity has been established between two reflective constructs.

Formative Second-Order Constructs Assessments

Collinearity issues of the assessment of formative second-order construct for both individualistic and collectivist values are assessed as depicted in Table 5. The VIF values below 3.3 for each structural model construct show that collinearity is not a concern (Diamantopoulos & Siguaw, 2006). Such findings suggest that these constructs are distinct and measure individualistic values (INDV) and collectivist values (COLV) distinctively.

Table 3
Fornell-Larcker Criterion

	ACH	ATT	BEN	CON	HED	INV	POW	SD	STI	TRA
ACH	0.800									
ATT	0.206	0.783								
BEN	0.438	0.251	0.885							
CON	0.172	0.181	0.212	0.751						
HED	0.487	0.140	0.406	0.129	0.865					
INV	0.302	0.200	0.267	0.141	0.273	0.756				
POW	0.378	0.151	0.122	0.156	0.163	0.213	0.890			
SD	0.457	0.215	0.285	0.170	0.385	0.325	0.246	0.778		
STI	0.512	0.111	0.336	0.076	0.532	0.318	0.214	0.325	0.833	
TRA	0.267	0.188	0.316	0.250	0.276	0.236	0.199	0.278	0.218	0.861

Note: Diagonals represent the square root of the AVE while the off-diagonal represent the correlations

Table 4
Heterotrait-Monotrait (HTMT) Matrix

	ACH	ATT	BEN	CON	HED	INV	POW	SD	STI	TRA
ACH										
ATT	0.347									
BEN	0.783	0.321								
CON	0.454	0.308	0.363							
HED	0.905	0.191	0.585	0.275						
INV	0.528	0.244	0.362	0.288	0.386					
POW	0.659	0.192	0.167	0.407	0.231	0.287				
SD	0.607	0.376	0.538	0.53	0.801	0.625	0.493			
STI	0.757	0.177	0.522	0.208	0.872	0.49	0.336	0.725		
TRA	0.502	0.247	0.459	0.532	0.419	0.337	0.289	0.578	0.355	

Table 5

Collinearity assessment

	Collinearity Ass	Collinearity Assessment (VIF)					
	Individualistic Value (INDV)	Collectivist Value (COLV)					
POW	1.180						
ACH	1.773						
HED	1.584						
STI	1.586						
SD	1.337						
BEN		1.134					
TRA		1.156					
CON		1.089					

Furthermore, the weights and path coefficients from bootstrapping results for each formative second-order construct are depicted in Table 6 (Hair et al., 2014).

The results indicated that all values were significantly related to all individualistic values (INDV) and collectivist values (COLV), respectively.

Table 6
Path coefficient assessment

	Direct Effect (β)	Standard Error	T-Statistic	P-Value
POW -> INDV	0.241	0.025	9.580**	0.000
ACH -> INDV	0.295	0.013	23.266**	0.000
HED -> INDV	0.323	0.017	19.130**	0.000
STI -> INDV	0.305	0.015	20.880**	0.000
SD-> INDV	0.235	0.016	14.564**	0.000
BEN -> COLV	0.576	0.033	17.533**	0.000
TRA -> COLV	0.521	0.028	18.657**	0.000
CON -> COLV	0.263	0.036	7.159**	0.000

Note: ***p<0.01, **p<0.05 (one-tailed)

Structural Model Assessments

The collinearity of the structural model was firstly assessed to ensure the final model is free from collinearity issues, as shown in Table 7. The VIF values below 3.3 for each structural model construct show that collinearity is not a concern (Diamantopoulos & Siguaw, 2006).

Table 7

Collinearity assessment

	Collinearity As	Collinearity Assessment (VIF)		
	INV	ATT		
INDV	1.295			
COLV	1.295			
INV		1.000		

The findings in Table 8 further accept all the hypothesized relationships. All the path relationships are found to be significant (Individualistic Value -> Involvement, β =

0.346, P-value = 0.000; Collectivist Value -> Involvement, β = 0.170, P-value = 0.001; Involvement -> Attitude, β = 0.209, P-value = 0.000)

Table 8
Path co-efficient assessment

	Direct Effect (β)	Standard Error	T-Statistic	P-Value
INDV -> INV	0.346	0.048	7.000**	0.000
COLV -> INV	0.170	0.047	3.420**	0.001
INV -> ATT	0.209	0.044	4.570**	0.000
Post hoc (mediation) and	alysis			
INDV -> INV -> ATT	0.072	0.018	3.674**	0.000
COLV -> INV -> ATT	0.036	0.013	2.585**	0.010

Note: ***p<0.01, **p<0.05 (one-tailed)

Table 9 further depicts the predictive capability of the model through the blindfolding procedure by assessing the cross-validated redundancy through Stone-Geisser's predictive relevance (Q²) estimates and co-efficient of determination (R²), as well as the effect size (f²) (Hair et al., 2014). The value of R² in Table 9 indicated that individualistic values explain 19.2% of the variance in involvement and 4.0% in attitude. The Q² value for involvement and attitude suggests predictive relevance in the overall model. The interpretation of

 f^2 results is adopted from Cohen (1988), where f^2 values are classified into small, medium, and large (0.020, 0.150, and 0.350), respectively. From Table 9, it can be established that individualistic value ($f^2 = 0.159$) has medium effect size on involvement compared to collectivist value ($f^2 = 0.025$). It indicates that individualistic value factors are more important than collectivist value factors in explaining and predicting involvement with discount sales promotion techniques. Lastly, involvement ($f^2 = 0.042$) had small effect size on attitude.

Table 9

Determination of coefficient (R^2), predictive relevance (Q^2), and effective size (f^2)

	Determination	Predictive			
	of Coefficient (R ²)	Relevance (Q ²)	INV	ATT	f^2
INDV			0.159		Medium
COLV			0.025		Small
INV	0.192	0.022		0.042	Small
ATT	0.040	0.103			

DISCUSSION

This discussion is illustrated from the influence of individualistic and collectivist values perceptions on consumers' involvement and attitude towards preferred sales promotion techniques (i.e., discount). The findings from this study largely reveal that when consumers are involved in the decision-making stage (evident in the individualistic values these consumers associated with), the more likely they will show any involvement and attitudinal

responses towards the preferred sales promotion technique (i.e., discount). It is especially evident when looking at shopping products (apparel) enticed with discount sales promotion (Jee & De Run, 2013; McNeill, 2012, 2013; Sinha & Verma, 2020). Such characteristics, in return, will have an impact on consumers' overall attitudinal responses towards discount sales promotion techniques used.

The personal values issue is important for consumers. The significant relationship

indicates that discount sales promotion must provide immediate gratification and values (i.e., individualistic values) to allow for involvement and attitude to hold. It aligns with consumers' needs and wants, which are closely tied with the values they assimilated with (Jee, 2018; Jee & De Run, 2013; Kaveh et al., 2021). It happens as consumers like to appear smart and decisive in their shopping decisions (Jallow & Dastane, 2016; Jee, 2018, 2021; Jee et al., 2016; Jee & De Run, 2013; Ndubisi & Chiew, 2006), whilst creating positive involvement and attitude in their purchases.

At the same time, consumers associated with the collectivist values annotate the needs and wants of the larger society (Kacen & Lee, 2002; Saad & Samet, 2020). It can be seen from the preference and involvement towards monetary-based sales promotion techniques (i.e. discount) in highly collectivist societies such as Malaysia (Jee et al., 2016; Jee & De Run, 2013, 2016). It is true that the cultural build-up of such a collectivist community, which consists of strong societal norms and beliefs, has a clear and strong impact on their purchase behaviour (i.e. attitude and purchase intention) (Huang et al., 2016; Madahi & Sukati, 2012). Hence, consumers largely expect to acquire better quality in their purchases, which accentuates the collectivist values hold within such a collectivist society, for example, in Malaysia (Jee, 2021). Such societal reinforcement will increase their susceptibility towards utilising sales promotions when they shop.

While personal values dimensions (i.e., individualistic and collectivist values) play an essential role in understanding Malaysian consumers' involvement in discount sales promotions, subsequent research on the mediating impact of involvement on discount sales promotion attitudes yields similar results. Consumers usually believe that their preferences for discount sales promotion strategies were desirable, bolstered by their participation in the transactions.

Theoretical Implications

The study has three major implications for theory. First, the positive relationship between individualistic and collectivist values dimensions on the involvement and attitude towards discount sales promotion preferences. It indicates that Malaysian consumers believe that preference for monetary-based sales promotion (i.e. discount) accentuates the values that they seek (Kaveh et al., 2021; Sinha & Verma, 2020). Specifically, the results showed that consumers consider the personal values which best fit them on a personal level as well as the mass (e.g., power, achievement, hedonism, stimulation, and self-direction, which is associated with pleasure and sensuous gratification for oneself, and benevolence, tradition, and conformity which is associated with the societal expectations) when evaluating discount sales promotion. These results may be attributable to the significant effects that personal values and the ideology these values (individualistic and collectivist) affirm. Hence, it is best that their values are

to be grouped into distinct individualistic and collectivist perspectives to predict consumers' involvement better and attitude towards sales promotion in a more meaningful way as identified in previous studies (Jee, 2018; Jee et al., 2016; Jee & De Run, 2013; Kaveh et al., 2021; Ndubisi & Chiew, 2006; Sinha & Verma, 2020) and the current study.

Secondly, the findings on the positive relationship between involvement and attitude towards discount sales promotion, as illustrated earlier, support the findings of previous studies that emphasised the importance of gratification, including the need to contextualise these conditions to deliver certain experiences in a retailing setting which appeals to the mass (Jee, 2018; Jee et al., 2016; Jee & De Run, 2013).

Finally, the study's findings indicated that involvement mediates the relationship between the various personal values constructs on attitude towards discount sales promotion. Such findings are novel and important. The study showed that involvement could exemplify the relationship between personal values and attitude towards discount sales promotion. It is in line with previous studies' findings that emphasised the importance of involvement in shaping consumers' attitudes (Gbadamosi, 2009; Jee, 2018; Krishnamurthy & Kumar, 2018; Liu et al., 2020; McClure & Seock, 2020; Ndubisi & Chiew, 2006). Notably, the finding from this study shows that the mediating effect of involvement can occur in both ways; increased immediate sale and upholding the value of a brand or product for highly involved consumers.

Managerial Implications

This study affirms that sales promotion impacts consumer involvement and attitude towards sales promotion (i.e., discount) through individualistic and collectivist values perceptions. It further reveals the difference in consumer perceived personal values (individualistic and collectivist) for the same promotion technique under investigation (i.e., discount). Such findings are useful in developing a workable target approach according to individualistic and collectivist values of a particular preferred sales promotion technique within a specific market context. Furthermore, with its wide implication on consumers' involvement and attitude, such findings provide a different angle to investigate sales promotion technique perceptions, thus further articulating more effective sales promotion strategies and implementation in the marketplace.

The results provide practical insights for the operation of discount sales promotion preferences. Notably, this study found empirical evidence suggesting that Malaysian consumers favour discount sales promotion, resulting in favourable involvement and attitude. It can be achieved by cultivating the values (individualistic and collectivist) associated with Malaysian consumers when designing their sales promotion campaign, focusing on power, achievement, hedonism, stimulation, and self-direction to develop individualistic values and benevolence tradition conforming to develop collectivist values. Retailers and marketers can further invest in various discount promotional campaigns which accentuate the needs for both individualistic and collectivist values perceptions by integrating both perceptions to generate a more positive involvement and attitudinal responses towards it. It can be done by incorporating messages and visuals into retailers' and marketers' promotional campaigns to accentuate different values perceptions (individualistic and collectivists). Retailers and marketers can further link these messages and visuals to their other ongoing programs (e.g., loyalty programs) in alignment with the previously stated implications.

CONCLUSION

Sales promotions are used by businesses to stimulate consumers' desires and curiosity, encourage consumers to try new goods and increase sales, promote trade, or channel members, hence making it an important tool for marketing strategy success. However, businesses generally use sales promotions for short-term monetary gain, mainly by providing monetary incentives to consumers to induce their purchases. Findings from the present study provide useful insights for business practitioners on discount sales promotion preferences, particularly from the lens of different personal values (individualistic and collectivist), on consumers' involvement and attitude towards preferred sales promotion techniques (i.e., discount). Hence, discount sales promotion must be included in the business's crucial marketing plan and strategy.

Limitations and Future Research

This study contributes to the theory and practice of sales promotion technique preferences and usages, but it did have two main limitations. First, the scope of the study, which was to explore discount sales promotion techniques, has limited the effect of other sales promotion techniques preferences and other product types. Previous research has shown that different sales promotion techniques are associated with different product types (Jee & De Run, 2013). Thus, future research should broaden this study's findings by exploring other product types and sales promotion techniques associated with it.

This study is also limited to the studies of personal values from individualistic and collectivist perspectives in explaining consumers' involvement and attitude towards sales promotion. Future research can examine other indicators such as value consciousness to explain better consumers' involvement and attitudinal responses towards sales promotion techniques. Other possibilities could include identifying and testing other components of personal values (such as mixed values—the combination of universalism, security, and spirituality) to explain better consumers' sales promotion techniques perceptions, preferences, and the purchase decisions associated with it.

Even though the variety of places and people taken as samples for this study considers a wide diversity, it also failed to consider the younger or older generations who might have a different perspective. Further studies on these issues can be conducted. The results from this study also provide a perspective on the effect of sales promotion as a double-edged sword to get new customers, but that alienates highly involved (or lowly involved) customers from the current view. Further studies on this issue can also be conducted.

REFERENCES

- Akter, S., D'Ambra, J., & Ray, P. (2011). An evaluation of PLS based complex models: the roles of power analysis, predictive relevance and GoF index. In *Proceedings of the 17th Americas Conference on Information Systems (AMCIS2011)* (pp. 1-7). Association for Information Systems.
- Becker, J. M., Klein, K., & Wetzels, M. (2012). Hierarchical latent variable models in PLS-SEM: Guidelines for using reflective formative type models. *Long Range Planning*, *45*(5), 359-394. https://doi/10.31620/JCCC.06.21/14
- Brewster, M. E., Velez, B. L., Geiger, E. F., & Sawyer, J. S. (2020). It's like herding cats: Atheist minority stress, group involvement, and psychological outcomes. *Journal of Counseling Psychology*, 67(1), 1-13. https://doi.org/10.1037/cou00000392
- Chandon, P., Wansink, B., & Laurent, G. (2000). A benefit congruency framework of sales promotion effectiveness. *Journal of Marketing*, 64(4), 65-81. https://doi.org/10.1509/jmkg.64.4.65.18071
- Chang, L. (1994). A psychometric evaluation of 4-Point and 6-Point Likert-Type Scales in relation to reliability and validity. *Applied Psychology Measurement*, 18(3), 205-215. https://doi.org/10.1177/014662169401800302
- Chen, C.-w., Yu, H.-H., Tuliao, K. V., Simha, A., & Chang, Y.-Y. (2019). Supervisors' value orientations and ethics: A cross-national analysis. *Journal of Business Ethics*, 1-14. https://doi. org/10.1007/s10551-019-04254-0

- Cohen, J. (1988). Statistical power analysis for the behavioral sciences. Lawrence Erlbaum Associates. Inc.
- Department of Statistics Malaysia. (2016). Population distribution and basic demographic characteristics. https://www.dosm.gov.my/v1/index.php?r=column/ctwo&menu_id=L0pheU 43NWJwRWVSZklWdzQ4TlhUUT09#:~:text =In%202016%2C%20total%20population%20 of,rate%20for%20the%20same%20period cited on 13/2/2022
- 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
- Fam, K. S., Annuar, S. N. S., Tan, K. L., Lai, F. H., & Ingko, I. (2019a). Touring destination and intention to consume indigenous food. *British Food Journal*, *122*(6), 1883-1896. https://doi/10.1108/bfj-08-2019-0635
- Fam, K. S., Brito, P. Q., Gadekar, M., Richard, J. E., Jargal, U., & Liu, W. (2019b). Consumer attitude towards sales promotion techniques: A multi-country study. *Asia Pacific Journal of Marketing and Logistics*, 31(2), 437-463. https://doi/10.1108/APJML-01-2018-0005
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39-50. https://doi.org/10.2307/3151312
- Ganesha, H. R., & Aithal, P. S. (2020). Short-term discounting frameworks: Insights from multiple experiments. *International Journal of Case Studies in Business, IT, and Education*, 4(1), 8-22. https://doi/10.47992/IJCSBE.2581.6942.0058
- Gbadamosi, A. (2009). Cognitive dissonance: The implicit explication in low-income consumers' shopping behaviour for "low-involvement"

- grocery products. *International Journal of Retail & Distribution Management*, *37*(12), 1077-1095. https://doi/10.1108/09590550911005038
- Hair, J. J. F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2014). A primer on partial least squares structural equation modeling (PLS-SEM). Sage Publications.
- Huang, H. W., De Run, E. C., Ting, H., & Ting, H. S. C. (2016). "Made In China" products and the implication of ethnic identification strength. *International Review of Management and Marketing*, 6(3), 631-640.
- Inoue, Y., Funk, D. C., & McDonald, H. (2017).
 Predicting behavioral loyalty through corporate social responsibility: The mediating role of involvement and commitment. *Journal of Business Research*, 75, 46-56. https://doi/10.1016/j.jbusres.2017.02.005
- Iranmanesh, M., Jayaraman, K., Imrie, B. C., & Zailani, S. (2016). Promoting products through volume discount: Evidence from Malaysia. *Journal of Promotion Management*, 22(1), 71-88. https://doi.org/10.1080/10496491.2015 .1107009
- Ismail, H. N., Karkoulian, S., & Kertechian, S. K. (2019). Which personal values matter most? Job performance and job satisfaction across job categories. *International Journal of Organizational Analysis*, 27(1), 109-124. https://doi.org/10.1108/IJOA-11-2017-1275
- Jallow, H., & Dastane, O. (2016). Effect of sales promotion schemes on purchase quantity: A study of Malaysian consumers. *Management and Marketing*, 25(2), 299-320.
- Jee, T. W. (2018). Impact of sales promotion on customer intention to purchase high involvement product. *International Journal of Service Management and Sustainability*, 3(2), 61-82.
- Jee, T. W. (2021). The perception of discount sales promotions A utilitarian and hedonic

- perspective. *Journal of Retailing and Consumer Services*, 63, 102745. https://doi.org/10.1016/j.jretconser.2021.102745
- Jee, T. W., & De Run, E. C. (2013). Consumers' personal values and sales promotion preferences effect on behavioural intention and purchase satisfaction for consumer product. Asia Pacific Journal of Marketing and Logistics, 25(1), 70-101.
- Jee, T. W., & De Run, E. C. (2016, June 2017). Beliefs towards preferred sales promotion technique (Paper presentation). MAG Scholar Global Business, Marketing and Tourism Conference, Jilin University of Finance and Economics, Jilin, Changehun, China.
- Jee, T. W., De Run, E., & Lo, M. C. (2016). Beliefs towards sales promotion technique: The perspective of Malaysia emerging market. *International Journal of Modelling in Operations Management, 6*(1/2), 112-139.
- Joseph, J., Sivakumaran, B., & Mathew, S. (2020). Does loyalty matter? Impact of brand loyalty and sales promotion on brand equity. *Journal of Promotion Management*, 26(4), 524-543.
- Kacen, J. J., & Lee, J. A. (2002). The influence of culture on consumer impulsive buying behavior. *Journal of Consumer Research*, 12(2), 163-176.
- Kamakura, W. A., & Mazzon, J. A. (1991). Values segmentation: A model for the measurement of values and values systems. *Journal of Consumer Research*, 18(2), 208-218.
- Kapoor, S., Wolfe, A., & Blue, J. (1995). Universal values structure and individualism—collectivism: A US test. *Communication Research Reports*, 12(1), 112-123.
- Kaveh, A., Nazari, M., van der Rest, J. P., & Mira, S. A. (2021). Customer engagement in sales promotion. *Marketing Intelligence & Planning*, 39(3), 424-437.
- Kraft, P., Rise, J., Sutton, S., & Roysamb, E. (2005). Perceived difficulty in the theory of planned

- behaviour: Perceived control or affective attitude? *British Journal of Social Psychology*, 44, 479-496.
- Krishnamurthy, A., & Kumar, S. R. (2018). Electronic word-of-mouth and the brand image: Exploring the moderating role of involvement through a consumer expectations lens. *Journal of Retailing and Consumer Services*, 43, 149-156.
- Kropp, F., Lavack, A. M., & Silvera, D. H. (2005).
 Values and collective self-esteem as predictors of consumer susceptibility to interpersonal influence among university students. *International Marketing Review*, 22(1), 7-33.
- Leong, C.-M., Tan, K.-L., Puah, C.-H., & Chong, S.-M. (2020). Predicting mobile network operators users m-payment intention. *European Business Review*, 33(1), 22-30. https://doi.org/10.1108/EBR-10-2019-0263
- Lim, X. J., Ng, S. I., Chuah, F., Cham, T. H., & Rozali, A. (2019). I see, and I hunt. *British Food Journal*, 122(6), 1777-1800. https://doi.org/10.1108/BFJ-07-2018-0459
- Liu, Q., Zhang, X., Huang, S., Zhang, L., & Zhao, Y. (2020). Exploring consumers' buying behavior in a large online promotion activity: The role of psychological distance and involvement. *Journal* of Theoretical and Applied Electronic Commerce Research, 15(1), 66-80. http://doi.org/10.4067/ S0718-18762020000100106
- Madahi, A., & Sukati, I. (2012). The effect of external factors on purchase intention amongst young generation in Malaysia. *International Business Research*, *5*(8), 153-159. https://doi:10.5539/ibr.v5n8p153
- McClure, C., & Seock, Y. K. (2020). The role of involvement: Investigating the effect of brand's social media pages on consumer purchase intention. *Journal of Retailing and Consumer Services*, 53(3) 1-8. https://doi.org/10.1016/j. jretconser.2019.101975

- McNeill, L. (2012). Sales promotion in the supermarket industry: A four country case comparison. *The International Review of Retail, Distribution and Consumer Research*, 22(3), 243-260. https://doi.org/10.1080/09593969.2012.682599
- Moschis, G. P., Hosie, P., & Vel, P. (2009). Effects of family structure and socialization on materialism: A life course study in Malaysia. *Journal of Business and Behavioral Sciences*, 21(1), 166-181. https://doi.org/10.2753/MTP1069-6679180104
- Munson, J. M., & McIntyre, S. H. (1979). Developing practical procedures for the measurement of personal values in cross-cultural marketing. *Journal of Marketing Research*, *16*, 48-52. https://doi.org/10.1177/002224377901600107
- Ndubisi, N. O., & Chiew, T. M. (2005). Customer behavioral responses to sales promotion: The role of fear of losing face. *Asia Pacific Journal of Marketing and Logistics*, 17(1), 32-49. https://doi/10.1108/13555850510672278
- Ndubisi, N. O., & Chiew, T. M. (2006). Awareness and usage of promotional tools by Malaysian consumers: The case of low involvement products. *Management Research News*, 29(1/2), 28-40.
- Nnadozie, E. E., Ugwu, L. E., Enwereuzor, I. K., Anozie, E. U., & Albi-Oparaocha, F. C. (2019). Bringing out the creativity in you: How a competitive climate and mentoring kindle creative work involvement of university academic staff. *Journal of Psychology in Africa*, 29(6), 556-562. https://doi.org/10.1080/143302 37.2019.1691788
- Nonis, S., & Swift, C. O. (2001). An examination of the relationship between academic dishonesty and workplace dishonesty: A multicampus investigation. *Journal for Education in Business*, 77(2), 69-77. https://doi.org/10.1080/08832320109599052

- Pressca, N., Jati, K., Nur Azizah, A. M., Nuraida, A. H. A., & Aisyah, N. (2019). Does advertisement and celebrity endorsements influence the Korean cosmetic products purchase intention? Empirical evidence among netizen in Kota Samarahan, Sarawak. Malaysian Journal of Consumer and Family Economics, 22(2), 73-85.
- Podsakoff, P. M., MacKenzie, S. B., & Podsakoff, N. P. (2012). Sources of method bias in social science research and recommendations on how to control it. *Annual Review of Psychology*, 65, 539-569. https://doi.org/10.1146/annurevpsych-120710-100452
- Qian, T. Y., Wang, J. J., Chou, W. W., Kim, E., Zhang, J., & Gong, B. (2017). When the future of Chinese soccer is at stake: Chinese youth's attention, involvement and satisfaction. *International Journal of Sports Marketing and Sponsorship*, 18(1), 29-47. https://doi/10.1108/IJSMS-09-2016-0065
- Rønnow-Rasmussen, T. (2007). Analysing personal value. *The Journal of Ethics*, *11*(4), 405-435. https://doi.org/10.1007/s10892-006-9012-1
- Rønnow-Rasmussen, T. (2011). *Personal value*. Oxford University Press.
- Roux, A. T. (2014). South African consumers' views and responses to sales promotions. *Journal of Social Sciences*, 41(2), 243-251. https://doi.org/10.1080/09718923.2014.11893360
- Saad, M., & Samet, A. (2020). Collectivism and commonality in liquidity. *Journal of Business Research*, 116, 137-162. https://doi.org/10.1016/j.jbusres.2020.04.012
- Sagiv, L., & Schwartz, S. H. (2000). Value priorities and subjective well-being: Direct relations and congruity effects. *European Journal of Social Psychology*, 30, 177-198. https://doi. org/10.1002/(SICI)1099-0992(200003/04)30
- Schwartz, S. H. (1992). Universals in the content and structure of values: Theoretical advances and empirical tests in 20 countries. In M.

- Zanna (Ed.), Advances in experimental social psychology (Vol. 25, pp. 1-66). Academic Press.
- Schwartz, S. H. (2012). An overview of the Schwartz theory of basic values. *Online readings in Psychology and Culture*, 2(1), 1-20.
- Schwartz, S. H., & Bilsky, W. (1987) Toward a universal psychological structure of human values. *Journal of Personality and Social Psychology*, 53(3), 550-562. https://doi/10.1037/0022-3514.58.5.878
- Sharma, V. M., & Klein, A. (2020). Consumer perceived value, involvement, trust, susceptibility to interpersonal influence, and intention to participate in online group buying. *Journal of Retailing and Consumer Services*, 52, 101946. https://doi.org/10.1016/j.jretconser.2019.101946
- Sheth, J. N., & Uslay, C. (2007). Implications of the revised definition of marketing: From exchange to value creation. *Journal of Public Policy and Marketing*, 26(2), 302-307. https://doi.org/10.1509/jppm.26.2.302
- Sinha, S. K., & Verma, P. (2020). Impact of sales promotion's benefits on perceived value: Does product category moderate the results? *Journal of Retailing and Consumer Services*, 52, 101887. https://doi.org/10.1016/J. JRETCONSER.2019.101887
- Tellis, G. J. (1998). *Advertising and sales promotion strategy*. Addison-Wesley.
- Ting, H., Chuah, F., Cheah, J. H., Memon, M. A., & Yacob, Y. (2015). Revisiting attitude towards advertising, its antecedent and outcome: A two-stage approach using PLS-SEM. *International Journal of Economics and Management*, 9(2), 382-402.
- Vivek, S. D., Beatty, S. E., & Morgan, R. M. (2012). Customer engagement: Exploring customer relationships beyond purchase. *The Journal of Marketing Theory and Practice*, 20(2), 122-146. https://doi.org/10.2753/MTP1069-6679200201

- Wong, K. K. (2013). Partial least squares structural equation modeling (PLS-SEM) techniques using SmartPLS. *Marketing Bulletin*, 24(1), 1-32.
- Yang, K., Min, J. H., & Garza-Baker, K. (2019). Poststay email marketing implications for the hotel industry: Role of email features, attitude, revisit intention and leisure involvement level. *Journal* of Vacation Marketing, 25(4), 405-417. https:// doi.org/10.1177/1356766718814081
- Zaichkowsky, J. L. (1985). Measuring the involvement construct. *Journal of Consumer Research*, 12, 341-352. https://doi.org/10.1086/208520
- Zhu, D. H., Sun, H., & Chang, Y. P. (2017). How the content of location-based advertisings influences consumers' store patronage intention. *Journal of Consumer Marketing*, 34(7), 603-611.





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Social Media Influence Towards Understanding, Awareness and Perception on Royal Institutions: Empirical Study on Young Millennials

Siti Sara Ibrahim^{1*}, Masitah Ahmad¹, Wan Admiza Wan Hassan¹, Abd Halim Mohd Noor² and Abdul Halim Ramli³

¹Universiti Teknologi MARA, Cawangan Negeri Sembilan, Kampus Rembau, 71300, Rembau, Malaysia ²Universiti Teknologi MARA, Cawangan Melaka, Kampus Alor Gajah, 78000, Alor Gajah, Malaysia ³Universiti Teknologi MARA, Cawangan Negeri Sembilan, Kampus Seremban, 70300, Seremban, Malaysia

ABSTRACT

Social media currently plays a major role in the lives of young millennials (Gen Z) who primarily use technology to communicate, express their opinions and gather information. From one angle, social media usage brings significant benefits; the failure to use it wisely can lead to negative impacts. In the context of the Royal Institution, the liberty to use social media to express personal and public sentiments has led many youths to disregard protocol and to hurl insults to the Rulers. On the other hand, positive social media usage in this context can boost favourable perceptions of the Royal Institution. Hence, this study aims to examine how the level of understanding and awareness about our Royal Institution amongst young millennials can significantly influence their perceptions about the institution as reflected via social media. A cross-sectional survey was conducted using structured questionnaires distributed to 393 respondents comprising youths born after 1994 to fulfil the

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E-mail addresses:
saraibrahim@uitm.edu.my (Siti Sara Ibrahim)
masitah@uitm.edu.my (Masitah Ahmad)
wanadmiza@uitm.edu.my (Wan Admiza Wan Hassan)
drabdhalim@uitm.edu.my (Abd Halim Mohd Noor)
abdul488@uitm.edu.my (Abdul Halim Ramli)
*Corresponding author

research criteria of young millennials (Gen Z). The partial least squares method was adopted for data analysis. It is confirmed that the hypothesis on the significant influence of understanding and awareness gathered from social media has reflected young millennials' perception of our Royal Institutions. The findings are significantly important to facilitate the government in formulating policies or guidelines towards establishing positive social media usage that

can nurture general respect for the Royal Institution and ultimately a harmonious social relationship between the people and the institution.

Keywords: Awareness, millennial, perception, royal institution, social media, understanding

INTRODUCTION

Social media has progressed from a platform for people for connection to a place where one stays updated on current global issues. Compared to conventional media, social media has the advantage of acquiring and sharing information and improving the quality of public services that traditional media cannot, particularly in terms of efficiency (Malawani et al., 2020). Furthermore, social media combines computer and information technology, communication networks, and digital media content (Mustafa & Hamzah, 2011). Hence, the information presented is substantially different from traditional media due to its convergence features, digital networking capabilities, global reach, interactivity, and mass communication.

Young millennials (Gen Z) are also exposed to global narratives through social media, attracting them to groups seeking to change the world. Young millennials utilise social media for more than personal consumption and connection; they also use it to start movements and protests (Milkman, 2017). In addition, they are using social media to voice their opinions about policies affecting their lives. Lenhart et al. (2010) asserted that youths are prolific social media

users who invest a substantial amount of their time in media interaction. Millennials and Generation Z were born into a world where social media and digital technology were pervasive in almost every area of their life. Hence, there is a need to control their social media usage to prevent cyber threats. Young millennials are supporters of the nation's vision; they are vital in attaining highly valuable information that is now experiencing an explosion, changed by their social media use.

Undoubtedly, social media also brings positive social impacts. Omar and Sallehuddin (2011) highlighted that social media usage is significantly linked to personal fulfilments such as the prevention of loneliness, the pursuit of entertainment and information, and the strengthening of relationships. Mustafa (2016) agrees with the view by asserting that social media is primarily used to establish friendships via Facebook. Mustaffa and Ibrahim (2014) listed other usages of Facebook, including recalling memories of past events, keeping up with technology, strengthening friendships, achieving educational goals, lessening daily stress, obtaining information, and entertainment.

However, Markom et al. (2019) asserted that uncontrolled and irresponsible social media usage could be damaging. The current scenario shows that social media consequently can also lead to the spread of rumours and speculation if the user fails to use it wisely (Shiang et al., 2021). Therefore, it highlights social or interactive media to play a major role in the lives of young

millennials (Gen Z) who primarily use technology to communicate, express their opinions, and gather information. Social media usage brings significant benefits; however, using it wisely can lead to negative impacts. Studies have looked into the negative effects of social media, especially in terms of cyberbullying as well as to the individual inner performance (Hung & Li, 2007; Omar et al., 2016; Stevens et al., 2016; Whittaker & Kowalski, 2015).

In the context of the Royal Institution, positive social media usage among young millennials can lead to better understanding and awareness about the institution. Social media can drive a favourable perception about the Royal Institution. According to Associate Professor Dr Shamrahayu Abd Aziz, the royal symbol of the institution must be maintained to reflect a country that practices a democratic parliamentary system (Arif, 2018). It is an open secret that the younger generation of various ethnicities uses social media platforms to voice their frustration and intent to abolish the monarchy. For a country built upon parliamentary democracy and the constitutional monarchy, it is difficult for Malaysia to strike a balance between social media control and freedom (Mahmud & Pitchan, 2017).

Hence, this study intends to analyse the perception of young millennials (Gen Z) about the Royal Institution in Malaysia as reflected by their social media usage. Following this introduction, the next section examines the study's relevant literature. Next, the methods used are described in Section 3. Finally, Section 4 contains the data analyses, whereas Section 5 contains a discussion of the findings. These are followed by the study's results and implications, which emphasise the necessity of young millennials understanding and awareness to reflect a favourable perspective of Malaysia's Royal Institutions.

LITERATURE REVIEW

Review on Social Media Usage by Gen-Z

Both beneficial and negative outcomes have resulted from communication technologies. It is described as any electronic service that allows Internet users to produce and share a wide range of material via the Internet (Prakashyadav & Rai, 2017). Other forms of social media include media sharing sites like YouTube and Flickr, social bookmarking sites like Delicious and CiteULike, collaborative knowledge development through wikis, creative works such as blogs and microblogging (e.g., Twitter, Blogger), content aggregation, and organisation tools like RSS feeds and tagging tools, and re-mixing or mashups of content from various sources (Greenhow, 2011). In addition, the Malaysian Communications and Multimedia Commission (MCMC) has jurisdiction and power over media abuse incidents or complaints in Malaysia.

As a result of the increasing adoption of social media, researchers have begun to investigate the consequences of social media use on interpersonal interactions. Several studies have found that, rather than replacing offline relationships, social

media is frequently used to maintain and intensify them (Glaser et al., 2018; Rykov et al., 2020; Stevens et al., 2016). Initially, Rykov et al. (2020) discovered that social media was highly linked to social capital, particularly maintaining loose social links and vast social networks. Furthermore, Mohamad et al. (2018) discovered that the frequency with which college students used Facebook was linked to social trust, political participation, and civic engagement. It is also backed up by a study by You and Hon (2019). However, while the body of knowledge implies that social media can help people build social capital, the results' generalisability is limited due to the lack of variety in the study populations (Zhang et al., 2014).

Aside from the study on social media in the general population of the community, numerous studies have also been conducted in general and on students and young adults in terms of their social media usage pattern, motivation as well as addictive behaviour (Anderson & Jiang, 2018; Markom et al., 2019; Martin et al., 2018; Ninan et al., 2020; Omar & Sallehuddin, 2011; Prakashyadav & Rai, 2017; Salman & Pulungan, 2017). Initially, it is mentioned that adolescents or young millennials have utilised social media sites more than any other type of online site (Anderson & Jiang, 2018). Its popularity began with blogging in the late 1990s and skyrocketed with Facebook, LinkedIn, Twitter, and other early platforms. Individuals can use sites like Facebook and Twitter to show personal information, establish and maintain social networks, and

communicate with others. According to recent research, social media sites are used by 81 per cent of teenagers, with 94 per cent of teens being social media users with a Facebook account (Martin et al., 2018).

The user behaviour concerning social media is changing rapidly, and the usage and acceptance differ across generations. Generally, social media is used by youths and public and private sector employees and even homemakers for various purposes (Omar & Sallehuddin, 2011). However, young millennials (Gen Z), i.e., those born after 1991, have mostly been exposed to the Internet since young and highly influenced by it. They are aware of the power of technology and hence utilise it to their advantage (Ninan et al., 2020). Brosdahl and Carpenter (2011) use the birth year category for each cohort to classify generations: Generation X (1961-1980), Generation Y (1981-1990), and Generation Z (1991 and later). Because of the digital revolution in the 1990s, Gen Z is the first generation to have Internet technology easily available, and they have been exposed to an unprecedented quantity of technology in their childhood (Prakashyadav & Rai, 2017). People of Generation Z are sometimes stereotyped as being highly comfortable with technology that they spend a considerable percentage of their socialising time on social networking websites. In Malaysia, 77% of the 24 million Internet users consist of youths between 15 and 40 years old (Markom et al., 2019). This generation is an active contributor, a heavy consumer of online material, and a creative and mashup specialist; they have a strong gravitational tie with online communication, preferring to participate and stay connected via technology at their fingertips.

Young millennials are drawn to groups that aim to alter the world because of social media's extensive access to global narratives. Youths, according to Salman and Pulungan (2017), are heavy Facebook users. A survey by the Global Web Index, quoted in a 2019 World Economic Forum (WEF) article, indicated that Gen Z spends more time on social media than any other generation, at 2 hours 55 minutes each day. Because they grew up moulded by technology and the Internet as a vital part of their daily lives, Gen Z is digital natives. Young people in Generation Z are wellinformed about global concerns and value variety (Ahmed et al., 2018). According to previous research, young millennials use social media extensively daily, especially acquiring information, communicating their thoughts, and networking. Despite the numerous advantages of social networking, concerns about the potential perils abound.

Royal Institution in Malaysia: Impact from Social Media

Malaysia practices Parliamentary Democracy with Constitutional Monarchy and His Majesty the King as the Paramount Ruler. The Federal Constitution was legislated to set up conditions for this system to exist. The Constitutional Monarchy and Parliamentary Democracy framework rehearsed by the country since independence has proven effective in creating stability and prosperity for the country (Iversen & Soskice, 2019). Examples of other countries that have adopted a Constitutional Monarchy are Britain, Thailand, and even Japan. Otherwise, in Malaysia, The King also is the source and centre of power. The King is the compiler of customs, the proprietor of the public authority and stands firm in safeguarding the picture of the Islamic State in a glad society just as rehearsing Islamic Sharia Law (Saad, 2020). The power of The King is a blessing from the sovereignty possessed by the Sultan of all States, whereby His power is then channelled to mobilise the government and administration.

Information technology and communication development are top priorities in Malaysia, but the country still practices "tolerance and liberalism based on set guidelines" (Mustapha & Abdullah, 2004). However, the advent of the Internet has brought numerous new challenges to Asian countries, similar to their Western counterparts. Internet control and freedom have been a heated debate in many Asian countries, including Malaysia. China has taken proactive steps to control Internet usage among its highly condensed population (Tai, 2006). In Malaysia, Internet freedom is guaranteed under the MSC Guarantee Agreement 1996. In short, the culture, customs, systems, and rules of a country determine the extent of its Internet control and freedom (Mahmud & Pitchan, 2017).

Meanwhile, the presence of various media is significantly important in information delivery in society (Arigo

et al., 2018). The media and society are difficult to separate. The mass media is liable for educating, motivating, and informing the public and is a significant mode for the government to channel the data and information on the country's development (Emanuelson, 2017). Indeed, the media is also used to assist the government in instilling a spirit of understanding and strengthening unity among the multiracial community. The media can educate and transform any group of society that has generally lived independently into an integrated ethnic group where ethnic differences are no longer a source of conflict (Carroll & Hollinshead, 1993).

However, the Internet offers various benefits to its users and threats to the government, the Royal Institution, and the general public alike in the form of sedition, slander, pornography, and many more. Moreover, social media has given an open space for criticising the government, the Royal Institution, and even the public, which is often done harshly (Ashaari et al., 2020). Specifically, social media is used to criticise national leaders and rulers, highlighting the need for social media control and freedom (Mahmud & Pitchan, 2017). Insulting the King and state Sultans via social media is considered a violation of the Federal Constitution and the second pillar of the Rukun Negara, i.e., Loyalty to the King and the Nation and the third pillar, i.e., the Supremacy of the Constitution. Nowadays, numerous incidents have been recorded to undermine the Royal Institutions, especially the power of the King. The widespread use of social media has brought new 'trends' or cultures of individuals and certain parties who abuse the latest facilities, disputing or insulting the Institution of The King.

As freedom is the core of a democratic country like Malaysia, any form of information control will result in a social uproar. As a country that adopts a democratic system, there is no denying that freedom of speech is essential to all other fundamental rights and freedoms in the constitution (Fisher, 2021). However, it is difficult for a country based on parliamentary democracy and constitutional monarchy to strike a balance between social media control and freedom. Although the Malaysian Federal Constitution supports freedom of speech for all citizens, certain restrictions must still adhere to freedom of speech and expression also has limits and restrictions provided in the Federal Constitution, through Article 10 (2) (a), and restrictions through enacted legislation. Legal action is taken against individuals who commit acts for offences involving this freedom of expression, including the Sedition Act (1948) (Sreedharam & Jalil, 2013), the Printing Presses and Publications Act (1984) (Dafrizal & Ahmad, 2011), the Official Secrets Act (1972) (Griffith, 1989), Defamation Act (1957) (Masum & Desa, 2014), and the Internal Security Act (1960) (Fritz & Flaherty, 2002). This constitution and laws were enacted to protect the victims, particularly The King and his relatives who were insulted and slandered. It is because contempt for the royal institution is an act that does not necessarily symbolise

the identity of our nation. Acts of insult, incitement and defamation will have various adverse effects, especially on national security and some irresponsible parties abuse freedom of speech and expression. Hence, there is a need for a balanced implementation of Internet freedom and control to safeguard the harmony and wellbeing of the country (Mahmud & Pitchan, 2017).

METHOD

Sample and Data Collection

The purposive sampling technique is referred to as selective, subjective, or judgmental sampling, but the actual structure involved remains the same. The study has intentionally selected the subjects to gather specific information within respondents' knowledge using this sampling technique. The focus remains on individuals with specific characteristics in a targeted population group of interest, which is Gen Z. It is because, when it comes to age and behaviour, the millennial generation (Gen Z) is the generation that actively uses the Internet and social media (Warsihna, 2020). Otherwise, Gen Z is also chosen as the respondent as this generation is often associated with a lack of knowledge and interest in history, including the history of the Royal Institution, which may lead to disrespectful action by making sarcastic comments on the position of King or sultan, Federal Constitution, etc. on social media.

The study focuses on a few criteria in the selection within the purposive sampling technique: age, location, education level, and use of social media. The age for targeting Gen Z individuals, i.e., those born on or after 1994, while the Klang Valley area of the respondent is chosen for this initial study because this area has a wider coverage on the Internet and social media networks. The respondent must also have at least one social media account, such as a Facebook, Instagram, Twitter, LinkedIn, or Youtube channel, to be qualified as a study respondent.

A self-administered questionnaire (Appendix 1) was developed and distributed to 393 respondents. The questionnaire has granted ethics approval from Research Ethics Committee and aimed to identify how social media determine the level of understanding and awareness (independent variables) that influence the young millennials' perception (dependent variable) about the country's Royal Institution.

Likert scales are often used in closedended survey questions to measure subjective qualities that are otherwise difficult to quantify, such as in this study, e.g., awareness and perception of young millennials. However, when using Likert type data in research, it is necessary to clarify whether midpoints are used or not, as well as the scales of the Likert. For midpoints, some researchers believe that using midpoints on a Likert scale may affect research reliability and validity, but others disagree (Garland, 1991; Subedi, 2016). While some researchers have shown that when the number of scales increases, respondents' use of the mid-point category diminishes, longer scales are also unjustified because there are few arguments for respondents' readiness to answer looking at the longer scales supplied (Matell & Jacoby, 1972; Pornel & Saldaña, 2013).

Initially, Likert (1932) developed the 5-point descriptive response scale to present response options in a bipolar format (both negative and positive options), allowing researchers to collect information regarding the direction and the intensity of an individual's opinion. However, the debate till here reveals that from the methodological viewpoint, both use and not use of midpoints are acceptable in Likert type measurement as the midpoints may not affect reliability and validity. In this sense, the study used midpoints (five-Likert) giving the meaning of neither agree nor disagree, meaning in between disagree and agree in five-point Likert scale considering epistemological connotation. Therefore, the variables were

measured using a five-point Likert scale, where 1 = Strongly Disagree, and 5 = Strongly Agree.

There are 4 to 5 questions under each factor from which an average score is later calculated. The data gathered was subsequently analysed using SMART-PLS 3.0 via measurement and structural models focusing on the reliability, validity, and significant relationship between the variables. Figure 1 illustrates the research framework developed based on Hypotheses 1 and 2.

H1 There is a significant relationship between understanding through social media and perception about the Royal Institution.

H2 There is a significant relationship between awareness through social media and perception about the Royal Institution.

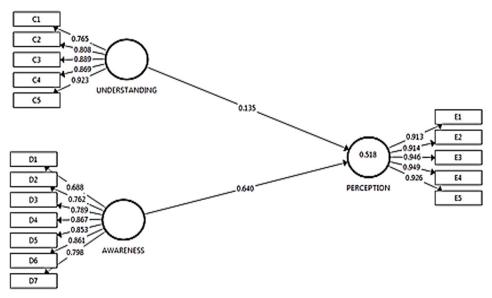


Figure 1. The research framework established from the PLS-SEM Measurement Model

ANALYSIS & FINDINGS

To begin the analysis, SPSS was used to detect errors, missing values (via multiple imputations) and common method bias in the dataset. The variance was found to be below 50%, thus indicating that common method bias does not exist in this study, as Podsakoff et al. (2003) suggested. Next, using the recommendations of Hair et al. (2014), partial least squares analysis was employed as the statistical tool for examining the measurement and structural models due to its non-requirement of normality assumption (Chin et al., 2003). Finally, the measurement model (validity and reliability) and structural model (relationship between the variables) were examined to determine the outcome using the bootstrapping method with 5,000 re-samples (Hair et al., 2017).

Evaluation of Measurement Model

The measurement model was assessed by determining the convergent validity and discriminant validity. Based on the recommendations of Hair et al. (2017), convergent validity was determined by examining the factor loading, average variance extracted (AVE), and composite reliability (CR). As a result, the items loading was greater than 0.7, the AVE greater than 0.5, and the CR greater than 0.7. Therefore, it indicates that the convergent validity for the measurement model has been fulfilled (Table 1).

Table 1

Measures for convergent validity

Variable	Item	Loading	CR	AVE
UNDERSTANDING	C1	0.765	0.928	0.648
	C2	0.808		
	C3	0.889		
	C4	0.869		
	C5	0.923		
AWARENESS	D1	0.688	0.969	0.864
	D2	0.762		
	D3	0.789		
	D4	0.867		
	D5	0.853		
	D6	0.861		
	D7	0.798		
PERCEPTION	E1	0.913	0.930	0.727
	E2	0.914		
	E3	0.946		
	E4	0.949		
	E5	0.926		

Next, discriminant validity was determined by assessing the heterotrait-monotrait (HTMT) ratio of correlations based on the recommendation (Henseler et al., 2015). Table 2 shows that all the values are lower than the threshold level, i.e.,

HTMT .85 (Kline, 2015). Furthermore, the HTMT Inference reveals that the confidence interval did not reach a value of 1 for any of the constructs, confirming discriminant validity.

Table 2

HTMT ratio for discriminant validity

		1	2	3
1	AWARENESS			
2	PERCEPTION	0.752		
3	UNDERSTANDING	0.574	0.490	

EVALUATION OF STRUCTURAL MODEL

The structural model was assessed by determining the R2, standard beta, t-values (via the bootstrapping procedure with a re-sample of 5,000), predictive relevance (Q2), and effect sizes (f2) based on the recommendations of Hair et al. (2017). Table 3 presents the results. This study had developed two hypotheses. Based on the statistical results, both the hypotheses are supported with $\beta = 0.640$, p<0.01 for understanding, and $\beta = 0.222$, p<0.05 for awareness. H1 and H2 are supported, confirming the significant influence of understanding and awareness on perception, i.e., the dependent variable.

Next, the R2 value for perception is 0.55, explaining that both understanding and awareness have 55% explained the perception of young millennials toward Royal Institutions in Malaysia. Meanwhile,

the other 45% will be explained by another construct in a future study. Then, according to Hair et al. (2017), the effect size f2 can be determined by examining the changes in the R2 value. Cohen (1977) provided a guideline that states that an effect size of understanding, 0.652 has a large effect on perception and awareness, 0.028 denote small effects, respectively. Therefore, the f2 results indicate acceptable effect sizes, thus supporting the hypotheses.

The findings also revealed that multicollinearity does not exist among the variables in the model as the variance inflation factor (VIF) values were all lower than the threshold value of 5.00 (Hair et al., 2017).

Lastly, the model's predictive relevance was examined using the blindfolding procedure. The predictive sample reuse technique or Stone-Geisser's Q2 is applicable as a criterion for predictive

Table 3

Path coefficients and significance values in structural model

Hypothesis	Path Relationship	Std. beta	SD	t-value	Decision	f2	VIF
Н1	Understanding through social media → Perception about the Royal Institution	0.640	0.056	11.437**	Supported	0.625	1.362
Н2	Awareness through social media → Perception about the Royal Institution	0.222	0.107	2.567*	Supported	0.028	1.362

Note: **p < 0.01, *p < 0.05

relevance alongside the magnitude of the R2. Henseler et al. (2009) also recommended this measure to assess the research model's prediction capability.

The Q2 examines the model's predictive validity via PLS using the blindfolding procedure. In general, Q2 is determined using a distance omission of 5–10 in PLS (Akter et al., 2011). A Q2 value greater than 0 indicates predictive relevance for certain endogenous constructs in the model (Hair et al., 2014). The findings revealed in Table 4 that the Q2 values for green EI (Q2 = 0.433) is greater than 0, thus indicating sufficient predictive relevance for the model. According to Hair et al. (2014), values of 0.02, 0.15, and 0.35 respectively denote a small, medium, and large predictive relevance

for certain endogenous constructs. Table 5 finally conclude the hypothesis findings to support the study that shows awareness and understanding the information gathered in social media has significantly influenced the positive perception toward our Royal Institutions.

DISCUSSION

Social media has revolutionised communication for young people and the entire world. Social media, which surpasses space and time, provide access to information, opportunities, and connections that were not previously available. It is commonly believed that social media may be linked to negative well-being; after looking at the incident of cyberbullying and specific to Royal Institution itself,

Table 4 *Q2 measure for predictive validity*

	SSO	SSE	Q ² (=1-SSE/SSO)
AWARENESS	2751.000	2751.000	
PERCEPTION	1965.000	1113.601	0.433
UNDERSTANDING	1965.000	1965.000	

Table 5

Results for each hypothesis

Hypothesis No.	Hypothesis Statement	Result
H1	There is a significant relationship between understanding through social media and perception about the Royal Institution.	Supported
H2	There is a significant relationship between awareness through social media and perception about the Royal Institution.	Supported

there are several incidents of insulting this institution in social media. It has reflected how social media has negatively impacted the community, especially our Ruler. Therefore, the study is done to empirically measure the factors that may influence the perception of our Royal Institution by social media. The hypothesis is developed to test whether the knowledge and awareness might influence the positive perception toward our Royal Institution in social media.

The finding has supported the proposed hypothesis indicated that Hypothesis 1 (There is a significant relationship between understanding through social media and perception about the Royal Institution) is supported with a t-value of 11.437 and p-value < 0.01 (Hair et al., 2014, 2017).

Then, Hypothesis 2 (There is a significant relationship between awareness through social media and perception about the Royal Institution) is supported with a t-value of 2.567 and p-value < 0.05 (Hair et al., 2014, 2017). These findings are supported by the previous study indicating the positive impact of social media on the community even though there is no specific study has done towards the Royal Institution (Glaser et al., 2018; Mustafa, 2016; Mustaffa & Ibrahim, 2014; Rykov et al., 2020; Stevens et al., 2016; You & Hon, 2019). However, it is supported by the statement of Associate Professor Dr Shamrahayu Abd Aziz in NST, 2018, mentioned that social media could drive a favourable perception about the Royal Institution. However, the royal symbol of the institution must be maintained to reflect a country that practices a democratic parliamentary system.

However, it is undeniable that the government should know-how knowledge and awareness can be created within the young millennial or particularly GEN-Z to utilise social media usage that leads to positive perception toward our Royal Institution. It is supported previously by a study from Chaudhary (2018) that mentioned the urgent need to safeguard young children against the negative impacts of an unhealthy internet environment. Problems such as cyberbullying, "Facebook depression," sexting, and exposure to inappropriate marketing information must be understood and addressed by parents, practitioners, and companies. The young generation currently uses social media websites like Facebook, MySpace, and Twitter as their most common activity for amusement and communication. However, this raises (Chaudhary, 2018). Furthermore, the study also suggested that it is the role of adults to acknowledge that social media is deeply ingrained in current society and that they must learn to help young people navigate digital citizenship to prevent potential harm. Rather than chastising social media, society needs to learn to leverage its strengths because it is not going away anytime soon.

CONCLUSION & RECOMMENDATION FOR FUTURE AGENDA

The Internet's existence has altered communication styles and patterns, as well

as their influence (Luan et al., 2021). In the context of the Royal Institution, the liberty to use social media to express personal and public sentiments has led many youths to disregard protocol and to hurl insults to the Rulers. On the other hand, positive social media usage in this context can boost favourable perceptions of the Royal Institution.

With the general acknowledgement that the Royal Institution must continue to be held in high esteem, this study's main objective is to determine how understanding and awareness among young millennials as reflected in social media can influence their perception of the Royal Institution. Based on the statistical analysis conducted via partial least square techniques, the understanding and awareness of youths via social media strongly predict their perception of the Malaysian Royal Institution. Even though a study by Roengtam et al. (2017) has highlighted that social media use is not appropriated as a space for citizengovernment interaction, this study is suggested that adequate information is relayed via social media for the young millennials to be updated or informed about our Rulers thus enabling them to realise the importance of showing respect to the Royal Institution. It also demonstrates the emphasis on good manners within the Malaysian culture.

Nevertheless, this study also has several limitations which open up new avenues for further research. This study only focused on young millennials, specifically Gen Z. Future quantitative and qualitative studies can examine the external validity of the current findings by focusing on other generations that are also prolific users of social media as a medium for communicating and gathering information. Other variables that may potentially affect the perception of the Royal Institution could also be added. In light of the potential risks and benefits of social media, further research is needed, particularly to all generations, not only youth but also as social media usage has expanded to all communities.

Therefore, this research confirms that social media does not cause negative well-being for commonly criticised for its negative effects. Patrick and Hee (2021) also currently have highlighted the significant influence of relative advantage on Internet users' adoption of social media through several advantages from the positive perception as a result. Modern social media platforms, which have made significant inroads into many users' daily lives, provide an excellent source of information about user thoughts, beliefs, and opinions (Abimbola et al., 2020). However, a strategy needs to be set up to ensure that the young generation is equipped with full knowledge and awareness of our Royal Institution to not simply misuse social media to accuse or even insult our Ruler.

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REFERENCES

- Abimbola, A. F., Bakar, H. S. A., Mat, M. Z., & Adebambo, O. H. (2020). Evaluating the influence of resident agencies' participation in flood management via social media, in Nigeria. *Pertanika Journal of Social Science and Humanities*, 28(4), 2765-2785. https://doi.org/10.47836/pjssh.28.4.15
- Ahmed, M., Li, Y., Waqas, M., Sheraz, M., Jin, D., & Han, Z. (2018). A survey on socially aware device-to-device communications. *IEEE Communications Surveys & Tutorials*, 20(3), 2169-2197. https://doi.org/10.1109/COMST.2018.2820069
- Akter, S., D'Ambra, J., & Ray, P. (2011). Trustworthiness in mHealth information services: An assessment of a hierarchical model with mediating and moderating effects using partial least squares (PLS). *Journal of the American Society for Information Science and Technology*, 62(1), 100-116. https://doi.org/10.1002/asi.21442
- Anderson, M., & Jiang, J. (2018). *Teens, social media and technology 2018*. Pew Research Center. https://www.pewresearch.org/internet/2018/05/31/teens-social-media-technology-2018/
- Arif, Z. M. (2018, August 16). Reform royal institution to ensure it stays relevant, says IIUM law lecturer. *New Straits Times (NST)*. https://www.nst.com.my/news/nation/2018/08/402089/reform-royal-institution-ensure-it-stays-relevant-says-iium-law-lecturer
- Arigo, D., Pagoto, S., Carter-Harris, L., Lillie, S. E., & Nebeker, C. (2018). Using social media for health research: Methodological and ethical considerations for recruitment and intervention delivery. *Digital Health*, 4, 2055207618771757. https://doi.org/10.1177/2055207618771757

- Ashaari, M. F., Rasit, R. M., Ismail, Z., & Ramzy, M. I. (2020). Islamic discourse in the Facebook of Mufti Departments in Malaysia. *International Journal of Islamic Thought*, 17, 66-77. https://doi.org/10.24035/ijit.17.2020.170
- Brosdahl, D. J. C., & Carpenter, J. M. (2011). Shopping orientations of US males: A generational cohort comparison. *Journal of Retailing and Consumer Services*, 18(6), 548-554. https://doi. org/10.1016/j.jretconser.2011.07.005
- Carroll, B., & Hollinshead, G. (1993). Equal opportunities: Race and gender in physical education: A case study. In J. Evans (Ed.), *Equality, equity and physical education*. Routledge. https://doi.org/10.4324/9781315399867
- Chaudhary, M. (2018). Profiling children as consumers: An Indian study. *Pertanika Journal of Social Sciences & Humanities*, 26(4), 2523-2539.
- Chin, W. W., Marcolin, B. L., & Newsted, P. R. (2003). A Partial Least Squares Latent Variable Modeling approach for measuring interaction effects: Results from a Monte Carlo simulation study and an electronic-mail emotion/adoption study. *Information Systems Research*, 14(2), 189-217. https://doi.org/10.1287/isre.14.2.189.16018
- Cohen, J. (1977). The concepts of power analysis. In J. Cohen (Ed.), *Statistical power analysis for the behavioral sciences* (pp. 1-17). Academic Press. https://doi.org/10.1016/B978-0-12-179060-8.50006-2
- Dafrizal, F. I., & Ahmad, F. (2011). Framing of controversial caricatures of Prophet Muhammad: A study of two Malaysian mainstream newspapers. *Jurnal Komunikasi*, 27(2), 77-95.
- Emanuelson, E. J. (2017). Fake left, fake right: Promoting an informed public in the era of alternative facts. *Administrative Law Review*, 70(1), 209-232.

- Fisher, D. (2021). The right to communicate: A philosophical framework for the debate evolving perspectives on the right to communicate. In L. S. Harms & J. Richstad (Eds.), *Evolving perspectives on the right to communicate* (pp. 85-104). University of Hawaii Press. https://doi.org/10.1515/9780824885403-013
- Fritz, N., & Flaherty, M. (2002). Unjust Order: Malaysia's Internal Security Act. *Fordham Int'l LJ*, 26, 1345.
- Garland, R. (1991). The mid-point on a rating scale: Is it desirable. *Marketing Bulletin*, 2(1), 66-70.
- Glaser, P., Liu, J. H., Hakim, M. A., Vilar, R., & Zhang, R. (2018). Is social media use for networking positive or negative? Offline social capital and internet addiction as mediators for the relationship between social media use and mental health. *New Zealand Journal of Psychology*, 47(3), 12-18.
- Griffith, J. (1989). The official secrets act 1989. *JL & Soc'y*, *16*, 273.
- Greenhow, C. (2011). Youth, learning, and social media. *Journal of Educational Computing Research*, 45(2), 139-146. https://doi.org/10.2190/EC.45.2.a
- Hair, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., & Thiele, K. O. (2017). Mirror, mirror on the wall: A comparative evaluation of compositebased structural equation modeling methods. *Journal of the Academy of Marketing Science*, 45(5), 616-632. https://doi.org/10.1007/s11747-017-0517-x
- Hair, J. F., Sarstedt, M., Hopkins, L., & G. Kuppelwieser, V. (2014). Partial least squares structural equation modeling (PLS-SEM). European Business Review, 26(2), 106-121. https://doi.org/10.1108/EBR-10-2013-0128
- 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
- Henseler, J., Ringle, C. M., & Sinkovics, R. R. (2009).
 The use of partial least squares path modeling in international marketing. In R. R. Sinkovics & P. N. Ghauri (Eds.), New challenges to international marketing (Vol. 20, pp. 277-319).
 Emerald Group Publishing Limited. https://doi.org/10.1108/S1474-7979(2009)0000020014
- Hung, K. H., & Li, S. Y. (2007). The influence of eWOM on virtual consumer communities: Social capital, consumer learning, and behavioral outcomes. *Journal of Advertising Research*, 47(4), 485-495. https://doi.org/10.2501/ S002184990707050X
- Iversen, T., & Soskice, D. (2019). Democracy and prosperity: Reinventing capitalism through a turbulent century. Princeton University Press. https://doi.org/10.2307/j.ctv4g1r3n
- Kline, R. B. (2015). Principles and practice of Structural Equation Modeling (4th ed.). Guildford Press.
- Lenhart, A., Purcell, K., Smith, A., & Zickuhr, K. (2010). Social media & mobile internet use among teens and young adults. *Pew internet & American life project*. http://www.sbhihelp.org/files/social-media-young-adults.pdf
- Likert, R. (1932). A technique for the measurement of attitudes. Archives of psychology, 22(140), 55.
- Luan, N. M., Halim, W. P. M. W., & Hafifi, A. A. M. (2021). Relationship between online interethnic interactions on interethnic bridging social capital: A study of academic staff in Malaysian private universities. *Pertanika Journal of Social Science and Humanities*, 29(2), 1313-1334. https://doi.org/10.47836/pjssh.29.2.30
- Mahmud, W. A. W., & Pitchan, M. A. (2017). Media baharu dan Institusi Raja di Malaysia: kes penghinaan raja-raja di media sosial [New

- Media and the Royal Institution in Malaysia: Cases of Insult to the Rulers in social media]. *Jurnal Komunikasi: Malaysian Journal of Communication*, 33(1), 406-422. https://doi.org/10.17576/JKMJC-2017-3301-27
- Malawani, A. D., Nurmandi, A., Purnomo, E. P., & Rahman, T. (2020). Social media in aid of post disaster management. *Transforming Government: People, Process and Policy*, 14(2), 237-260. https://doi.org/10.1108/TG-09-2019-0088
- Markom, R., Zainol, Z. A., & Fuad, N. A. (2019). Literasi perundangan media baharu dalam kalangan belia. *Jurnal Komunikasi: Malaysian Journal of Communication*, 35(3), 372-389. https://doi.org/10.17576/JKMJC-2019-3503-22
- Martin, F., Wang, C., Petty, T., Wang, W., & Wilkins, P. (2018). Middle school students' social media use. *Journal of Educational Technology & Society*, 21(1), 213-224. http://www.jstor.org/stable/26273881
- Masum, A., & Desa, M. R. M. (2014). Media and the libel law: The Malaysian experience. *Procedia-Social and Behavioral Sciences*, 155, 34-41.
- Matell, M. S., & Jacoby, J. (1972). Is there an optimal number of alternatives for Likert-scale items? Effects of testing time and scale properties. *Journal of Applied Psychology*, 56(6), 506-509.
- Milkman, R. (2017). A new political generation: Millennials and the post-2008 wave of protest. *American Sociological Review*, 82(1), 1-31. https://doi.org/10.1177/0003122416681031
- Mohamad, B., Dauda, S. A., & Halim, H. (2018). Youth offline political participation: Trends and role of social media. *Jurnal Komunikasi: Malaysian Journal of Communication*, 34(3), 172-192. https://doi.org/10.17576/JKMJC-2018-3403-11
- Mustafa, S. E. (2016). Penggunaan laman sosial dan impaknya terhadap hubungan persahabatan dalam talian [Use of Social Media Web

- and Its Impact on Online Friendships]. *Jurnal Komunikasi: Malaysian Journal of Communication*, 32(2), 65-81. https://doi.org/10.17576/JKMJC-2016-3202-04
- Mustafa, S. E., & Hamzah, A. (2011). Media baharu yang baharu: Trend penggunaan jaringan sosial dalam kalangan pengguna di Malaysia [New New Media: Trends in the Use of Social Networks Among Consumers in Malaysia]. Malaysian Journal of Media Studies, 13(2), 93-110.
- Mustaffa, C. S. b., & Ibrahim, N. Z. M. (2014).
 Persepsi dan penggunaan media sosial dari perspektif ibu bapa: Satu analisis kualitatif.
 Jurnal Komunikasi: Malaysian Journal of Communication, 30(Special Issue), 43-74.
- Mustapha, R., & Abdullah, A. (2004). Malaysia transitions toward a knowledge-based economy. *Journal of Technology Studies*, *30*(3), 51-61.
- Ninan, N., Roy, J. C., & Cheriyan, D. N. K. (2020). Influence of social media marketing on the purchase intention of Gen Z. *International Journal of Advanced Science and Technology*, 29(1), 1692-1702. http://sersc.org/journals/ index.php/IJAST/article/view/3734
- Omar, F. I., Hassan, N. A., Sallehuddin, I. S., & Abdullah, N. H. (2016). Gen Y: A Study on Social Media Use and Outcomes. *Journal of Management and Muamalah*, 6(1), 53-64. https://jmm.kuis.edu.my/index.php/jurnal/article/view/98
- Omar, F. I., & Sallehuddin, I. S. (2011). Media sosial: kajian tentang penglibatan dan kepuasan dalam kalangan mahasiswa. *Proceeding of* the International Conference on Media and Communication, Malaysia, 11, 1-12.
- Patrick, Z., & Hee, O. C. (2021). Affiliate marketing in SMEs: The moderating effect of developmental culture. *Pertanika Journal of Social Science and Humanities*, 29(2), 1249-1271. https://doi.org/10.47836/pjssh.29.2.27

- Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879-903. https://doi.org/10.1037/0021-9010.88.5.879
- Pornel, J. B., & Saldaña, G. A. (2013). Four common misuses of the Likert scale. *Philippine Journal of Social Sciences and Humanities University of the Philippines Visayas*, 18(2), 12-19.
- Prakashyadav, G., & Rai, J. (2017). The Generation Z and their social media usage: A review and a research outline. *Global Journal of Enterprise Information System*, 9(2), 110-116.
- Roengtam, S., Nurmandi, A., Almarez, D. N., & Kholid, A. (2017). Does social media transform city government? A case study of three ASEAN cities. *Transforming Government: People, Process and Policy*, 11(3), 343-376. https://doi.org/10.1108/TG-10-2016-0071
- Rykov, Y., Koltsova, O., & Sinyavskaya, Y. (2020).
 Effects of user behaviors on accumulation of social capital in an online social network. *PLOS ONE*, 15(4), e0231837. https://doi.org/10.1371/journal.pone.0231837
- Saad, H. M. (2020). A brief history of Malaysia: Texts and materials. Pena Hijrah Resources. https://books.google.com.my/ books?id=lozhDwAAQBAJ
- Salman, A., & Pulungan, S. M. (2017). Pendedahan diri, motivasi dan kepuasan penggunaan Facebook dalam menjalin persahabatan [Self Disclosure, Motivation and Satisfaction using Facebook in Establishing Friendship]. Jurnal Komunikasi: Malaysian Journal of Communication, 33(1), 438-459.
- Shiang, L. S., Chibundu, I. S., & Wilson, S. (2021). The missing narratives: Exploring the experiences of Malaysian journalists and family members and friends of victims during the MH370 aviation crisis. *Pertanika Journal of Social Science*

- and Humanities, 29(2), 1193-1211. https://doi.org/10.47836/pjssh.29.2.24
- Sreedharam, R. K., & Jalil, F. (2013). The Challenges in Controlling Malaysian Bloggers with the Sedition Act 1948. GSTF Journal of Law and Social Sciences (JLSS), 2(2), 70.
- Stevens, R., Gilliard-Matthews, S., Dunaev, J., Woods, M. K., & Brawner, B. M. (2016). The digital hood: Social media use among youth in disadvantaged neighborhoods. *New Media & Society*, 19(6), 950-967. https://doi.org/10.1177/1461444815625941
- Subedi, B. P. (2016). Using Likert type data in social science research: Confusion, issues and challenges. *International Journal of Contemporary Applied Sciences*, 3(2), 36-49.
- Tai, Z. (2006). *The Internet in China: Cyberspace and civil society* (1st ed.). Routledge. https://doi.org/https://doi.org/10.4324/9780203944073
- Warsihna, J. (2020). Behavior of millennials in using internet for learning. In Kusmawan, U., Aisyah, S., Rokhiyah, I., & Sukmayadi, D. (Eds.), Emerging perspectives and trends in innovative technology for quality education 4.0 (pp. 201-205). Routledge.

- Whittaker, E., & Kowalski, R. M. (2015). Cyberbullying via social media. *Journal of School Violence*, 14(1), 11-29. https://doi.org/10.1080/15388220.2014.949377
- You, L., & Hon, L. (2019). How social ties contribute to collective actions on social media: A social capital approach. *Public Relations Review*, 45(4), 101771. https://doi.org/10.1016/j. pubrev.2019.04.005
- Zhang, M. W., Ho, C. S., Fang, P., Lu, Y., & Ho, R. C. (2014). Usage of social media and smartphone application in assessment of physical and psychological well-being of individuals in times of a major air pollution crisis. *JMIR mHealth and uHealth*, 2(1), e16-e16. https://doi.org/10.2196/mhealth.2827



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The Effectiveness of Parental Self-Efficacy Program to Improve Children's Moral Development with Single-Parent Status

Henny Indreswari¹, Evania Yafie^{1*} and Khasturi Ramalingam²

¹Faculty of Education, State University of Malang, Malang, 65145, East Java, Indonesia ²Faculty of Social Science and Humanities, Universiti Teknologi Malaysia. Skudai, 81310, Johor, Malaysia

ABSTRACT

At an early age, moral cultivation starts. If the child is in an area where, because of many factors, there is only a father or mother, this can affect the physical and psychological preparation of the child. The role of single parents in the development of children can be an obstacle to promoting child development, especially moral development. The value of training in self-efficacy for single-parents in stimulating moral growth is, therefore, an alternative option for children. This research aimed to examine the effectiveness of the Parental Self-Efficacy Program in improving the morality of children with single-parent status. This study explores one form of effort or experimental research to affect improvement. In order to determine the effectiveness of the parental self-efficacy program to promote the moral and social-emotional growth of children with single-parent status, a pre-test-post-test nonequivalent comparison group quasi-experimental design was chosen. Data were obtained from two community samples of 30 parents (mother) with single-parent families and 30 normal parent family status with children between preschool children aged 4 to 6 years. The findings showed that the parental self-efficacy program had an impact

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E-mail addresses: henny.indreswari.fip@um.ac.id (Henny Indreswari) evania.yafie.fip@um.ac.id (Evania Yafie) khasturiam@gmail.com (Khasturi Ramalingam) *Corresponding author on improving the moral growth of children with single-parent status. It can be seen from the major differences linked to parental self-efficacy and the moral growth of children between the control group and the experimental group, where the experimental group had a higher average.

Keywords: Children, moral development, parental program, self-efficacy

INTRODUCTION

There is a very real-time in their lives in early childhood. For children's lives for the next life, early childhood has a very significant stage, but not all parents understand the needs of children (Yafie, 2018a, 2018b). Both physically, mentally, socially, morally, and in many other facets of their lives, children have very distinctive characteristics. This time is very important to form a fundamental framework by proper moral lessons also for mental and character of children. It cannot be distinguished from parents' role in promoting the growth of children. Changes in the modern world have brought on some changes to our lives. Nevertheless, morality is declining in our children (Tan & Yasin, 2020).

Compared to children's relationships with other individuals around them, the relationship between biological parents and children profoundly affects aspects of growth (Orben et al., 2020). Things do not go as expected in life. Some of the parents around us may have been single parents, eventually impacting the lives of their children. A single parent is a father or mother who, as the head of the household and a housewife, is solely responsible (Reimann et al., 2020). Any of the reasons include divorce from someone else without a wife, death, pregnancy outside of wedlock, or the veil of children. Compared to families with two parents or full workers in terms of economic status, health, and housing standards and the children living with them, families with single parents would be disadvantaged (Kamody & Lydecker,

2021). Low economic status can influence the aggressiveness of a child, which also influences the moral conduct of the child (Yafie, 2018a).

The moral is simply defined as a principle to distinguish good and bad behavior where this can be manifested in the form of actions that reflect the condition of the soul, character, and moral components in oneself (Korotaeva & Chugaeva, 2019). As for moral behavior that is considered problematic, such as children who do not like to share and pay attention to friends or the people around them and are unable to distinguish between good and bad things (Benish-Weisman et al., 2019). Although this behavior is normal in early childhood, in daily behavior, when children continue to feel selfish and do not want to learn to distinguish between good and bad things, this must be a concern for adults who take care of children (Cingel & Krcmar, 2020). Because if egocentrism and the inability of children to distinguish good and bad things in children are not overcome, this will affect the child until he grows up (Khodnapur, 2021).

Fatigue and lack of time to carry out the parenting process for single parents become difficult because they must do parenting tasks, household affairs, and other things on their own. Wulandari (2020), in their research, explained that single mothers who work feel they have limited time in carrying out parenting tasks. The limited-time experienced makes single mothers less able to supervise to carry out the maximum parenting process, especially

in disciplining children and actively and routinely monitoring activities carried out by children (Victor et al., 2019).

According to Poblete (2019), low parental self-efficacy correlates with single-parent s' emotions such as feeling stressed and depressed, actual behavior problems in children, perceptions of the difficulties they face, passive coping styles in dealing with problems, and high-stress levels. Therefore, parenting self-efficacy is crucial for single-parents because it can function as a self-control factor for single-parents to maintain and improve the quality of parenting despite facing various challenges in parenting (Harpaz et al., 2021).

Parenting self-efficacy is considered an important variable because the ability to carry out parenting practices is closely related to parenting self-efficacy (Amin et al., 2018). Single-parents with high parenting self-efficacy will show positive parenting practices. These parenting practices include responsive parenting, properly stimulating children, and not punishing children in the wrong way (Botha et al., 2020). Single parenting self-efficacy can also influence coping strategies in parenting when facing various problems, especially active coping strategies (Martínez-Muñoz et al., 2019).

Augustinavicius (2020) said that social support is one of the resources that have been proven effective in helping to increase the parenting self-efficacy of parents. Social support shows a positive effect in facilitating parental role-taking in their care (Hernandez, 2020). Bandura (1977) states that social support in the form of

verbal persuasion and an action that is encouraging can have a positive influence on the parenting self-efficacy of parents. This social support can be realized in the form of a training program held specifically for single-parents with the aim of increasing their parental self-efficacy (Chou et al., 2018). Although single parents do not get social support from their partners, there are others who can provide support for them.

Increasing awareness and skills and solving problems in the environment are some of the benefits of training (Yafie et al., 2020a). Through this rising awareness, it affects the quality of single-parent care. As a result, they can be more responsive, give more time in the midst of their busy lives, and provide direction with a focus on the process that the children are carrying out not, only on the results.

Training programs can be developed in various ways through technology or faceto-face; the most important thing is the goal of the program (Yafie et al., 2020a). Moreover, for prevention and intervention measures, Parenting Self Effectiveness can also be useful (Jones & Prinz, 2005). Some components that need to be integrated into parental self-efficacy therapy services are instilling discipline, understanding children's play practices, understanding appropriate parenting styles, understanding instrumental treatment according to the age of children, implementing appropriate teaching, having responsibility as parents, being able to monitor the outcomes of childhood. It would make kids get the attention they deserve with the presence of parental self-efficacy therapy for parents so that the issues of kids with single parents can be solved. Collaboration between parents and teachers may produce favorable policies and affect the development of children, especially on the moral behavior of children.

The value of parental self-efficacy training programs for single parents for the spiritual growth of children to be accomplished in solving and resolving children's problems in a social setting is based on the above theory. This program is very important to enable single parents to fulfill their responsibility to look after their children and to have the correct understanding so that it does not impact the development of children, especially the morals of children. This research aimed to examine the effectiveness of the Parental Self-Efficacy Program in improving the morality of children with single-parent status.

LITERATURE REVIEW

Parent Training Program

Training curriculum on parental self-efficacy is hoped to provide special skills used by single parents, which include child incentive techniques, differential reinforcement, and attempts to eradicate inappropriate behavior in children. In addition, it is intended to provide an understanding for parents to decrease negative behavior. This understanding can be applied through the instructional video guide (Fukkink, 2008; Hitchcock et al., 2003). Another form of this training is to include the influence or power that parents have. In a power-

based approach to parental instruction, parental behavioral skills are targeted and are aimed at improving those skills and enabling others in similar circumstances to apply those skills. In children and adults who have the potential to have deviant actions, this exercise is considered useful as a technique for improving prosocial skills and appropriate behavior (Buchanan et al., 2013).

Parental self-efficacy training programs that aim to develop parenting skills can be considered to provide positive parenting (Sims & Skarbek, 2019). It is hoped that this training program will be able to minimize problems related to the moral development of children and help single-parents in assisting the care that is carried out (Hsieh et al., 2020). Parental self-efficacy training will make single parents more responsive to what their children are feeling. It will encourage positive parenting. It means that parents will not immediately judge when children make mistakes. Guidance and giving understanding to children when parents understand the child's character will be easier. This parental self-efficacy effectiveness program, therefore, needs to be well prepared.

In planning a parenting curriculum for a parental self-efficacy training program, the Institute requires an aim to provide single-parent parents with information and skills. Therefore, the first thing to be done when the targets are planned is to perform an overview in collaboration with experts on program-relevant issues and to study the sources related to the training topic being held. Second, the planning of longterm educational priorities, sub-goals, and objectives. It is important to achieve the objectives based on a preliminary review (Varol, 2018). The next move after setting the goals is to think about how the trainees will profit from the training program being held. Parts of the presentation and assessment material should be included in this instance.

Single parents have different advantages in educating their children's growth and stimulating them. Parental self-efficacy training programs may be a problem-solving program where program teachers teach parents special strategies to solve problems and implement everyday life interventions, and this is considered useful to parents (Bearss et al., 2015). Parental self-efficacy training services need to be provided to develop parenting skills and avoid bad behavior exhibited by children, as can be seen in the latest study by (Comer et al., 2013). The form of parental training offered could be community training if children are already attending formal education at an institution. The curriculum would concentrate on how to monitor the actions of children, the ability to teach children skills, or how to give children an idea of something. Community training held for parents has many benefits. One of the most significant benefits is to have colleagues study and share milestones with the parents of fellow group members. In addition, parents themselves will establish their training in the scope of their setting with a form like this (Silverman, 2021).

Another benefit is that this preparation is more cost-effective so that parents are commonly liked and have an influence on the number of services parents will receive (Cavkaytar, 1999; Silverman, 2021; Varol, 2018). It also makes parents no longer feel isolated when they have issues, share feelings and can understand the feelings of each other between parents, and this will eventually affect the solutions proposed (Cavkaytar, 1999; Varol, 2018). Even though it has many benefits, this does not mean that there are no flaws in this software. The limitations related to each parent's requirements are one of the main shortcomings of parenting group training. For example, training based in the US has been established in most institutions in many countries for nonminority parents born in the US and familiar with Western parenting practices. However, the perspectives and cultures of immigrants and ethnic minority parents living in the US are not adequately represented or discussed by such programs (Kim et al., 2008). Therefore, by keeping group numbers smaller, it might be possible to spend more time on needs while organizing group training (Silverman, 2021). The organization must also recognize, in addition to the advantages and disadvantages of instruction, the assessment of this curriculum to provide optimum performance.

The researcher must think of an effective assessment as a reference for progress after presenting targets and evaluating the advantages and drawbacks of the parental self-efficacy training program.

The evaluation is carried out to determine whether the targets have been accomplished. Evaluation is carried out of any parent involved. Parents who achieve the goal must be compensated when the assessment is carried out, while parents who are unable to achieve the goal must be given reinforcement of the material before the parents meet the same goal (Varol, 2018). Parents must be given a training session number before the program begins. First, each sub-goal of the educational objective and the time it takes for the achievement of the sub-goal is listed to decide the parental self-efficacy training session. For example, if a session lasting between one and one and a half hours is held, the session that is deemed to be longer should be arranged as two different sessions.

As a result, by deciding how many training sessions were conducted to accomplish each sub-objective, the parental self-efficacy training session was determined (Varol, 2018). It is proposed that the number of trainees should not be more than 10 to 12 people after the number of sessions and the number of participants is identified (Fox, 1990; Varol, 2018). After deciding the number of participants, the next step is to set the date and time for the training session. The trainer or trainer of the participants in the program must work together to decide an appropriate date and time. Having at least one parental self-efficacy training session a week is strongly recommended (Varol, 2018). Checking homework and planning to start training, the training process itself, and giving back homework should be part of one training session. The details given in the first session may be about the introductory material on parenting instruction. It is necessary because no homework has been given previously, and details about what kind of procedure will be passed in the future will be given. The parental self-efficacy training session should start with reviewing homework and preparing for the next part of the material in addition to the first session. The homework assigned to parents should be completed at home with their children in this part of the session, as discussed in the previous session, should be emphasized. In this section, inappropriate homework should be selected, and a summary or guidance about what can be done to obtain proper homework should also be given for why it is inappropriate homework. Regarding this, as a feedback practice, other parents may request feedback.

At the end of this section of the presentation, it is important to indicate which subjects will be addressed in that day's session. The educational objectives that parents should teach that day and an assessment of these goals should be included in the presentation section. Both 'ideas, abilities,' and 'practices, open speech, inductive, direct education', may be distinguished according to educational objectives. Evaluation to assess whether the educational objectives were accomplished as planned after completing the presentation on targets with consistent methods. The availability of a measurement instrument that can evaluate both parents together without manipulating each other is one

of the most important aspects at the assessment level. Once the presentation of all educational goals for the day's session is completed and reviewed, part of the homework will be given. The supervisor provides parental training in this segment to explain the contents and complete the assignment to parents. The points made on that day will then be briefly clarified, and, if any, more information about the session will be circulated, and the session will be ended.

Parent Self Efficacy

The theory first formulated by Bandura (1977) describes how personal feelings of effectively and efficiently handling tasks can influence how much effort the person puts into the task's performance. One instance is the feeling of being able to care for kids in the sense of parenting. The influence of this sense of capacity will also dictate how long he will survive adversity. Besides, maternal parental self-efficacy (PSE) grows and increases along with the performance of parents in challenging childcare tasks, according to Bandura's theory. Based on Bandura's work, De Montigny and Lacharité (2005) describe the definition of parents' perceived gain as "the assumption or opinion held by parents regarding their ability to coordinate and execute a set of parenting-related tasks." It describes the parental self-efficacy of parents. Parental self-efficacy can be further divided into specific sub-domains by Jones and Prinz (2005) as the perceptions of parents and their confidence in the effectiveness of parenting and building relationships

between parents and children, which can be related to childcare activities, such as caring for children. Education topics related to sickness, discipline, and children (Jones & Prinz, 2005; Wittkowski et al., 2017). The ability of parents to adjust, stimulate, and cultivate the atmosphere for parenting indicates that parents have a high degree of parental self-efficacy (Yafie, 2018b).

One of the factors that play an important role in affecting the growth and development of children is the skills of parents in parenting their children (Yafie, 2020b). It is also said that parenting's success has an impact on all aspects of growth that the child has. Physical-motor aspects, awareness, vocabulary, norms and values, moral views, art, and social emotions are all included in these aspects. It is unlikely for all these elements to evolve individually but become one unit (Yafie, 2018b). Five crucial variables that develop and improve parental self-efficacy have been established. First, there are earlier encounters, representative encounters, psychological and affective states of verbal persuasion (Bandura, 1977). Second, parental self-efficacy (PSE) is characterized as the willingness of parents to preserve their ability to care for children (Coleman & Karraker, 2000; De Montigny & Lacharité, 2005), which is also a significant factor. Third, parents with poor parental self-efficacy have more unruly children who appear to act more aggressively and disobediently (Leerkes & Crockenberg, 2002).

Education for parents is required to improve their independence and provide

their children with knowledge of care. It is very necessary to increase knowledge and exposure to topics related to education laws and policies, as well as knowledge of mental health. Parental education will achieve improved parental self-efficacy (Murray et al., 2013; Wright & Taylor, 2014). Parents who are abusive or sometimes make kids uncomfortable sometimes feel less capable than other parents who seem to adjust their actions and make kids feel secure in their treatment (Coleman & Karraker, 2003; Heath et al., 2014). Also related are PSE and parenting behavior. PSE, parenting behavior, and the behavior of children are known to be interactively related and affect each other. Compared to parents with a higher degree of parental self-efficacy, parents with low self-efficacy tend to use more manipulative and aggressive parenting, tend to use more supportive parenting, such as comfort, empathy, positive impact, consistency, or rule set, and not to control their children (Johnston & Mash, 1989; Teti & Gelfand, 1991.).

The views of parents about self-care can be seen from a range of outcomes, such as the presence of parents at home (Giallo et al., 2013), parenting skills (Jones & Prinz, 2005), as well as the consistency and outcomes of parenting (Coleman & Karraker, 1998). Furthermore, parental self-efficacy is also correlated with the adaptation of children Jones and Prinz (2005), as aggression, depressive symptoms, autonomy, and academic parental self-efficacy are part of their psychosocial functions (Steca et al., 2011). Therefore,

in this report, it is very important to instill single-parent parental self-efficacy with the help of a parent training program to promote childcare.

Children's Moral Development (5-6 Years old)

Some social neuroscience theories focus more on development, which indicates how the development of the brain promotes moral development through its effect on the emergence of related cognitive and affective processes, but that does not mean that these theories always relate to the rich heritage of psychological theories of development (Knei-Paz, 2021). The theory of Piaget (2013), also considered to be the first theory of moral development in cognitive development, identifies four phases of rational reasoning and two phases of moral development, namely heteronomy and autonomy. It is not the product of mere imagination but is the result of information processing as people make choices and make decisions in any way, even when it comes to morality (Fiedler & Glöckner, 2015). Like every other form of decision-making, decision-making related to morality is an equally complex process. Multiple process theory is one of the most influential moral theories in social neuroscience, based on the degree to which various brain regions are stimulated when making certain decisions, from which there are assumptions regarding the cognitive and affective mechanisms involved in moral decision-making (Greene et al., 2004, 2008).

This disparity will cause someone to think about the reasons for their failures and look for reasons that are deemed acceptable (Duska & Whelan, 1975). Rest (1999) states that four factors are underlying moral behavior. Moral sensitivity, moral judgment, moral motivation, and moral character are amongst them. Moral sensitivity can be useful both for himself and others when reacting to circumstances, choosing to act, and understanding the consequences of these acts. When deliberating and determining which one is considered correct, the internal moral judgment part will be used. The moral motivation aspect is related to the prioritization of values and refers to abilities and techniques that encourage moral choices, such as self-control (Rest et al., 1999). Therefore, it is necessary to do moral development in children through habituation by the parents who accompany them.

In engaging with or determining what action is good and bad in the future, moral development for children can influence their lives. The role of love, compassion, and protection is supported from an early age, and parents directly influence character education in young children (Setiawan et al., 2020). As they enter the heteronomous stage, children will feel the responsibility to follow external rules set by adults, while when they can understand that rules are deserving of respect and are based on mutual consent, the child has entered the autonomous stage (Piaget, 2013). As Piaget (2013) suggested, alongside logical reasoning and abstract reasoning, cognitive processes evolve, and this paves the way

for moral development. In moral judgment, Kohlberg (1996) notes that six phases are divided into three stages: pre-conventional, conventional, and post-conventional. The first point, the pre-conventional level, consists mainly of children under the age of nine. Most teenagers and adults are in the conventional stage, and a small proportion of adults enter the post-conventional level.

Piaget (2013) notes that the moral growth of the child has arisen as a child moves away from egocentrism. This phase needs the cognitive capacity to differentiate between the ego and the social environment, and the maturation of language and imagination encourages it. Duska and Whelan (1975) noted that this could be a way to promote the creation of mutual respect and keep children away from egocentric thinking when children are six years old and can work together with their peers. Piaget (2013) notes that by controlling their social experiences and imitating the behavior of their parents or those around them who are growing up, children can develop their social and moral intelligence.

Concerning Piaget's theory that moral reasoning depends on advanced, rational reasoning, Kohlberg (1996) offers an extended assumption. In this, there is consistency between the logical stage of the person and his moral stage. Similar to Piaget (2013), Kohlberg 1996) stressed that it is necessary to play a role by thinking about other people's perspectives on moral development and proposed that children's social environment should include

opportunities and involvement to promote moral development. Kohlberg sees the six phases he defines as being sequential in his theory. Progress to the next level can occur when circumstances arise where cognitive conflict or disparity is created, or an opinion is insufficient to deal with a moral dilemma. The moral dimensions of the children to be tested in this analysis are honesty versus deceit, fairness of penalties, the effectiveness of punishment, and equality versus authority (Kurtines & Pimm, 1983).

Research Hypothesis

H0: There is no difference in the average pre-test scores between the experiment and control class.

H1: There is a difference in the average pre-test scores between the experiment and control class.

METHODS

Participants

This research examines one type of effort to effect change or is called experimental research. A pre-test-post-test nonequivalent comparison group quasi-experimental design was selected to assess the effectiveness of parental self-efficacy programs to improve children's moral development with single-parent status. The independent variable in this study is the parental self-efficacy program, while the dependent variable in the study is children's moral development with single-parent status. Data is collected from two group samples of 30 parents (mother) with single-parent families' status

and 30 normal parent family's status who have children between four-to-six-year-old preschool children. This research is conducted in TK Laboratorium Universitas Negeri Malang. The two samples attended the same parenting program, in which the same parenting variable parental self-efficacy, and children's moral development. They were tested at pre-test, post-test, and follow-up at the same intervals (post-test at eight weeks/follow-up at 16 weeks). They shared common socio-demographic characteristics (parent's educational level and age, child's gender, and age).

Procedure

The experimental procedure is structured in four steps. In the first step, the researcher shared information online, which contained screening questions related to the status of parents, the age range of the children they had, and the parenting patterns they took. Ouestionnaires were encoded and used to test the comparability between experimental and control groups and as baseline control measures in the main analysis testing the effect of the experimental manipulation. In the second step, mothers came to the lab with their children for one hour and were randomly allocated to the experimental or control group. Participants are not aware of the conditions. Then, a pre-test was carried out to mothers and children by distributing questionnaires for Parental Self-efficacy (PSE) and Moral Development Scale (MDS).

In the third step, those allocated to the experimental group were given regular

guidance and training for eight weeks. Material and mentoring were given directly in the class for eight meetings with 60 minutes per meeting. The material is in the form of children's moral development stages, children's moral problems, strategies to stimulate children's morals, and assistance to be good parents. In addition to getting the material directly, parents (mothers) also get material in the form of guidebooks, brochures related to developing a scale of moral development and parental selfefficacy. Furthermore, the experimental group received consultations through social media groups to conduct consultations. Meanwhile, the control group only received manuals on parental self-efficacy and moral development scales without being given ongoing guidance. The fourth step is to measure the effectiveness (post-test) related to PSE & MDS, taken online in both groups to find out which effectiveness is given.

Measures

Parental Self-Efficacy. For coercion regulation with the Global PSE Scale of Meunier and Roskam (2009), parental selfefficacy (PSE) was assessed. The Echelle Global du Sentiment de Competence Parental (EGSCP), a questionnaire, tests multiple domain specific SEBs, and three associated cognitive constructs. The EGSCP showed good psychometric properties. Parental Self-Efficacy has eight domainspecific questions (discipline, play, nursing, instrumental care, teaching, parental responsibility, outcome management, and motivation for mastery) and 37 objects. Tests on the eight parenting self-efficacy domains can be seen in Table 1.

Table 1
Validity and reliability parental self-efficacy (PSE) scale

No	Domain-specific (parental self-efficacy)	Item	Correlation coefficients	Sig	Reliability
1	Discipline	1-7	0.548-0.875	0.00	0.912
2	Play	8-12	0.786-0.783	0.00	0.984
3	Nurturance	13-17	0.616-0.791	0.00	0.904
4	Instrumental care	18-22	0.650-0.807	0.00	0.929
5	Teaching	23-25	0.684-0.899	0.00	0.992
6	Parental responsibility	26-29	0.418-0.815	0.00	0.817
7	Parental control of outcome	30-33	0.552-0.823	0.00	0.888
8	Mastery motivation	34-37	0.582-0.931	0.00	0.957

Moral Development Scale (MDS). The Moral Development Scale (MDS) is formed within a Piagetian context by moral reasoning (Kurtines & Pimm, 1983). The structure of the scale and the rationale of the scoring scheme were both derived from the original work of (Piaget, 2013). In his work on moral realism and the creation of the concept of justice, the original

collection of stories chosen based on content relevance and face validity is intended to be a representative subset of the stories that Piaget published. There are four domain-specific MDS (honesty versus lying, the fairness of punishment, punishment utility, and equality versus authority). Tests on four specific domains on the moral development scale can be seen in Table 2.

Table 2
Validity and reliability Moral Development Scale (MDS)

No	Domain-specific (Moral Development Scale)	Item	Correlation coefficients	Sig	Reliability
1	Honesty versus lying	1-4	0.518-0.823	0.00	0.871
2	Fairness of punishment	5-8	0.624-0.843	0.00	0.934
3	Utility of punishment	9-12	0.530-0.868	0.00	0.899
4	Equality versus Authority	13-16	0.636-0.887	0.00	0.961

Data Analysis

The prerequisite test was carried out to establish that the data analyzed was naturally distributed and homogeneous. Using the Kolmogorov-Smirnov One-Sample Test on the SPSS software, the data normality test was carried out. If the study has an Asymp, the information is normally distributed. Sig (2-tailed) > 0.05 value. The two-variance similarity test (homogeneity) is intended to establish that a population with the same variance comes from the sample data group. The homogeneity test was performed through the SPSS program via analysis. If the sig value is > 0.05, the data is homogeneous. For the study of the

Independent Sample T-test in the SPSS software, hypothesis testing is conducted, decision-making is achieved by comparing the t-count value with the t-table or p>0.05.

FINDING

The key findings of this research are the differences between the control group and the experimental group in parental self-efficacy in mothers and moral growth in children aged 4-5 years after being offered a parental self-efficacy program. The normality and homogeneity checks are, however, carried out first before testing the hypothesis.

Normality Test

In this analysis, the data normality test in the experimental class used the Kolmogorov-

Smirnov test statistics using the SPSS program, and the measurement results are presented in Table 3.

Table 3

Normality test

Group	Variables	Asymp.sig (2-tailed)	Explanation
Control	Parental self-efficacy	0.738	Normal
	Moral Development	0.433	Normal
Experiment	Parental self-efficacy	0.467	Normal
	Moral Development	0.534	Normal

The calculation results show that the value of the Asym. Sig. (2-tailed) > 0.05 to usually distribute the parental self-efficacy and moral growth data in the experimental class and control class. It can therefore be inferred that the data distribution in the two classes is typically distributed.

Homogeneity Test

A homogeneity test is used to find out whether the data has the same variance (homogeneous) or not. Homogeneity test results can be seen in Table 4.

The statistical significance values of the Levene test are 1.754 and 2.445 based on Table 4, and this significant value is greater than the significance level of 0.05 (sig. (0.185 & 0.284) > 0.05). So, it can be inferred that there is the same difference between the experimental and control classes.

Table 4

Homogeneity test

Variable	Levene Statistic	Sig.	Explanation
Parental self- efficacy	1.754	0.185	Homogeny
Moral development	2.445	0.284	Homogeny

Hypothesis Testing

The independent-sample t-test was used to test the effectiveness of parental self-

efficacy programs to improve children's moral development. The test results can be seen in Table 5.

Table 5

Pre-test-post-test

Group	Variable	Pre-Test		Post-Test	
		Mean	Set Dev	Mean	Set Dev
Control	Parental self-efficacy	2.35	0.43	3.11	0.38
	Moral development	2.21	0.32	3.09	0.29
Experiment	Parental self-efficacy	2.82	0.36	3.89	0.52
	Moral development	2.72	0.39	3.93	0.41

According to the results of the pre-test and post-test in the control and experimental class, it can be concluded that there is an increasing effect between the control class and the experimental class. Self-efficacy for parents in the control class who are not given training is approximately 32.3% in giving pre-test to post-test. In comparison, the moral development of children only experienced a change of 39.8%. In the experimental class, the self-efficacy of parents is increased by 37.9% from pre-test

to post-test after being given training. In the moral development of children, it shows a fairly high increase of 44.4%.

The finding shows that Sig. (2-tailed) is smaller (sig. 2-tailed = 0.000 < 0.05) than alpha = 0.05, so, H0 is rejected. Since H0 is rejected, it can be inferred that there is an increase between the control and experimental group in parental self-efficacy of mothers and moral growth in children aged 4-5 years after being offered a parental self-efficacy program.

Table 6 *T-test*

Variable	t-statistic	Sig.	Result
Control Class	3.154	0.000	Significant
Experimental Class	3.245	0.000	Significant

DISCUSSION

Parental Self-Efficacy Program Intervention to Improve Moral Development of Children with Parents Having Single-Parent Status

This study intervenes with parents by providing training with materials that focus on parents' self-efficacy. Before the program starts, the researcher conducts a planning process, program implementation, and program evaluation.

1. Program Planning Stage

The planning process is a process that prepares everything needed during the implementation of activities and aims for the smoothness and success of a program or activity to be implemented. Planning is the process of determining the goals or objectives to be achieved, the paths, and the resources needed to achieve the goals as effectively as possible. It is in line with the planning carried out by researchers, where researchers carry out the planning process without involving parents to achieve the goals of parenting activities as effectively as possible.

Planning in the parenting program is carried out by researchers who include determining the schedule of activities, program materials, and infrastructure to support the implementation of the parenting program so that it runs optimally. The method used in implementing the parenting program is the lecture method to provide an introduction and follow up with discussions; it is carried out so that the speakers and parenting participants can interact well.

Then after the class ends, there is still sharing and question and answer in online chat groups.

The media used in the parenting implementation is LCD; this media is used so that the participants of the parenting event can see and read the material given by the speaker with the available LCD screen. In addition, it is hoped that the parenting event participants can understand more about the material given in the PowerPoint that the speaker has made.

2. Parenting Program Implementation

If the researcher plans and determines the time, material, place, and media or tools needed in the implementation process, it will not be far from the terms. Is in accordance with what O'Hara (2021) states that implementation is an activity or effort carried out to do all plans and policies that have been formulated and determined, equipped with all the needs, tools, and equipment needed, who implements it, where the implementation starts, and how it should be implemented.

The implementation of the parenting program took place in TK Laboratorium Universitas Negeri Malang with the concept of *lesehan*; so that there are no chairs in this event, but instead used mats for seating guests, resource persons, MCs, and participants in the parenting event. There is also a table for the MC and the speaker or resource person for this parenting event, as well as a table for placing the LCD.

Its implementation emphasizes discussion and sharing with various

problems faced by single parents in the process of educating children at home related to the moral development of children. The material presented in parenting activities is related to the moral development of children, single parent parenting at home, and more emphasis on parental problems in dealing with children to foster an attitude of distinguishing good and bad things in children. The speakers in the parental self-efficacy program activities are academics who come from the realm of early childhood education.

3. Parenting Program Evaluation Process

The evaluation process is a measuring tool to determine the extent to which the objectives of a program can be achieved. The evaluation process in the parenting program can be said as a form of assessment of an activity that has been carried out. According to Martha (2009), evaluation activity is an attempt to measure and provide value objectively on the achievement activity implementation result that has been previously planned. Evaluation always seeks to question the effectiveness and efficiency of the implementation of a plan. In addition, the evaluation also measures the results of the implementation objectively with a size that all related parties can accept.

The form of evaluation of the parenting program is carried out two times. The first is carried out at the end of the parenting program activity for parents in the form of discussions and questions and answers to find out the extent to which parents understand

in accepting and understanding the material presented. The second is an evaluation of the overall parenting program activities carried out by researchers; the evaluation includes all program components and the entire parenting program implementation process. Evaluation is carried out to improve the quality of the next program to be better.

Single-Parent Training on Increasing Moral Development without Parental Self-Efficacy Approach in Control Class

According to the results of the t-test, it is known that the average pre-test in the control class for the parental self-efficacy variable is 2.35 with the post-test is 3.11, and the moral development variable has a pre-test of 2.21 and a post-test of 3.09 so that the increase is 0.75. Furthermore, based on the t-test, the calculated value is 3,154, and the significance value is smaller than $0.05 \ (0.00 < 0.05)$. Therefore, it could be stated that there is a significant increase in the parental self-efficacy of parents and the moral development of children.

In control class, parents are only given a manual on parenting without further material on parental self-efficacy. A module can be interpreted as a book written with the aim that students can learn independently without or with teacher guidance (Susanti et al., 2020). Logan (2021) Claims that the module becomes a material that can be used to guide students without extra help from the teacher, this allows the module to facilitate materials, tools, and measure student achievement in a material,

which in the context of this research is the understanding of parents on increasing the moral development of children.

The module becomes an independent learning tool so that students can learn at their own pace (Latipah et al., 2020). Modules are designed to help individual learners achieve learning goals (Wulandari & Afiatin, 2020). Modules are usually presented in the form of self-instruction; each participant can determine the intensity and pace of his learning (Retnaningsih & Setiyawati, 2019).

Single-Parent Training Related to Increasing Moral Development with Parental Self-Efficacy Approach in Experimental Class

According to the results of the t-test, it is known that the average pre-test in the experimental class for the parental self-efficacy variable is 2.82, the post-test is 3.89, and the moral development variable has a pre-test of 2.72 and a post-test of 3.93 so that the increase is 1.07. Furthermore, based on the t-test, the calculated value is 3.245, and the significance value is smaller than 0.05 (0.00 < 0.05), thus, it can be stated that there is a significant increase in parental self-efficacy of parents and also the moral development of children.

Parental self-efficacy services aim at providing parents with feedback and knowledge and equipping them with those abilities (Glatz & Buchanan, 2021). To services aimed at parental identity, experiences, values and attitudes, selfconfidence and parental anxiety, as well as knowledge on the spiritual growth of children, moral concerns of children, methods to stimulate the morale of children, and helping to become good parents (Albanese et al., 2019). Parental self-efficacy is one of the increasingly common concepts lately, and the correct method of PSE growth is through training. Routine preparation will improve the awareness of parents and change their childcare behavior (Liu & Leighton, 2021).

The parental self-efficacy program provided to the experimental class (training, mentoring, consultation, manuals) for parents with single-parent status, based on the results of the study, was able to substantially increase parental self-efficacy compared to the control group that received only manual books. It proves that the PSE score can be greatly improved by training followed by mentoring. Muirhead et al. (2020) revealed that PSE-related parental awareness could be gained formally, informally, and informally through schooling, training, and experience programs. It confirms Bandura's (1977) view, which explains that information is an asset for people to have an evaluation of their effectiveness. Liu and Leighton (2021) also indicate that parental self-efficacy has a positive relationship with particular patterns and individual habits, such as the attempts of parents to inform themselves about parenting, such as adopting parental education services and reading parentingrelated literature.

Differences in Single-Parent Training Regarding Moral Development Improvement with Parental Self-Efficacy Approach in Experiment Class and Manual Book in Control Class

Based on the post-test t-test, it is known that the average experimental class learning outcomes on the parental self-efficacy variable are 3.89, the moral development variable is 3.93, and the average control class learning outcomes on the parental self-efficacy variable are 2.11, and the moral development variable is 3.09. Therefore, it can be concluded that the average learning outcomes of the experimental class on the parental self-efficacy variable are 0.78 greater than the parental self-efficacy variable in the control class. Furthermore, in the average learning outcomes of the experimental class, the moral development variable is 0.84 greater than the moral development variable in the control class.

Testing the hypothesis by calculating the independent sample t-test, it is known that the average increase in the experimental group is 3,245 while the increase in the control class is 3,154. Furthermore, it is known that the increase in learning outcomes in the experimental group class is 0.091 more than in the control class. Finally, it is also known that the significance value is less than 0.05 (p = 0.000 < 0.05), so it can be stated that there is a significant difference in the significant increase in learning outcomes scores in the experimental group and the control group.

The training design/method is one of the factors considered effective in promoting the performance of this training. According to Zeng (2019), the training design/system is one that affects the transition process of training. It is in line with Jha (2019)'s view that one of the things that affect the performance of the training program is the design or transition of learning, including learning goals, material relevance, teaching, techniques, media, and selfmanagement methods that are applicable to transition training. Lam (2019) claimed that through meditation, innovative practice, and the development of childcare strategies and autonomous decision-making in a supportive environment, the development of parental self-efficacy is possible. Generally, there are two cycles of experiential learning undergone by participants in this training. Therefore, the findings of this research support previous studies that used the method of experiential learning as an efficient method of learning to increase self-efficacy.

A child's moral growth is affected a lot by the environment. Children, especially their parents, get moral values from their surroundings (Abdullah & Tabrani, 2018). According to these principles, he learns to understand values and behave. The role of parents is very important in developing children's moral values, especially for young children. Therefore, any parents' views need to be taken into account in relation to the moral growth of children.

Through social interaction with adults, particularly parents, children develop their social awareness (Aisyah, 2020). In early childhood, parents are an effective model as most children are at least formally educated (Moheghi et al., 2020). The degree to which moral principles are internalized and their potential for guilt is connected to parental behaviors, disciplinary methods, and types of parenting in terms of aspects of moral growth (Farisia, 2020). Strategies for punishment are ways of correcting children's actions (for instance, getting them to stop biting when they are angry). In addition, intensive parental contact may provide an incentive for children to understand why change is important for their actions (Kohlberg, 1971).

Since children must be disciplined 5-6 times per hour, the moral growth of children can be profoundly affected by behavioral approaches and methods (Moheghi et al., 2020). With a large capacity in the early years to influence their infant, parents have the opportunity to promote and support the overall moral growth of children. Parents have the ability to help classify their children with positive traits and adopt them. Compassion is recognized as an essential component of moral learning for children (Yucel et al., 2020). It not only makes kids more open to punishment and more likely to mimic the actions of their parents, but it also helps kids feel emotionally secure in reacting to others' needs (Tan & Yasin, 2020). The affective traits of parents can promote the moral development of children

by using them in conjunction with inductive discipline.

CONCLUSION

According to the results of research and discussion, it can be concluded that the use of experimental methods in increasing the moral development of children with parental self-efficacy has a positive effect. It can be shown by the results of hypothesis testing, which shows that the significance value obtained is 0.000, which is smaller than the 0.05 significance level. In addition, it can also be seen from the average post-test results using the experimental method on the parental self-efficacy variable of 3.89 and the moral development variable of 3.93. In addition, in the control class, the parental self-efficacy variable is 2.11, and the moral development variable is 3.09.

In further research, the use of the experimental method of parental self-efficacy should be further developed to be able to reach more parents, not just single parents. In addition, careful preparation is needed in the application of this experimental method to suit the objectives to be achieved.

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REFERENCES

- Abdullah, A., & Tabrani, Z. A. (2018). Orientation of education in shaping the intellectual intelligence of children. *Advanced Science Letters*, 24(11), 8200-8204. https://doi.org/10.1166/asl.2018.12523
- Aisyah, A. (2020). Pendidikan karakter untuk perkembangan moral anak usia dini [Character education for early childhood moral development]. *Jurnal Warna: Pendidikan dan Pembelajaran Anak Usia Dini, 5*(2), 77-84. https://doi.org/10.24903/jw.v5i2.528
- Albanese, A. M., Russo, G. R., & Geller, P. A. (2019). The role of parental self-efficacy in parent and child well-being: A systematic review of associated outcomes. *Child: Care, Health and Development, 45*(3), 333-363. https://doi.org/10.1111/cch.12661
- Amin, N. A. L., Tam, W. W. S., & Shorey, S. (2018). Enhancing first-time parents' self-efficacy: A systematic review and meta-analysis of universal parent education interventions' efficacy. *In International Journal of Nursing Studies*, 82, 149-162. https://doi.org/10.1016/j.ijnurstu.2018.03.021
- Augustinavicius, J. L., Murray, S. M., Familiar-Lopez, I., Boivin, M. J., Mutebe, A., Arima, E., & Bass, J. K. (2020). Measurement of parenting selfefficacy among female HIV-affected caregivers in Uganda. *Maternal and Child Health Journal*, 24(3), 319-327. https://doi.org/10.1007/s10995-019-02855-9
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84(2), 191. https://doi.org/10.1037/0033-295X.84.2.191
- Bearss, K., Johnson, C., Smith, T., Lecavalier, L., Swiezy, N., Aman, M., McAdam, D. B., Butter, E., Stillitano, C., Minshawi, N., Sukhodolsky, D. G., Mruzek, D. W., Turner, K., Neal, T., Hallett, V., Mulick, J. A., Green, B., Handen,

- B., Deng, Y., ... & Scahill, L. (2015). Effect of parent training vs parent education on behavioral problems in children with autism spectrum disorder: A randomized clinical trial. *JAMA Journal of the American Medical Association*, 313(15), 1524-1533. https://doi.org/10.1001/jama.2015.3150
- Benish-Weisman, M., Daniel, E., Sneddon, J., & Lee, J. (2019). The relations between values and prosocial behavior among children: The moderating role of age. *Personality and Individual Differences*, 141, 241-247. https://doi.org/10.1016/j.paid.2019.01.019
- Buchanan, R., Chamberlain, P., Price, J. M., & Sprengelmeyer, P. (2013). Examining the equivalence of fidelity over two generations of KEEP implementation: A preliminary analysis. *Children and Youth Services Review,* 35(1), 188-193. https://doi.org/10.1016/j.childyouth.2012.10.002
- Chou, J. L., Pierce, K. J., Pennington, L. B., Seiler, R., Michael, J., Mc Namara, D., & Zand, D. (2018). Social support, family empowerment, substance use, and perceived parenting competency during pregnancy for women with substance use disorders. *Substance Use and Misuse*, *53*(13), 2250-2256. https://doi.org/10.1080/10826084. 2018.1467456
- Cingel, D. P., & Krcmar, M. (2020). Considering moral foundations theory and the model of intuitive morality and exemplars in the context of child and adolescent development. *Annals of* the International Communication Association, 44(2), 120-138. https://doi.org/10.1080/238089 85.2020.1755337
- Coleman, P. K., & Karraker, K. H. (1998). Self-efficacy and parenting quality: findings and future applications. *Developmental Review*, *14*(1), 47-85. https://doi.org/10.1006/drev.1997.0448
- Coleman, P. K., & Karraker, K. H. (2000). Parenting self-efficacy among mothers of school-age

- children: Conceptualization, measurement, and correlates. *In Family Relations*, 49(1), 13-24. https://doi.org/10.1111/j.1741-3729.2000.00013.x
- Coleman, P. K., & Karraker, K. H. (2003). Maternal self-efficacy beliefs, competence in parenting, and toddlers' behavior and developmental status. *Infant Mental Health Journal*, *24*(2), 126-148. https://doi.org/10.1002/imhj.10048
- Comer, J. S., Chow, C., Chan, P. T., Cooper-Vince, C., & Wilson, L. A. S. (2013). Psychosocial treatment efficacy for disruptive behavior problems in very young children: A meta-analytic examination. *Journal of the American Academy of Child and Adolescent Psychiatry*, 52(1), 26-36. https://doi. org/10.1016/j.jaac.2012.10.001
- De Montigny, F., & Lacharité, C. (2005). Perceived parental efficacy: Concept analysis. *Journal of Advanced Nursing*, 49(4), 387-396. https://doi.org/10.1111/j.1365-2648.2004.03302.x
- Duska, R., & Whelan, M. (1975). Moral development: A guide to Piaget and Kohlberg. Paulist Press. https://eric.ed.gov/?id=ED123144 Follow APA 7th format for book
- Farisia, H. (2020). Nurturing Religious and moral values at early childhood education. *Didaktika Religia*, 8(1), 1-27. https://doi.org/10.30762/ didaktika.y8i1.1881
- Fiedler, S., & Glöckner, A. (2015). Attention and moral behavior. *Current Opinion in Psychology*, 6, 139-144. https://doi.org/10.1016/j. copsyc.2015.08.008
- Fox, R., & M. C. B. (1990). Parenting; A developmental behavioral approach. *Advances in Special Education*, 7B, 187-201.
- Fukkink, R. G. (2008). Video feedback in widescreen: A meta-analysis of family programs. *Clinical Psychology Review*, 28(6), 904-916. https://doi.org/10.1016/j.cpr.2008.01.003

- García-Moriyón, F., González-Lamas, J., Botella, J., Vela, J. G., Miranda-Alonso, T., Palacios, A., & Robles-Loro, R. (2020). Research in moral education: The contribution of P4C to the moral growth of students. *Education Sciences*, 10(4), 119. https://doi.org/10.3390/educsci10040119
- Giallo, R., Treyvaud, K., Cooklin, A., & Wade, C. (2013). Mothers' and fathers' involvement in home activities with their children: Psychosocial factors and the role of parental self-efficacy. *Early Child Development and Care, 183*(3-4), 343-359. https://doi.org/10.1080/03004430.20 12.711587
- Glatz, T., & Buchanan, C. M. (2021). Trends in parental self-efficacy between 1999 and 2014. *Journal of Family Studies*, 1-16 https://doi.org/10.1080/13229400.2021.1906929
- Greene, J. D., Morelli, S. A., Lowenberg, K., Nystrom, L. E., & Cohen, J. D. (2008). Cognitive load selectively interferes with utilitarian moral judgment. *Cognition*, 107(3), 1144-1154. https:// doi.org/10.1016/j.cognition.2007.11.004
- Greene, J. D., Nystrom, L. E., Engell, A. D., Darley, J. M., & Cohen, J. D. (2004). The neural bases of cognitive conflict and control in moral judgment. *Neuron*, *44*(2), 389-400. https://doi.org/10.1016/j.neuron.2004.09.027
- Harpaz, G., Grinshtain, Y., & Yaffe, Y. (2021). Parental self-efficacy predicted by parents' subjective well-being and their parenting styles with possible role of help-seeking orientation from teachers. *Journal of Psychology: Interdisciplinary and Applied*, 155(6), 571-587. https://doi.org/10.1080/00223980.2021.1926896
- Heath, C. L., Curtis, D. F., Fan, W., & McPherson, R. (2014). The association between parenting stress, parenting self-efficacy, and the clinical significance of child ADHD symptom change following behavior therapy. *Child Psychiatry and Human Development*, 46(1), 118-129. https://doi. org/10.1007/s10578-014-0458-2

- Hernandez, D. (2020). The effects of social support and self-efficacy on parenting stress in single Latino mothers [Doctoral dissertation, The Chicago School of Professional Psychology]. ProQuest Dissertations and Theses Global.
- Hitchcock, C. H., Dowrick, P. W., & Prater, M. A. (2003). Video self-modeling intervention in school-based settings: A review. *In Remedial* and Special Education, 24(1), 36-45. https://doi. org/10.1177/074193250302400104
- Hsieh, Y. P., Wu, C. F., Chou, W. J., & Yen, C. F. (2020). Multidimensional correlates of parental self-efficacy in managing adolescent internet use among parents of adolescents with attention-deficit/hyperactivity disorder. *International Journal of Environmental Research and Public Health*, 17(16), 5768. https://doi.org/10.3390/ijerph17165768
- Jha, A., Chandrasekaran, A., Kim, C., & Ramprasad, R. (2019). Impact of dataset uncertainties on machine learning model predictions: The example of polymer glass transition temperatures. *Modelling and Simulation in Materials Science* and Engineering, 27(2), 024002. https://doi. org/10.1088/1361-651X/aaf8ca
- Johnston, C., & Mash, E. J. (1989). A measure of parenting satisfaction and efficacy. *Journal of Clinical Child Psychology*, 18(2), 167-175.. https://doi.org/10.1207/s15374424jccp1802 8
- Jones, T. L., & Prinz, R. J. (2005). Potential roles of parental self-efficacy in parent and child adjustment: A review. *Clinical Psychology Review*, 25(3), 341-363. https://doi.org/10.1016/j. cpr.2004.12.004
- Kamody, R. C., & Lydecker, J. A. (2021). Parental feeding practices and children's disordered eating among single parents and co-parents. *International Journal of Eating Disorders*, 54(5), 812-820. https://doi.org/10.1002/eat.23490
- Khodnapur, B. (2021). A comparative study to assess the cognitive and moral development of school

- age children among joint versus nuclear family in selected rural area of Bijapur district. *IP Journal of Paediatrics and Nursing Science*, *3*(4), 104-111. https://doi.org/10.18231/j.ijpns.2020.020
- Kim, E., Cain, K. C., & Webster-Stratton, C. (2008). The preliminary effect of a parenting program for Korean American mothers: A randomized controlled experimental study. *International Journal of Nursing Studies*, 45(9), 1261-1273. https://doi.org/10.1016/j.ijnurstu.2007.10.002
- Knei-Paz, C. (2021). Moral development in young children exposed to domestic violence: The case for the proactive role of the therapist. *Journal of Infant, Child, and Adolescent Psychotherapy*, 20(4), 425-438. https://doi.org/10.1080/152891 68.2021.2003683
- Kohlberg, L. (1971). Stages of moral development as a basis for moral education. *Moral education: Interdisciplinary Approaches*, 23-92. https://doi. org/10.3138/9781442656758
- Kohlberg, L. (1996). Die Psychologie der moralentwicklung [The psychology of moral development]. Harper & Row. https://ixtheo.de/ Record/278177115
- Korotaeva, E., & Chugaeva, I. (2019). Socio-moral development of preschool children: Aspects of theory and practice. *Behavioral Sciences*, 9(12), 129. https://doi.org/10.3390/bs9120129
- Kurtines, W., & Pimm, J. B. (1983). The moral development scale: A Piagetian measure of moral judgment. *Educational and Psychological Measurement*, 43(1), 89-105. https://doi. org/10.1177/001316448304300112
- Lam, B. (2019). Social support giving and teacher development. In Social Support, Well-being, and Teacher Development, 241-277. https://doi. org/10.1007/978-981-13-3577-8_6
- Latipah, E., Kistoro, H. C. A., & Putranta, H. (2020). The effects of positive parenting toward intolerance in pre-school children. *International*

- Journal of Early Childhood Special Education, 12(2), 137-146. https://doi.org/10.9756/INT-JECSE/V12I2.201065
- Leerkes, E. M., & Crockenberg, S. C. (2002). The development of maternal self-efficacy and its impact on maternal behavior. *Infancy*, 3(2), 227-247. https://doi.org/10.1207/S15327078IN0302 7
- Liu, Y., & Leighton, J. P. (2021). Parental self-efficacy in helping children succeed in school favors math achievement. *Frontiers in Education*, *6*(82). https://doi.org/10.3389/feduc.2021.657722
- Logan, R. M., Johnson, C. E., & Worsham, J. W. (2021). Development of an e-learning module to facilitate student learning and outcomes. *Teaching and Learning in Nursing*, 16(2), 139-142. https://doi.org/10.1016/j.teln.2020.10.007
- Martínez-Muñoz, M., Arnau, L., & Sabaté, M. (2019).
 Evaluation of a parenting training program,
 "limits", in a juvenile justice service: Results
 and challenges. Psychosocial Intervention, 28(1),
 1-10. https://doi.org/10.5093/pi2018a14
- Meunier, J. C., & Roskam, I. (2009). Self-efficacy beliefs amongst parents of young children: Validation of a self-report measure. *Journal of Child and Family Studies, 18*(5), 495-511. https://doi.org/10.1007/s10826-008-9252-8
- Moheghi, M., Ghorbanzadeh, M., & Abedi, J. (2020). The investigation and criticism moral development ideas of Kohlberg, Piaget and Gilligan. *International Journal of Multicultural and Multireligious Understanding*, 7(2), 362-374. http://dx.doi.org/10.18415/ijmmu. v7i2.1516
- Muirhead, V., D'Antoni, D., & Auyeung, V. (2020).
 Community pharmacy staff oral health training, training needs and professional self-efficacy related to managing children's dental problems.
 International Journal of Pharmacy Practice, 28(5), 449-457. https://doi.org/10.1111/ijpp.12626

- Murray, M. M., Handyside, L. M., Straka, L. A., & Arton-Titus, T. V. (2013). Parent empowerment: Connecting with preservice special education teachers. *School Community Journal*, 23(1), 145-168. https://eric.ed.gov/?id=EJ1004336
- O'Hara, K. L. (2021). The development, evaluation, and implementation of parenting-focused prevention programs in collaboration with family court. *Family Court Review*, *59*(4), 710-724. https://doi.org/10.1111/fcre.12604
- Orben, A., Tomova, L., & Blakemore, S. J. (2020). The effects of social deprivation on adolescent development and mental health. *In The Lancet Child and Adolescent Health*, 4(8), 634-640. https://doi.org/10.1016/S2352-4642(20)30186-3
- Piaget, J. (2013). *The moral judgment of the child*. Free Press. https://doi.org/10.4324/9781315009681
- Poblete, A. T. (2019). Parental self-efficacy in lowincome, ethnically diverse mothers [Doctoral dissertation, The George Washington University]. ProQuest Dissertations and Theses Global.
- Reimann, M., Marx, C. K., & Diewald, M. (2020). Work-to-family and family-to-work conflicts among employed single parents in Germany. *Equality, Diversity and Inclusion, 39*(5), 513-531. https://doi.org/10.1108/EDI-02-2019-0057
- Rest, J. R., Narv ez, D., Thoma, S. J., Bebeau, M. J., & Bebeau, M. J. (1999). Postconventional moral thinking: A Neo-kohlbergian approach (1st ed.). Psychology Press. https://doi.org/10.4324/9781410603913
- Retnaningsih, W., & Setiyawati, D. (2019). Validasi Modul pelatihan disiplin positif untuk meningkatkan praktik pengasuhan pada ibu anak prasekolah [Validation of positive discipline training module to improve parenting practices for mothers of preschool children]. Gadjah Mada Journal of Professional Psychology, 5(2), 158-172. https://doi.org/10.22146/gamajpp.50373

- Setiawan, J. A., Suparno, Sahabuddin, C., Tasrif, & Ramadhan, S. (2020). The role of parent on the character education of kindergarten children age 5-6 years in Bima. *Journal of Educational Research*, 8(3), 779-784. https://doi.org/10.13189/ujer.2020.080307
- Silverman, W. K. (2021). Does training parents in reinforcement skills or relationship skills enhance individual youths' cognitive behavioral therapy for anxiety? Outcome, specificity, and mediation. *Clinical Psychological Science*. https://doi.org/10.1177/21677026211016402
- Sims, D. C., & Skarbek, A. J. (2019). Parental self-efficacy: A concept analysis related to teen parenting and implications for school nurses. *Journal of School Nursing*, 35(1), 8-14. https://doi.org/10.1177/1059840518755871
- Steca, P., Bassi, M., Caprara, G. V., & Fave, A. D. (2011). Parents' self-efficacy beliefs and their children's psychosocial adaptation during adolescence. *Journal of Youth and Adolescence*, 40(3), 320-331. https://doi.org/10.1007/s10964-010-9514-9
- Susanti, M., Rahman, I. K., & Ibdalsyah, I. (2020). Parenting meeting development module. *Idarah Tarbawiyah: Journal of Management in Islamic Education*, 1(1), 1-7. https://doi.org/10.32832/itjmie.v1i1.2700
- Tan, W. N., & Yasin, M. (2020). Parents' roles and parenting styles on shaping children's morality. *Universal Journal of Educational Research*, 8(3C), 70-76. https://doi.org/10.13189/ ujer.2020.081608
- Teti, D., & Gelfand, D. (1991). Behavioral competence among mothers of infants in the first year: The mediational role of maternal self-efficacy. *Child Development, 62*(5), 918-929. https://doi.org/10.1111/j.1467-8624.1991.tb01580.x
- Varol, N. (2018, March 22-25). Generating flow based on dependencies [Paper presentation]. In 2018 6th International Symposium on Digital Forensic and Security (ISDFS), Istanbul, Turkey.

- Victor, S. E., Hipwell, A. E., Stepp, S. D., & Scott, L. N. (2019). Parent and peer relationships as longitudinal predictors of adolescent nonsuicidal self-injury onset. *Child and Adolescent Psychiatry and Mental Health*, 13(1), 1-13. https://doi.org/10.1186/s13034-018-0261-0
- Vozzola, E. C. (2014). *Moral development: Theory and applications*. Taylor and Francis. https://doi.org/10.4324/9781315871226
- Wittkowski, A., Garrett, C., Calam, R., & Weisberg, D. (2017). Self-report measures of parental self-efficacy: A systematic review of the current literature. *Journal of Child and Family Studies*, 26(11), 2960-2978. https://doi.org/10.1007/ s10826-017-0830-5
- Wright, A. C., & Taylor, S. (2014). Advocacy by parents of young children with special needs: Activities, processes, and perceived effectiveness. *Journal of Social Service Research*, 40(5), 591-605. https://doi.org/10.1080/0148837 6.2014.896850
- Wulandari, B., S. Pettalongi, S., & Hamlan, H. (2020). The influence of single parent parenting style on social emotional development women student of Al-Istiqamah Ngatabaru Modern Islamic Boarding School. *International Journal Of Contemporary Islamic Education*, 2(2), 21-36. https://doi.org/10.24239/ijcied.vol2.iss2.17
- Wulandari, S., & Afiatin, T. (2020). Positive parenting program to improve mother efficacy in parenting teenagers. *Jurnal Psikologi*, 47(1), 30-42. https://doi.org/10.22146/jpsi.44971
- Yafie, E. (2018a, May 9). The effect of parenting efficacy on the social-emotional development of children in b-class kindergarten [Paper presentation]. International Conference on Learning Innovation (ICLI), Universitas Negeri Malang, Malang, Indonesia.
- Yafie, E. (2018b). The level of parents' understanding in children development needs at the first 1000 days of birth. *Advances in Social Science*,

- Education and Humanities Research, 285, 36-41. https://doi.org/10.2991/icet-18.2018.8
- Yafie, E., Haqqi, Y. A., Kustiawan, U., Astuti, W., Boedi, D., & Ilhami, B. S. (2020a). The effect of teacher competency training on high order thinking-based learning. *Journal of Early Childhood Care and Education*, 2(2), 87-93. https://doi.org/10.26555/jecce.v2i2.1293
- Yafie, E., Samah, N. A., Mohamed, H., & Haqqi, Y. A. (2020b). Collaborative Mobile Seamless Learning (CMSL) based on android apps to improving critical thinking in higher education in the post-covid-19 era. *Journal of Advanced Research in Dynamical and Control Systems*, 12(7), 428-441. https://doi.org/10.5373/ JARDCS/V12SP7/20202125
- Yucel, M., Hepach, R., & Vaish, A. (2020). Young children and adults show differential arousal to moral and conventional transgressions. *Frontiers* in *Psychology*, 11, 548. https://doi.org/10.3389/ fpsyg.2020.00548
- Zeng, Y., Xing, L., Zhang, Q., & Jia, X. (2019). An analytical method for reliability analysis of hardware-software co-design system. *Quality and Reliability Engineering International*, *35*(1), 165-178. https://doi.org/10.1002/qre.2389
- Zhu, Z. M. (2018). Effects of the practice of experiential education on employee self-efficacy and organizational commitment in catering industry. Eurasia Journal of Mathematics, Science and Technology Education, 14(3), 745-751. https://doi.org/10.12973/ejmste/80126



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Amity	- Amity University	UNPAD	– Universitas Padjadjaran
BUP	 Bangladesh University of Professionals 	UNS	– Universitas Sebelas Maret
IEMCAL	 Institute of Engineering & Management Calcutta 	UNUD	– Universitas Udayana
IPTIQ	– Institut Institut Perguruan Tinggi Ilmu Al-Qur'an	UOWM	– University of Western Macedonia
KMUTT	 King Mongkut's University of Technology 	UP	 University of the Philippines
Ole Miss	- The University of Mississippi	UPM	– Universiti Putra Malaysia
Pondi	 Pondicherry University 	UPSI	– Universiti Pendidikan Sultan Idris
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UMP	– Universiti Malaysia Pahang	UTM	– Universiti Teknologi Malaysia
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(REGULAR ISSUE)

(Manuscript Preparation & Submission Guide)

Revised: December 2020

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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 Serdana, 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

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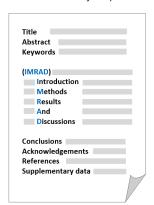
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	(Van der Port, 2015)	Emotions in second language teaching (pp. 145-163).
	Or	Springer, Cham. https://doi.org/10.1007/978-3-319-75438-3 9
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	(Sheldon & Turner-Vorbeck, 2019)	Sheldon, S. B., & Turner-Vorbeck, T. A. (Eds.). (2019).
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	Camilleri (2018a, 2018b)	practice (pp. 29-50). Springer, Cham. https://doi org/10.1007/978-3-319-49849-2_2
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	(Khajouei et al., 2018)	org/10.1016/j.ijmedinf.2018.09.004
	(Yusop et al., 2020)	Yusop, F. D., Ab Ghaffar, F., Danaee, M., Firdaus, A.
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	Khajouei et al. (2018)	Social Sciences and Humanities, 28(1), 325-342.
	Yusop et al. (2020)	
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	(Tobler et al., 2017)	S., O'Donoghue, A., O'Loughlin, I., Sutton, P., Zilio, F. Walshe, K., Williams, A. N., Turney, C. S. M., Williams
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	(De Rubeis et al., 2017)	sensitivity as a vulnerability marker for depressive symptom deterioration in men. <i>PloS One, 12</i> (10), Article
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	(Nastasa & Farcas, 2015)	, , , , , , , , , , , , , , , , , , ,



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	Ibrahim (2019a, 2019b)	
	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. Australian Financial Review. 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 people away from war. (2017, December 16). <i>The Age</i> , 33.
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Unpublished Dissertation or Thesis References	(Curry, 2016) Or Curry (2016)	Curry, J. (2016). A guide to educating single mothers about early gang intervention and prevention (Unpublished Master's thesis). Pacific Oaks College.
	Conference/Semina	r Papers
Conference proceedings published in a journal	(Chaudhuri et al., 2017) Or Chaudhuri et al. (2017)	Ohaudhuri, 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
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Online	(McDonald et al., 2019) Or McDonald et al. (2019)	McDonald, E., Manessis, R., & Blanksby, T. (2019, July 7-10). Peer mentoring in nursing - Improving retention, enhancing education [Poster presentation]. STARS 2019 Conference, Melbourne, Australia. https://unistars.org/papers/STARS2019/P30-POSTER.pdf
	Government Publi	ications
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). <i>National comprehensive housing market analysis</i> . https://www.huduser.gov/portal//publications/pdf/National-CHMA-20.pdf
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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

Umma Farida, Abdul Karim and Abdul Mufid

http://www.pertanika.upm.edu.my/ E-mail: executive_editor.pertanika@upm.edu.my Tel: +603 9769 1622



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