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JSSH

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Journal of Social Sciences & Humanities

About the Journal

Overview

Pertanika Journal of Social Sciences & Humanities (JSSH) is the official journal of Universiti Putra Malaysia published by UPM Press. It is an open-access online scientific journal which is free of charge. It publishes the scientific outputs. It neither accepts nor commissions third party content.

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

JSSH is a **quarterly** (*March, June, September and December*) periodical that considers for publication original articles as per its scope. The journal publishes in **English** and it is open to authors around the world regardless of the nationality.

The Journal is available world-wide.

Aims and scope

Pertanika Journal of Social Sciences & Humanities aims to develop as a pioneer journal for the social sciences with a focus on emerging issues pertaining to the social and behavioural sciences as well as the humanities.

Areas relevant to the scope of the journal include Social Sciences—Accounting, anthropology, Archaeology and history, Architecture and habitat, Consumer and family economics, Economics, Education, Finance, Geography, Law, Management studies, Media and communication studies, Political sciences and public policy, Population studies, Psychology, Sociology, Technology management, Tourism; Humanities—Arts and culture, Dance, Historical and civilisation studies, Language and Linguistics, Literature, Music, Philosophy, Religious studies, Sports.

History

Pertanika was founded in 1978. A decision was made in 1992 to streamline Pertanika into three journals as Journal of Tropical Agricultural Science, Journal of Science & Technology, and **Journal of Social Sciences & Humanities** to meet the need for specialised journals in areas of study aligned with the interdisciplinary strengths of the university.

After almost 25 years, as an interdisciplinary Journal of Social Sciences & Humanities, the revamped journal focuses on research in social and behavioural sciences as well as the humanities, particularly in the Asia Pacific region.

Goal of *Pertanika*

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

Quality

We aim for excellence, sustained by a responsible and professional approach to journal publishing. Submissions are guaranteed to receive a decision within 14 weeks. The elapsed time from submission to publication for the articles averages 5-6 months.

Abstracting and indexing of *Pertanika*

Pertanika is almost 40 years old; this accumulated knowledge has resulted in Pertanika JSSH being abstracted and indexed in SCOPUS (Elsevier), Thomson (ISI) Web of Knowledge [BIOSIS & CAB Abstracts], EBSCO & EBSCOhost, DOAJ, Cabell's Directories, Google Scholar, MyAIS, ISC & Rubriq (Journal Guide).

Future vision

We are continuously improving access to our journal archives, content, and research services. We have the drive to realise exciting new horizons that will benefit not only the academic community, but society itself.

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

Publication policy

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

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

International Standard Serial Number (ISSN)

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

Journal of Social Sciences & Humanities: ISSN 0128-7702 (*Print*); ISSN 2231-8534 (*Online*).

Lag time

A decision on acceptance or rejection of a manuscript is reached in 3 to 4 months (average 14 weeks). The elapsed time from submission to publication for the articles averages 5-6 months.

Authorship

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

Manuscript preparation

Refer to Pertanika's **INSTRUCTIONS TO AUTHORS** at the back of this journal.

Most scientific papers are prepared according to a format called IMRAD. The term represents the first letters of the words **I**ntroduction, **M**aterials and Methods, **R**esults, **A**nd, **D**iscussion. IMRAD is simply a more 'defined' version of the "IBC" [Introduction, Body, Conclusion] format used for all academic writing. IMRAD indicates a pattern or format rather than a complete list of headings or components of research papers; the missing parts of a paper are: *Title, Authors, Keywords, Abstract, Conclusions, and References*. Additionally, some papers include Acknowledgments and Appendices.

The *Introduction* explains the scope and objective of the study in the light of current knowledge on the subject; the *Materials and Methods* describes how the study was conducted; the *Results* section reports what was found in the study; and the *Discussion* section explains meaning and significance of the results and provides suggestions for future directions of research. The manuscript must be prepared according to the Journal's **INSTRUCTIONS TO AUTHORS**.

Editorial process

Authors are notified with an acknowledgement containing a *Manuscript ID* on receipt of a manuscript, and upon the editorial decision regarding publication.

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

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

As articles are double-blind reviewed, material that might identify authorship of the paper should be placed only on page 2 as described in the first-4 page format in Pertanika's **INSTRUCTIONS TO AUTHORS** given at the back of this journal.

The Journal's peer-review

In the peer-review process, three referees independently evaluate the scientific quality of the submitted manuscripts.

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

Operating and review process

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

1. The Journal's chief executive editor and the editorial board examine the paper to determine whether it is appropriate for the journal and should be reviewed. If not appropriate, the manuscript is rejected outright and the author is informed.
2. The chief executive editor sends the article-identifying information having been removed, to three reviewers. Typically, one of these is from the Journal's editorial board. Others are specialists in the subject matter represented by the article. The chief executive editor asks them to complete the review in three weeks.

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

3. The chief executive editor, in consultation with the editor-in-chief, examines the reviews and decides whether to reject the manuscript, invite the author(s) to revise and resubmit the manuscript, or seek additional reviews. Final acceptance or rejection rests with the Editor-in-Chief, who reserves the right to refuse any material for publication. In rare instances, the manuscript is accepted with almost no revision. Almost without exception, reviewers' comments (to the author) are forwarded to the author. If a revision is indicated, the editor provides guidelines 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 answered the concerns of the reviewers and the editor, usually in a tabular form. The author(s) may also submit a rebuttal if there is a need especially when the author disagrees with certain comments provided by reviewer(s).

5. The chief executive editor sends the revised paper out for re-review. Typically, at least one of the original reviewers will be asked to examine the article.
6. When the reviewers have completed their work, the chief executive editor in consultation with the editorial board and the editor-in-chief examine their comments and decide whether the paper is ready to be published, needs another round of revisions, or should be rejected.
7. If the decision is to accept, an acceptance letter is sent to all the author(s), the paper is sent to the Press. The article should appear in print in approximately three months.

The Publisher ensures that the paper adheres to the correct style (in-text citations, the reference list, and tables are typical areas of concern, clarity, and grammar). The authors are asked to respond to any minor queries by the Publisher. Following these corrections, page proofs are mailed to the corresponding authors for their final approval. At this point, **only essential changes are accepted**. Finally, the article appears in the pages of the Journal and is posted on-line.

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ABSTRACTING/INDEXING

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Foreword

Welcome to the **Third Issue 2017** of the Journal of Social Sciences and Humanities (JSSH)!

JSSH is an open-access journal for the Social Sciences and Humanities that is published by Universiti Putra Malaysia Press. It is independently owned and managed by the university and run on a non-profit basis for the benefit of the world-wide social science community.

This issue contains **27 articles**, of which **one** is a review article and **18** are regular research articles. The authors of these articles come from different countries, namely, **Nepal**, the **United States of America**, the **Philippines**, **Iraq**, **Australia**, **Japan**, the **United Arab Emirates**, **Pakistan**, **Nigeria**, **Malaysia**, **India** and **Indonesia**.

The review article in this issue reports briefly on educational effectiveness research as the knowledge base of improving education (*Siti Nurul Azkiyah*).

The regular articles cover a wide range of topics. The first is on the influence of board independence, board size and managerial ownership on firm investment efficiency (*Nor, N. H. M., Nawawi, A. and Salin, A. S. A. P.*). The following articles look at: the relationship between exposure to sexually explicit material and teenage pre-marital pregnancy (*Siti-Haidah M. I., Susan M. K. T., Bujang M. A., Voon Y. L., Lai F. C., Abdul-Wahab N., Kalil E. Z., Mohd-Ishak N and Kamal N. N.*); standardised age group mortality trend by state, Malaysia 1995-2010 (*Mohamad Adam Bujang, Abdul Muneer Abdul Hamid, Nurina Musta`ani Hamedon, Tg Mohd Ikhwan Tg Abu Bakar Sidik and Shahrul Aiman Soelar*); the effects of work-to-family conflict and work-to-family enrichment on job satisfaction among academics in Malaysia (*Badri, S. K. Z. and Panatik, S. A.*); stationarity of the Fama-French three factor model premiums in India (*Raghuram, G.*); impact of self-efficacy and contextual variables on entrepreneurial intention (*Brajaballav Kar, Rabi N Subudhi and Ramakrishna Padhy*); morphological features of the Siquijodnon-Cebuano language (*Bantawig, R. B. and Maraño, F. B.*); learning English in a third space as experienced by Malay students in an English-speaking university in Malaysia (*Ridwan Wahid and Zahariah Pilus*); academic dishonesty, considered in an empirical study of personal beliefs and values of undergraduate students in Malaysia (*Suriani Ismail and Zoharah Omar*); shared Arabic and Sanskrit loanwords beneficial for teaching Malay vocabulary to Nepali speakers (*Uni, Kazuhito.*); a case study looking into the driven readers among private higher education institution students (*Syamsul Fozy Osman and Ismail Sheikh Ahmad*); patterns of negotiation of meaning routine in online forum discussion (*Noor Mazni Abdul Karim, Rozina Abdul Ghani and Mohamed Ismail Ahamad Shah*); determinants of financial well-being among public employees in Putrajaya, Malaysia (*Mokhtar, N. and Husniyah, A. R.*); a study of Freudian hysteria in Fay Weldon's *The Life and Loves of a She-Devil* (*Omar Mohammed Abdullah and Mustafa Mohammed Abdullah*); a randomised controlled trial to examine the effectiveness of group Cognitive Behavioural Therapy for

the treatment of unipolar depression in Malaysia (*Low Jia Liang, Firdaus Mukhtar, Sherina M. Sidik, Normala Ibrahim, Raynuha Mahadevan and Tian PS Oei*); social transformation and the change of community capacity of post-tsunami Aceh, Indonesia (*Irfan Zikri*); authorial identity and linguistic features of native English and Thai writers in research articles (*Yotimart, D. and Noor Hashima Abd. Aziz*); a feminist reading of Eugene O’neill’s *Sentimental Stuff* (*Jyoti Sharma and InduPrabha Pathak*); procrastination behaviour, stress tolerance and study habits, considered in a cross-cultural analysis (*Sreethi Nair*); a state-level analysis of a shadow economy in Malaysia (*Yap, W. W., Sarmidi, T., Nor, A. H. S. M. and Said, F. F.*); Malaysian based intercultural knowledge and behaviour among secondary school students through an English-language intercultural reading programme (ELIRP) (*Manjet, K., Fatin, N. A. M., Jaganathan, P., Karupiah, P. and Ahmad, S. N. A.*); domestic violence against women, considered through empirical evidence from Pakistan (*Ashraf, S., Abrar-ul-haq, M. and Ashraf, S.*); a consideration of the motivation for youth entrepreneurship as a “born or made” factor (*Seun, A. O., Kalsom, A. W., Bilkis, A. and Raheem A. I.*); development of an office building sustainability assessment framework for Malaysia (*Shari, Z. and Soebarto, V.*); supply-chain management practices through a study of freight forwarders in Nepal (*Khanal, P. and Tamang, G.*); and factors influencing digital business strategy (*Singh, G., Gaur, L. and Agarwal, M.*).

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

I would also like to express my gratitude to all the contributors who have made this issue possible, as well as the authors, reviewers and editors for their professional contribution. Last but not least, the editorial assistance of the journal division staff is also fully appreciated.

JSSH 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

Nayan Deep S. KANWAL, [FRSA](#), [ABIM](#), [AMIS](#), [Ph.D.](#)

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Review Article

Educational Effectiveness Research as the Knowledge Base of Improving Education

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ABSTRACT

Discussing the strategies to improve and maintain the quality of education has been the concern of various education stakeholders. This paper offers a comprehensive review on Educational Effectiveness Research (EER), which provides theory-driven and evidence-based information on what and how to improve the educational context. Several key words such as EER, factors influencing student outcomes, and the dynamic model of educational effectiveness research are used to find relevant literature. The dynamic model considered to be the most influential theoretical construct in the field has four levels: the national, the school, the classroom, and the student level. The classroom level is emphasized while the national and school levels are expected to provide necessary conditions for the effectiveness of the classroom level. There are eight factors in the classroom level and the teaching skills included in these factors could be divided into five stages, ranging from easy to more difficult skills. This paper suggests there is a need to improve education through teacher improvement programs, and five stages of teaching quality in the dynamic model is used to offer individually-tailored teacher development programs. In this way, school improvement efforts could offer a space for testing theories derived from EER. Finally, it is important to include student non-cognitive outcomes as parameters to measure the effectiveness of education, yet future studies should attempt to identify specific and measurable variables belonging to non-cognitive outcomes that are clearly attributed to schools.

Keywords: Educational effectiveness research, educational improvement, teacher development program, the dynamic model of educational effectiveness research

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INTRODUCTION

Improving education has been one of the top priorities worldwide. Lately, many countries in Europe, America and Asia have established educational standards as a strategy to improve education (Choi, de Vries, & Kim, 2009; Delandshere & Petrosky 2004; Faizi, Shakil, & Lodhi, 2011; Neumann, Fischer & Kauertz, 2010; Widmer, 2004). Standards, which commonly refer to the standards of performance and content, have been considered to improve learning outcomes by providing clear direction to education stakeholders, especially teachers (Chambers & Dean, 2000; Marzano & Kendall, 1996). It is strongly believed that by having such information, teachers will adjust their instruction to provide better learning opportunities (National Council for Research [NCR], 2001; Stosich, 2016; Volante, 2012).

However, only a few studies to date have been conducted to investigate the impact of standards on educational performance. Existing research, predominantly from the US, show that the performance of American students at the high school level is still the same if not worse compared to when *A Nation at Risk* was published in 1983, a book that marked the emergence of standards-based education (Hanushek, Peterson, & Woessmann, 2012; the US Department of Education, 2008, 2015). According to these studies, the situation is worse for students from minority backgrounds; half of who do not graduate on time and lag far behind the majority. At this point, Educational Effectiveness Research (EER), which

attempts to provide empirical evidence on various factors strongly related to students' outcomes, is worth considering. Numerous studies in this field have shown rapid growth in terms of topic areas, methodological and theoretical advances, links between EER and improvement practices, and future directions (Reynolds et al., 2014). The key finding in this research is that teacher instruction or teaching quality has a greater influence on student outcomes compared to other factors (Goldhaber, 2015; Harris & Muijs, 2005; Luyten & Snijders, 1996; Marzano, 2007; Scheerens, 2013; Van Der Werf, Creemers, De Jong, & Klaver, 2000).

This paper reviews the result of educational effectiveness research. It clarifies the concept of EER, sheds light on its history and concludes important findings of EER. Several key words (i.e. educational effectiveness research, teacher effectiveness research, factors influencing student outcomes, and the dynamic model of educational effectiveness research) are used to find relevant literature. The first section presents the review of EER, followed by the dynamic model of educational effectiveness research. The second section offers the use of EER, especially the dynamic model of educational effectiveness research as the knowledge base of improving education.

REVIEW OF EDUCATIONAL EFFECTIVENESS RESEARCH

The review firstly defines the concept of EER and summarizes its development and major findings. Because the key finding is teacher instruction in the classroom,

the review is then focused on one model of EER, namely the dynamic model of educational effectiveness research (Creemers & Kyriakides, 2008). The dynamic model offers both a theoretically-driven and empirically-validated model of how teachers can be improved to enhance student outcomes, which is the ultimate goal of education.

Definition, History and Findings of Educational Effectiveness Research

Educational Effectiveness Research (EER) concerns characteristics that are empirically proven to be related to student outcomes. Several authors have defined effectiveness as the extent to which the expected goals are achieved (e.g. Creemers and Scheerens (n.d); Scheerens and Bosker, 1997). In education, student cognitive performance was largely used as the criterion to measure the effectiveness of different factors, although it has been criticized for narrowing the meaning and the scope of education. This could be due to the fact that non-cognitive outcomes were influenced more by other social institutions than schools (Van Der Werf, 1995). Therefore, although the attainment of non-cognitive outcomes is important, which is supported by educational psychology (Van Der Werf, Opdenakker, & Kuyper, 2008), looking at students' cognitive performance as an indicator of effectiveness is still deemed to be significant.

Doolaard (1999) provides a comprehensive review of three waves of

educational effectiveness research. The first wave of EER was intended to counter the work of Coleman et al. (1996) and Jencks et al. (1972), whose studies showed that schools and schooling did not make a difference in student outcomes. Some research has proven that schools matter, which means that they play roles in improving learning outcomes (Doolaard, 1999). Furthermore, Doolaard (1999) explains that the second wave of EER attempted to open "the black box" of schooling, resulting in the lists of factors found to correlate with students' learning outcomes. Influenced by other research, the third wave was marked by the blend of various research traditions and the merge between effectiveness research and school improvement efforts. Furthermore, the fourth phase, which persists until today, observes the internalization of the field due to the growing opportunities for networking, joint research across different countries and a continued call for the merger of school effectiveness (SE) and school improvement (SI) (Reynolds et al., 2014).

With respect to the improvement effort, which is the focus of this study, Creemers and Reezigt (2007) emphasize the importance of characteristics that could be changed through intervention programs such as teacher instruction. Through this program, a link between research or theories and improvement practices may be promoted. School effectiveness research offers empirically validated theories of school improvement, whereas school improvement offers essential means of testing theories.

Therefore, the findings presented in this section focuses more on changeable characteristics, especially as they relate to teacher instruction in the classroom, although other findings are also described. To begin, it is important to note that various characteristics have been listed by different authors and they could be situated at different levels such as student, classroom/teacher, school, and context or policy levels. At the student level, gender, socio-economic status (SES), and ethnicity have been proven to be strong predictors of learning attainment (Coleman et al., 1996; Jencks et al., 1972; Sammons, 1999). This was the context for the emergence of the first wave of EER (Reynolds et al., 2014), which therefore was intended to prove that schools mattered. Some programs were then established in order to address the gap of educational attainment across different backgrounds, such as race and ethnicity. This was also one of the main reasons for the emergence of education standards, particularly in the US (Marzano & Kendall, 1996; Ravitch, 1995). Another factor that has been under study is student motivation, which EER has treated as both a stable trait characteristic capable of predicting cognitive outcomes and a non-cognitive outcomes. However, research finds that motivation is an unstable condition and that it does not clearly predict student outcomes (Van Der Werf, Opdenakker, & Kuyper, 2008). Therefore, it is arguable to consider motivation as a non-cognitive outcome in which schools and teachers are expected to explain the variance in student motivation.

Moreover, a study by Ahmed, Minnaert, Van Der Werf and Kuyper (2010) shows that teachers influence student motivation, which in turn is related to achievement.

At both classroom and school levels, several factors were also identified. Scheerens and Bosker (1997), for instance, list 13 core effectiveness-enhancing factors that are usually mentioned in reviews of effectiveness studies. Additionally, Muijs and Reynolds (2011) recognize there were nearly 60 characteristics produced by different authors. Fortunately, consensus on several factors has been reached. Those factors include high expectations (Cotton, 2005; Doyle, 1986; Marzano, 2000), curriculum quality/opportunity to learn (Creemers, 1994) school climate, classroom climate, effective learning time/classroom management (Muijs & Reynolds, 2011), structured instruction (Kane, Taylor, Tyler, & Wooten, 2010), effective questioning, feedback and reinforcement (Brophy & Good, 1986; Muijs & Reynold, 2011; Scheerens & Bosker, 1997; Seidel & Shavelson, 2007), differentiation/adaptive instruction (Creemers & Kyriakides, 2008) parental involvement as well as purposeful leadership (Muijs & Reynolds, 2011).

The context or policies at the national level, as Creemers and Kyriakides (2008) have pointed out, are expected to provide necessary conditions for the effectiveness of school and classroom levels. Thus, it is very important to understand effectiveness enhancing factors at both levels. Yet, because schools are expected to facilitate the effectiveness at the classroom level, the

bottom line to emphasize for both schools and context levels is the effectiveness enhancing factors at the classroom level. This argument is supported by the research findings in the field (Creemers & Kyriakides, 2008; Doolaard, 1999). As previously mentioned, the effect size of classroom/teacher factors is larger than other factors such as school and national factors, which could be because learning takes place in the classroom and has a direct effect on student outcomes whereas the above levels (i.e. school and national levels) have indirect effect.

Concerning the effect size of each level, student background characteristics such as socio-economic status were found to play a major role, which accounts for 75% up to 83% (Creemers, 1994; Teddlie & Stringfield, 1993). This finding indicates the roles of other factors are small. Based on some studies, Creemers (1994) concludes that the characteristics of schools and teachers together explain the variance of student attainment between 10% and 20%. However, when both classroom and school are separated, the effect size of the classroom characteristics are clearly bigger (Kyriakides, Campbell, & Gagatsis, 2000; Luyten & Snijders, 1996; Luyten, 2003; Teddlie & Reynolds, 2000; Van Der Werf et al., 2000).

It is true that the above findings show the bigger effects of family and individual effects than school and teacher levels. Yet, it should be noted that student background is nearly impossible to be intervened. Therefore, it is important to pay attention

to factors that affect student outcomes and can be improved through intervention programs. In this case, EER has clearly seen that teacher level was consistently found to have bigger roles compared to school and national levels.

Furthermore, the remaining questions at this point are what teacher factors led to improved student performance. Several perspectives such as teacher and student perception, classroom observation (e.g. Money, 1992) and the “process-product” paradigm (Antoniou, 2009; Kane et al., 2010; Lavy, 2011) have been exercised to investigate effective teacher instructions in the classroom. In line with this, some factors such as teacher subject knowledge (Darling-Hammond, 2000; Heck, 2007), academic qualification and teaching experience (Reynolds & Muijs, 1999), as well as teaching behaviour have been measured (Harris, 2002; Muijs, 2006).

The findings of various studies show that compared to other factors, what teachers do in the classroom was found to explain a large proportion of classroom level variance (Creemers, 1994; Creemers & Kyriakides, 2008; Muijs & Reynolds, 2010). In this case, although different terms have been used, teacher instruction both in terms of quantity and quality has been largely found and recognized to be the most important aspect in teacher behaviour (e.g. Brophy & Good, 1986; Marzano, 2000; Muijs & Reynolds, 2011; Powell, 1980; Wang & Walberg, 1991). Furthermore, teacher instruction in this case refers to teacher efforts in maximizing student opportunity to learn (Creemers,

1994; Rosenshine, 1983). Several activities were identified and empirically validated in supporting the provision of learning opportunity, such as emphasis on academic goals and achievement (Cotton, 1995; Doyle, 1986; Powell, 1980), clear and step-wise presentation of materials as well as effective questioning and feedback (Brophy & Good, 1986; Kane et al., 2010; Scheerens & Bosker, 1997; Seidel & Shavelson, 2007; Smith & Land, 1981), and clear structures and routines (Brophy & Good, 1986).

In order to contribute to the development of effectiveness theories, Creemers (1994) developed a model of the effective classroom. The model recognizes teacher instructional roles as the most important factor at the teacher/classroom level and sums up different aspects of instruction into three categories, namely curriculum, grouping procedure, and teacher behaviour. The validity of this classroom model was examined by several studies (e.g. Antoniou, Demetriou & Kyriakides, 2006; De Jong, Westerhof, & Kruiter, 2004; Kyriakides, 2005; Kyriakides, Campbell, & Gagatsis, 2000) and is considered to be one of the most influential theoretical constructs in the field (Teddle & Reynolds, 2000). This model was then further developed into a dynamic model of educational effectiveness (Creemers & Kyriakides, 2008), which covers not only the classroom level but other levels i.e. the context / national level, school level, and students' levels. The model is dynamic because it recognizes multidimensional constructs of effectiveness

enhancing factors. Therefore, the model is complex, which is attributed to its attempt to describe in more detail the complex nature of educational effectiveness research. In addition, the model also considers teaching and learning as a dynamic processes that is constantly adapting changing needs and opportunities.

The Dynamic Model of Educational Effectiveness

The model is multilevel in nature. It refers to factors operating at four levels, as shown in Figure 1. The model argues that the higher levels (i.e. context/national and school levels) influence educational outcomes indirectly by influencing the classroom level. Therefore, this model highlights that teaching and learning at the classroom level should be emphasized and that it is very important to understand what happens at the classroom level and the aspect of teacher performance in learning. Creemers (1994) even argues that defining effectiveness factors at the classroom level is seen as a prerequisite for defining effectiveness at the school and the context level. Responding to the criticism that EER does not explicitly refer to the measurement of each effectiveness factor, the dynamic model proposes five dimensions to measure the effectiveness of factors in each level, which have been argued to provide a better picture of effectiveness enhancing factors and thus more specific strategies for improving educational practice could be established.

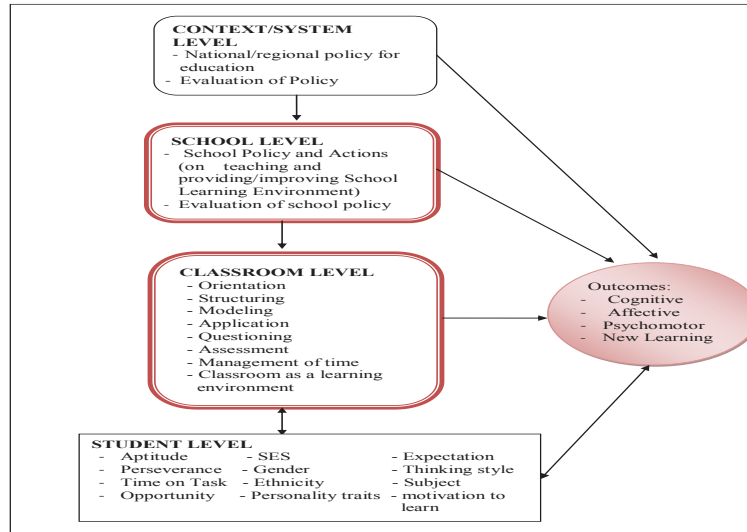


Figure 1. The dynamic model of Educational Effectiveness (Creemers & Kyriakides, 2008)

These dimensions are frequency, focus, stage, quality and differentiation. Frequency refers to the quantity of activities associated with effectiveness factors, whereas focus deals with the specificity of the activity: whether an activity is too specific or too general in relation to the goals of the activity. Effectiveness factors can happen in different periods and therefore the dimension of stage looks at the period at which activities take place. Furthermore, certain effectiveness factors may happen for some time but do not necessarily increase students' outcomes. Their quality need to be also considered, for instance by looking at the properties of the activities or whether they are supported by literature or whether students understand and can follow the activities. Finally, differentiation concerns with the diversity of subjects involved, which for the case of the classroom, are

students. Teachers are expected to address different groups of students in such a way that makes all students have the opportunity to learn.

During the last decade, several studies were conducted to test the validity of the dynamic model, especially in Cyprus. In the school year of 2004, a longitudinal study was conducted and the findings supported both the validity of the model at the classroom level and the proposed dimensions for measuring the functioning of each effectiveness factor (Antoniou, 2009). The second was a meta-analysis to estimate the effect size of school effectiveness factors on student achievement, which provided support for the school level of the model (Antoniou, Demetriou & Kyriakides, 2006). Therefore, it is worthwhile to review and consider the model as guidance in improving education. Due to space

limitation, the presentation of the model in this section focuses more on the school and the classroom levels.

As previously indicated, the model expects the higher level to support the effectiveness of the lower level. Since the definition of the dynamic model at the classroom level refers to the key concept of quality, time on task (quantity) and opportunity to learn (provision of learning opportunities), the policy at the school level should also support these aspects.

Therefore, the dynamic model emphasizes four factors at the school level: a) school policy for teaching and actions taken for improving teaching practice; b) evaluation of school policy for teaching and actions taken to improve teaching; c) policy for creating a school learning environment and actions taken for improving the school learning environment; and d) evaluation of the school learning environment (Creemers & Kyriakides, 2008). The following table explains in detail the description of each.

Table 1
School Level Factors and Their Description (Creemers & Kyriakides, 2008)

Factor	Description
1. School policy on teaching and action to improve teaching	
a. Quantity of teaching	Consists of 1) management of teaching time, 2) absenteeism of teacher and student, 3) homework, 4) lesson schedule and timetable.
b. Provision of learning opportunities	Concerns with the mission of schools in providing 1) content of curriculum, 2) teaching aims, 3) textbook and other resources, 4) extracurricular activities for teaching and learning, 5) extra support for students with extra needs.
c. Quality of teaching	Concerns with teacher attempts to make use of time and learning opportunities to help students learn.
2. Evaluation of policy in teaching	Concerns with the mechanism, the quantity and period, the aspects involved and the emphasis of teaching evaluation.
3. Policy and action on the development of learning environment	
a. Student behaviour outside the classroom	Refers to the rules that schools have developed to establish learning outside the classroom.
b. Collaboration and interaction between teachers	Refers to the mechanism to enable collaboration and interaction among teachers, which can contribute to teacher development and has effect on teaching practice and thereby improve student learning.
c. Partnership policy	Refers to schools' policies to build relations between schools and community, parents, and advisors.
d. Provision of sufficient learning resources to teachers and students	Refers to schools' policies on providing resources for learning and thereby ensuring the provision of more learning opportunities to students.
e. Values in favour of learning	Refers to strategies to encourage students and teachers to have positive attitude toward learning.
4. Evaluation of learning environment	Refers to the extent to which schools attempt to evaluate its learning environment.

Leadership is not dealt with in the dynamic model because meta-analysis of studies investigating the impact of the principal's leadership on student achievement (e.g. Scheerens, 1992; Teddlie & Stringfield, 1993) confirms earlier research findings on the limitations of the relationship between leadership and student achievement. However, instructional leadership, rather than administrative leadership, was strongly related to student outcomes (Scheerens, 1992; Teddlie & Stringfield, 1993). Nevertheless, it has been questioned due to inconsistent results, which could be due to different school settings and the role played by the principal as well as research theories and methodologies (Doolaard, 1999). The dynamic model, instead of leadership, is concerned with the content of school policy and the type of activities that take place in schools, not on who oversees designing and/or implementing school policy.

At the classroom level, eight factors are included, details of which are provided in Table 2, is followed by further explanation of each element.

Orientation

Orientation is concerned with teacher action in providing the objective of the lessons or tasks to facilitate student understanding regarding the importance of learning activities. Teachers can both present the objectives themselves or challenge students to guess the objectives of the lessons they learn. Several studies have shown that clear or explicit explanation of goals increases

student motivation and active participation in the classroom as learning becomes relevant and meaningful to them (e.g. Althoff, Linde, Mason, Nagel, & O'Reilly, 2007; De Corte, 2000; Padak, 2002; Paris & Paris, 2001). Based on several studies, Creemers (1994) concludes that explicit goals, especially when they are listed in a hierarchical way, contribute to effectiveness. It is also possible that teachers stimulate their students to come up with suggestions on possible objectives of the lessons or specific tasks during the lessons (Kyriakides & Creemers, 2006). The increase in student motivation and participation in the classroom is expected to mediate students' outcomes but also the results of orientation activities provided by teachers.

Structuring

Structuring is the teachers' attempt to clearly order and present the lessons. It is recommended that the materials or the activities be linked to the goals and organized into small parts (Joyce, Weil, & Calhoun, 2000). Some studies reviewed by Brophy and Good (1986) indicate that students achieve more when teachers not only present materials but also structure them by: 1) starting with overview or review of objectives; 2) outlining the content to be covered and signalling transitions between lesson parts; 3) calling attention to main ideas at the end of the lesson. In addition to review or overview of the objectives, it is also advisable to start the lesson with a review or practice of what students have learnt in the previous lesson, for instance by going

Table 2
School Level Factors and Their Description (Creemers & Kyriakides, 2008)

Factors	Main elements
1) Orientation	a) Providing the objectives for which a specific task/lesson/series of lessons take(s) place; b) Challenging students to identify the reason for which an activity takes place in the lesson.
2) Structuring	a) Beginning with overviews and/or review of objectives; b) Outlining the content to be covered and signalling transitions between lesson parts; c) Calling attention and reviewing main ideas.
3) Questioning	a) Raising different types of questions (i.e. process and product) at appropriate difficulty level; b) Giving time to students to respond; c) Dealing with student responses.
4) Teaching modelling	a) Encouraging students to use problem solving strategies presented by the teacher or other classmates; b) Inviting students to develop strategies; c) Promoting the idea of modelling.
5) Application	a) Using seatwork or small group tasks in order to provide needed practice and application opportunities; b) Using application tasks as starting points for the next step of teaching and learning.
6) The classroom as a learning environment	a) Establishing on task behaviour through the interactions they promote (i.e. teacher-student and student-student interactions); b) Dealing with classroom disorder and student competition through establishing rules, persuading students to respect them and using the rules.
7) Management of Time	a) Organizing the classroom environment and maximizing engagement rates.
8) Assessment	a) Using appropriate techniques to collect data on student knowledge and skills; b) Analysing data to identify student needs and report the results to students and parents; c) Evaluating their own practices.

over homework (Muijs & Reynolds, 2011; Rosenshine & Stevens, 1986) to connect what students have learned and what they are going to learn. Creemers (1994) notes that the results of integrating homework in the curriculum are encouraging, especially for the disadvantaged groups.

When outlining learning content, it is important to consider how much time is needed for each activity and in this case appropriate pacing is crucial. Especially for primary students and basic skills, higher pacing is recommended (Smith et al. 2004). Muijs and Reynolds (2011) argue that this

becomes possible because it maintains momentum and the interests of students and allows more content to be covered. The elements of structuring are argued to build connection among different activities of the lesson (Case, 1993). Then, reviewing or repeating main ideas will lead to a degree of redundancy of information, which has been found to increase achievement (Leinhardt, Weidman, & Hammond, 1987; Smith & Sanders, 1981). Finally, teacher expectation is another important aspect that could influence students' outcomes but belong to background characteristics rather than teacher behaviour in the classroom (Creemers, 1994). However, teacher expectation will play major roles when teachers outline the lessons to be covered.

Questioning

Effective teachers guide classroom discussion through questioning (Muijs & Reynolds, 2011). In reading for instance, questioning has generated higher achievement (Kane et al., 2010). Furthermore, effective teachers vary questions in terms of difficulty level and types (process and product) in accordance with the objectives. Product questions ask for specific answers, whereas process questions require processes and procedures used to get the answers (Muijs & Reynolds, 2011). In terms of difficulty level, some studies recommend that teachers create questions 75% of which are estimated to be correctly answered by students in general (Creemers & Kyriakides, 2008). Difficulty level of questions should also take different contexts into account. When teaching basic

skills for instance, a great deal of drill and practice with frequent, fast-paced review is required in which rapid and correct answers at the same time are also needed. However, when teaching complex cognitive skills such as generalizing and evaluating, usually only few students can answer correctly and there may be no single correct answer (Brophy & Good, 1986).

Concerning types, effective teachers raise more process questions (Askew & William, 1995; Brophy & Good, 1986; Everston, Anderson, Anderson, & Brophy, 1980; Muijs, Armstrong, & Chapman, 2010). Brophy and Good (1986) furthermore suggest that teachers raise around 25% of high level questions. In addition, effective teachers also equally distribute questions, provide appropriate feedback to students' answers, for instance providing hints or clues or changing questions into easier language when students cannot answer. Finally, the questions are clear and teachers provide enough time for students' answers.

Teaching Modelling

Modelling is a demonstration of procedures or strategies of learning to students, which is more effective than using verbal explanation, especially with younger learners (Muijs & Reynolds, 2011). Effectiveness research shows that effective teachers help their students to use or to develop their own strategies to enable them to solve various problems so that self-regulated learning can be promoted and students are able to organize their own learning (Creemers & Kyriakides, 2008). Teachers can

demonstrate the procedures themselves or challenge students to show them to their peers in a clear, structured and sequential way (Muijs & Reynolds, 2011).

Application

For the modelling activities to be effective, students are required to understand and imitate (Muijs & Reynolds, 2011). Therefore, teachers are expected to provide practice and also monitor how students use the procedures and provide appropriate feedback (Bohn, Roerig, & Pressley, 2004). Seatwork or small-group tasks could be used to facilitate needed practice and application opportunities (Borich, 1992). The grouping can be based on students' ability or students' speed of learning (pacing) (Creemers, 1994). The application activities are intended to provide immediate exercise of the lessons taught and direct feedback for both an individual and a group of students (Creemers & Kyriakides, 2008). Effective teachers provide encouragement for student effort more frequently to low-SES and low-achieving students (Kyriakides & Creemers, 2006).

Building Classroom as a Learning Environment

Classroom climate has been largely found to be positively related to student outcomes (e.g. Creemers & Reezigt, 1996; Muijs & Reynolds, 2011). The climate in this case is associated with the behaviour of the stakeholders (Heck & Marcoulides, 1996), which according to Doyle (1986) involves

two aspects, namely learning and order. Learning is the instructional side whereas order is the managerial side. Creemers (1994) points out that management is necessary to create learning but management itself is not sufficient to improve students' outcomes. Previous research has put both the learning and managerial sides in isolated constructs and therefore Creemers and Kyriakides (2008) view classroom climate or classroom learning environment to be teacher actions in creating classroom as a learning environment. Five elements are considered: 1) teacher-student interaction; 2) student-student interaction; 3) students' treatment by teacher; 4) competition between students; and 5) classroom disorder. The emphasis is on the roles of teachers in establishing the four first aspects and in dealing with the last aspect.

Management of Time

Opportunity to learn and time spent on tasks is considered to be two of the most significant effectiveness factors (Brophy & Good, 1986; Creemers, 1994). Furthermore, Brophy and Good (1986) explain that opportunity to learn could be measured in different ways, such as the number of pages of books, of topics covered, percentage of test-items taught, length of school day and school year. However, not all time allocated for academic activities are actually spent on such purpose. Therefore, teachers are expected to engage students in such a way to make them work on tasks and not to spend too much time on other purposes such as personal adjustment (Brophy

& Good, 1986; Creemers & Reezight, 1996; Evertson, et al., 1980). Moreover, achievement is maximized when teachers emphasize academic instruction (Brophy & Good, 1986).

Assessment

Several studies consider assessment to be an integral part of the teaching and learning processes (Delandshere & Petrosky, 2004). At the classroom level, formative assessment is one of the most important effectiveness factors (De Jong, Westerhof, & Kruiter, 2004; Kyriakides, 2005). It is ongoing assessment during learning processes that serves as a practice for students and for teachers to check their students understanding and to guide teacher decisions about future instruction. Effective teachers use various ways of measuring students' understanding of the lessons (Rao, Collins, & DiCarlo, 2002) and use the results to identify their students' needs as well as to evaluate their own teaching (Krasne, Wimmers, Relan, & Drake, 2006; Kyriakides, 2005). In short, assessment is the use of appropriate techniques to collect data on student knowledge, skills and the analysis of the data to identify student needs and evaluate teaching practices and to report to parents and students (Creemers & Kyriakides, 2008).

To sum up, the classroom factors of the dynamic model provide important information on what teachers can do to enhance their teaching quality. An experimental study conducted by Antoniou (2009) by using classroom factors of the

dynamic model found that teaching quality and student performance significantly improved. Moreover, Antoniou (2009) also found that teaching skills included in the classroom factors of the dynamic model could be divided into five stages, ranging from easier to more difficult skills. The first three stages refer to direct and active teaching, in which quantity of activities are more emphasized than quality. The last two stages are related to both quality and differentiation, which are more demanding because teachers are required not only to be capable of providing quality activities but also of addressing different needs of students. Thus, teacher development programs could be developed based on current teachers' teaching quality and teaching skills in the next level, which could make improvement efforts more focused.

THE USE OF EER IN EFFECTIVE SCHOOL IMPROVEMENT

School Improvement (SI) and School Effectiveness (SE, which in this paper is used interchangeably with Educational Effectiveness Research) have been considered by some as two different traditions. Reynolds et al. (1996) for instance differentiate the characteristics of SE and SI. On the one hand is SE which focuses on school organization, is quantitative in orientation, data driven with emphasis on student outcomes, based on research knowledge and concerned with effective schools. On the other hand, SI focuses on individual teachers or group of teachers, and school processes. In addition,

SI is rarely completed with empirical evaluation of effects of changes, and is more concerned with the journey of school improvement than its destination, and how schools become effective and have multiple outcomes.

However, there have been some efforts to merge the two traditions. In his review of some action projects that arise out of the blended tradition, such as Lewisham school improvement project, Schools Make a Difference (SMAD), Improving the Quality of Education for All (IQEA), and Quality Development Initiative (QDI), Stoll (1996) concludes that despite the differences in orientation, methodology and aims, the separate traditions of SE and SI possess many complementary features. Furthermore, he explains that through their improvement endeavours, effectiveness knowledge can be tested and greater understanding about improvement gained. In other words, SI can provide an excellent possibility for SE to carry out research in a quasi-experimental, natural setting (Creemers & Reezigt, 1997).

Furthermore, Hopkins (1996) provides a definition of SI that shows the blend of the two traditions. He regards school improvement to be a strategy for educational change that enhances student outcomes as well as strengthening the school's capacity for managing change. In this sense school improvement is about raising student achievement through focusing on the teaching-learning process and the conditions which support it. Similarly, Creemers and Kyriakides (2008) regard the effective school as one that is always in the process of

improving and / or maintaining the quality of teaching and the quality of the learning environment.

The question is how can SE or EER be implemented in SI efforts? Some school improvement efforts usually start with an understanding of the goals to be achieved and the strategies to achieve the goals. At this point, as Creemers and Kyriakides (2008) have suggested, EER (especially the dynamic model) can be a useful tool for helping the stakeholders to realize that the ultimate aim of any school reform effort should be to improve student outcomes. In the next stage, the knowledge base of SE could be used to outline the actual contents of the improvement project. Then, action plan in accordance with the previous stage should be designed and developed. Finally, evaluation should be carried out and the success should be seen from student outcomes.

Referring to the classroom factors of the dynamic model of educational effectiveness, it is important to emphasize school improvement efforts on teaching quality. The five stages of teaching quality resulted from the teaching skills included in the classroom factors of the dynamic model could be used to design individually-tailored teacher development program. Hence, when teachers are found in stage 1, they can focus their improvement to move to stage 2 and so on. In this way, teacher development programme is likely to be more successful because it can be more focused, address individual needs of different teachers, and promote teachers'

sense of belonging to the programme. Finally, improvement efforts should include not only student cognitive achievement but also non-cognitive outcomes as the indicator of effectiveness because focusing only on cognitive achievement has been considered to narrow down the goal of education (Creemers & Kyriakides, 2008).

CONCLUSION AND IMPLICATION FOR EDUCATION

This paper addressed both the strategies of improving and maintaining the quality of education. Dowson et al. (2007) for instance concludes that the promises of education standards to promote equity and excellence have not been empirically proven. Therefore, it is worth considering EER because it offers both theory-driven and evidence-based information on what to prioritize in an educational improvement program.

In this paper, the dynamic model of educational effectiveness developed by Creemers and Kyriakides (2008) was comprehensively explained. The model emphasizes the importance of the classroom level and requires the higher levels, i.e. the national and school levels, to provide necessary conditions to support the effectiveness of the classroom level. This implies that educational improvement programs should focus on classroom effectiveness enhancing factors and that both the government and schools should work together to enable the effectiveness of teacher.

In this case, continuous teacher professional development is indeed very important. The eight classroom factors of the dynamic model may serve as the basis on what teachers should improve in order to enable them to deliver effective teaching and learning processes. Moreover, the five stages of teaching quality resulted from the teaching skills included in the classroom factors of the dynamic model offers an individually-tailored teacher development program. When teachers are found to be in the first stage for instance, they can focus their improvement efforts on teaching skills in the second stage and therefore individual needs of teachers could be addressed. It is highly recommended for future researchers to do experimental studies employing the five stages of teaching quality in teacher development programs.

Concerning student outcomes as the indicator of effectiveness, it is important not to consider student cognitive outcomes that are normally represented in scores as the only parameter. This is because schools are also responsible for developing student non-cognitive outcomes. Yet, referring to some previous studies revealing the bigger roles of other social institutions in influencing student non-cognitive outcomes, future studies should attempt to identify specific and measurable variables belonging to non-cognitive outcomes that are clearly attributed to schools. Finally, it is suggested that both government and schools should provide an enabling mechanism for teachers to enhance their quality and those of their students.

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The Influence of Board Independence, Board Size and Managerial Ownership on Firm Investment Efficiency

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ABSTRACT

The purpose of this study is to examine the relationship between corporate governance, namely board independence, board size, and managerial ownership, with firm investment efficiency. Top 200 public listed companies in Malaysia according to market capitalisation from 2009 to 2011 were selected as a sample for the study. Level of investment efficiency was determined based on deviation from expected investment using the investment prediction model as a function of revenue growth. Board independence is measured by proportion of independent non-executive director of the board while board size is based on total number of directors of the board. Managerial ownership was calculated based on percentage of share owned by the executive director over the total number of shares issued by the company. Size of firm was computed based on total assets used as a control variable. Binomial logistic regression analysis was employed to test the hypotheses. The study found that only board size influenced the level of investment of the company, while board independence and managerial ownership prevent inefficiency pertaining to investment decision making. The results confirm the role of corporate governance in enhancing the performance of the company, particularly the role of the board size in protecting the interest of the shareholders.

Keywords: Investment, corporate governance, board independence, board size, managerial ownership, Malaysia

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INTRODUCTION

Corporate governance became important after 1997-1998 Asian financial crisis that

had hit several countries in Southeast Asia (Norwani et al., 2011) including Malaysia. The crisis revealed the icebergs, namely poor capital structure, uncontrollable gearing level, lack of accountability, and transparency. Malaysian authorities took proactive action to win back market confidence with the introduction of the Malaysian Code of Corporate Governance in 2000 and major revamp of the stock exchange requirements of Bursa Malaysia in 2001 such as corporate disclosure, directors' accountability and protection of minority shareholders.

Prior study shows that strong and effective corporate governance will give tremendous benefits to stakeholders such as transparent financial statement and superior financial reporting quality (Agrawal & Chadha, 2005; Brown et al., 2010; Karamaou & Vafeas, 2005; Brown & Caylor, 2006; Firth et al., 2007; Klai & Omri, 2011; Hashim et al., 2014; Husnin et al., 2016). This will then influence better and effective investment decisions and indirectly increase firm value (Chen et al., 2011), because good governance is able to reduce information asymmetry and lower the agency cost of monitoring and controlling management.

Corporate governance characteristics include Board of Directors' level of independence, size, and managerial ownership can influence the quality of financial reporting. Previous research shows that companies with a higher number of independent directors have greater tendency to generate quality earning information (Bushman et al., 2004; Vafeas,

2005; Qinghua et al., 2007). Performance also increases with a larger board size (Dalton et al., 1999) and higher equity participation by company executives (Elsila et al., 2013). All of these empirical findings show that quality directors will diligently monitor and supervise all aspects of a company's operation and financial details. Consequently, this will increase financial reporting quality, financial performance, firm value and boost company's investment efficiency, which is the focus of this study.

Investment efficiency is very important because it ensures that every dollar invested by shareholders generates an optimal return. Although very high return is preferable, it is risky because high investment returns are also associated with high risks that may turn into loss investment. Because of this, managers that manage the company investment need to be monitored so that the investment decisions will generate an appropriate return to investors. They also need to work hard to gather more capital at a lower cost to invest when a good opportunity arises. This may be done by attracting genuine investors via practising good governance in the company.

Literature review, however, shows that not many studies have been conducted on corporate governance and investment efficiency. Studies have discussed governance mechanisms and their relationship with financial reporting quality (Agrawal & Chadha, 2005; Brown et al., 2010; Karamaou & Vafeas, 2005; Brown & Caylor, 2006; Firth et al., 2007; Klai & Omri, 2011), as well as the relationship

between financial reporting quality and investment efficiency (Gilaninia et al., 2012; Kangarlouei et al., 2011; Li & Wang, 2010; Bushman & Smith, 2001), indicating that all these factors, governance mechanisms and investment efficiency are related. Effective corporate governance mechanism will lead to increased financial reporting quality which in turn influences firm's investment efficiency. This shows that corporate governance is important in every aspect of company operations, including its investment strategy. This is because effective corporate governance mechanisms will ensure shareholders and stakeholders receive reliable information about the organisation and mitigate agency problem as the manager will not hide the value of their investment (Bushman & Smith, 2003). Based on this argument, the purpose of this study is to investigate whether corporate governance has a direct influence on the investment efficiency of the company. In short, this study intends to answer the following research question, *"Does the corporate governance mechanism influence firm investment efficiency?"*

This study contributes to the body of knowledge in several ways. First, it provides useful information for determining whether there is a relationship between corporate governance mechanisms and company investment efficiency. Second, this study will enhance knowledge of business stakeholders, including shareholders, management, board of directors, creditors, and about the current condition of corporate governance and investment efficiency of

Malaysian companies. Third, the findings would be useful for companies to monitor and control firm performance as well as highlight to them the benefits and roles of corporate governance in company management.

This paper is organised as follows. The next section is a review of relevant literature, followed by research methodology. Section four contains findings and discussions. The last section concludes the paper by summarising main findings and outlining limitations of the study.

LITERATURE REVIEW

Corporate Governance

Series of accounting scandals, corporate collapse, and management fraud showed a failure of a corporate governance practices (Kiel & Nicholson, 2003). The Asian financial crisis of 1997-1998 had exposed weaknesses of corporate governance practices (Norwani et al., 2011; Hamid et al., 2011) which resulted in a call for major reforms in this area.

The government established the High Level Financial Committee on Corporate Governance in 1999 with the objective to review corporate governance framework specific for Malaysian business environment. In 2000, the Malaysian Code on Corporate Governance (MCCG) was introduced as a guideline for organisations and board of directors in carrying out their responsibilities. It highlights the principles and best practices of good governance and describes corporate governance structure and

its internal processes. In 2007, the MCCG was revised with the aim of strengthening the role of board of directors and ensuring that board committees discharge their responsibilities effectively. It was again revised in 2012 to focus on strengthening not only the company but also to regulate the market, so that the internal and external governance mechanisms complement each other.

Efforts to improve good corporate governance practices were taken on the belief that strong corporate governance benefits the company, largely in improving their performance. Corporate governance acts as a monitoring platform ensuring checks and balances and that the interests of all the shareholders and stakeholders are properly served. These monitoring mechanisms, for examples, were implemented through block ownership (Shleifer & Vishny, 1986; Asmuni et al., 2015), board size (Chiang & Chia, 2005; Haniffa & Hudaib, 2006), directors' independence (Abbott et al., 2004; Klein, 2002), CEO-Chairman power separation (Jensen, 1993; Husnin et al., 2013), strong work ethics (Manan et al., 2013; Siti Khadijah et al., 2015), directors' financial literacy (DeZoort & Salterio, 2001; Cohen et al., 2002), board meetings (Yatim et al., 2006), audit committees (Chen and Zhou, 2007; Davidson et al., 2005), remuneration committees and disclosures (Bosch, 1995; Jaafar et al., 2014), nominating committees (Leblanc, 2004) and external audits (Kim et al., 2003; Krishnan, 2003). The list is not exhaustive, as many empirical studies have argued on the inconsistency of the

governance-performance results due to these complex relationships. More specifically, companies should employ several monitoring mechanisms simultaneously, such that ineffective monitoring mechanisms will be substituted or complemented by alternative monitoring mechanisms (Azim, 2012). For example, CEO duality practices can be complemented by increasing the number of independent non-executive directors in the Board so that there is a balance of power in managing and decision making in the company.

Investment Efficiency

Investment efficiency refers to the positive net present value (NPV) of the investment project undertaken by an organisation under a predictive scenario, free from market interferences such as adverse selection or agency cost (Li & Wang, 2010). The decision to invest depends on the expected benefits and interest from investments, such as future growth and product demand (McNichols & Stubben, 2008).

In order to increase investment efficiency, a firm needs to strengthen its capital structure to finance a good investment opportunity when it appears (Verdi, 2006). This also prevents the manager from passing positive NPV investment due to inability to finance those project, which will result in underinvestment (Hubbard, 1998). However, the company can also face underinvestment situations, even though it may have the luxury of capital. The manager of this type of company expropriates

resources by investing inefficiently due to personal interests (Verdi, 2006).

Most scholars measure firm investments by using underinvestment and overinvestment as a proxy (Biddle et al., 2009; Kangarlouei et al., 2011; Li & Wang, 2010; Verdi, 2006). Underinvestment refers to the passing up of investment opportunities that is likely to have positive net present value (Li & Wang, 2010), while overinvestment refers to the choice to invest in a project with negative net present value (Biddle et al., 2009). In such a situation, investment efficiency will be achieved if the company is able to achieve an optimal investment position level.

Information asymmetry is one of the reasons for investment inefficiency in an organisation (Myers & Majluf, 1984; Verdi, 2006). Agency theory predicts that even though a manager is well informed about the existence of a profitable investment opportunity, it might not be pursued due to moral hazard problem. Prior study found that quality financial reporting information will improve investment performance level due to minimum information asymmetry (Verdi, 2006; Biddle et al., 2009). The small gap in the information asymmetry between the firm and its investors will contribute to a lower organisation cost of raising fund and monitoring managers. This indirectly will improve project selection (Verdi, 2006). Empirical evidence also shows that quality financial information provides information related to investment opportunities (Biddle et al., 2009; Verdi, 2006; Bushman & Smith, 2003) and hence, investment efficiency

(Gilaninia et al., 2012; Healy & Palepu, 2001).

This study uses underinvestment and overinvestment as a proxy for investment position level. Both proxies are related to the inefficiency of investment. Based on previous studies, underinvestment is found in an organisation that faces financial constraints, whereas overinvestment is common in an organisation with a large cash balance (Verdi, 2006). Biddle et al. (2009) used deviation from expected investment from investment prediction model as a function of revenue growth i.e. negative investment deficiency from expected investment (so-called lower investment) and positive deviation (so-called excess investment). This study has adopted the same measurement as Biddle's et al. (2009) and Kangarlouei (2011).

Corporate Governance and Investment

Corporate governance structure and firm investment are important indicators to evaluate and monitor an organisation's financial health, strategy, future direction and management. However, there are only a few studies that examined the relationship between corporate governance structure and firm investment. Most previous studies had investigated the relationship between financial reporting quality and investment efficiency with corporate governance as a control variable (Biddle et al., 2009; Kangarlouei et al., 2011; Li & Wang, 2010).

A study by Bushman and Smith (2003), for example, found that the quality of financial accounting information may

affect both investment and organisational productivity. The results show that there is positive association between the quality of financial accounting information and economic performance by disciplining management. El-Gammal and Showeiry (2012) found that the nature of relationship between corporate governance and financial accounting information may influence the effectiveness and efficiency of investment decision and hence, investment efficiency. Niu (2006) found that a strong corporate governance structure may be an effective factor to increase financial reporting quality. Therefore, when the quality of financial information is increased, it can the organisation can channel its resource towards good and efficient investment project.

The present study is intended to fill the gap and investigate the relationship between corporate governance structure and firm investment level. It will examine whether corporate governance structure is able to influence firm investment level by monitoring or controlling both overinvestment and underinvestment. As suggested by Biddle et al. (2009), financial reporting quality is linked with lower overinvestment and underinvestment. According to previous studies, higher financial reporting quality will minimise problems that might arise due to information asymmetry and agency cost (Healy & Palepu, 2001).

Agency Theory

Agency Theory (Jensen & Meckling, 1976) posits that there is problem in terms of the relationship between the owner of a firm, known as the principal, with their manager, called the agent. This calls for a control mechanism, known as an agency costs incurred by principal to monitor the work of their agent. In the context of current research, the shareholders (owner) will forego a certain amount of money (agency cost) in monitoring the work of the management (agent). The money spent is intended, for example, to strengthen the corporate governance system of the company such as hiring more independent non-executive directors and subscribe services from competent external auditors. In the context of this study, the manager may not seek to optimise the investment of the company and fail to generate return as expected by the shareholders due to the moral hazard problem.

Hypotheses Development

Independent Non-Executive Director.

Independent non-executive director is a person who does not hold any executive duties or responsibilities and free from any business and other affiliations with the organisation either directly or indirectly. The number of independent non-executive directors may influence the effectiveness of monitoring management and the integrity of financial accounting (Niu, 2006). According

to Baesley (1996), the role of independent directors in the board is to ensure effective monitoring mechanism. This implies that if the proportion of independent directors is higher, the board may be encouraged to be more effective in monitoring its corporate governance practices (Khanchel, 2007).

Previous studies have suggested that independent directors function as effective monitors of corporate governance practices because they do not have any personal or financial interests in the company. An independent director also does not have familial ties with the organisations' management (Boo & Sharma, 2008) and in a better position to objectively challenge the management (Klein, 2002). Empirical research shows that an organisation that has a large proportion of independent non-executive directors is able to mitigate earnings management (Klein, 2002), minimise accounting fraud cases (Baesley, 1996) and prevent managers from expropriation and misusing organisational resources (Niu, 2006).

The hypothesis is as follows:

H₁: There is a no relationship between the proportion of independent non-executive directors in the board and the firm's overinvestment or underinvestment level.

Board Size. The role of the board of directors is to act and represent the interests of the shareholders as well as to monitor and oversee the management (Phan & Yoshikawa, 2000). Most of the previous studies have found a positive relationship

between board size and company performance (Dalton et al., 1999) because a bigger board translates into diverse skills, knowledge, competency and experiences (Kiel & Nicholson, 2003) for effective monitoring of the management (Abidin et al., 2009) and the workload can also be distributed to many people (Alzoubi, 2012).

Peasnell et al. (2001) show a positive relationship between board size and accounting quality which in turn influences the relationship with investment level. Gois (2009) found the bigger the board the better their capability and ability to monitor the management. This may lower accounting discretion which results in a higher accounting information quality as well as mitigate overinvestment and underinvestment.

Thus, the following second hypothesis:

H₂: There is a significant relationship between board size and the firm's underinvestment and overinvestment level.

Managerial Ownership. Managers who also have investment in the company can control corporate behaviour directly from their position as manager and decision maker. When there is managerial ownership in the organisation, it will minimise agency cost, because it serves as an incentive to align the interest of owner-manager and other shareholders (Lopez-Iturriaga & Rodriguez-Sanz, 2001). The owners and management are the same individuals and are thus less likely to expropriate their own wealth (Wong, 2011). Besides, the owner-

manager also will have greater information related to firm's opportunity. This will lead to reduction of information asymmetry and give incentive to managers to improve performance (Basu, 2014). The share held by the manager is an effective mechanism to mitigate agency problems as well as to align manager interest with shareholders.

You et al. (2003) opined that managers are less motivated to perform their duties on behalf of the shareholders if fewer shares are owned by a manager than the total equity of the organisation. The increase in managerial ownership can limit managerial manipulation, increases quality of financial reporting and leads to better financial performance via superior investment position. According to agency theory, there is a positive relationship between the manager who has interest and share in an organisation's equity with optimal investment decision (Jensen & Meckling, 1976). Managerial ownership structure may minimise conflict of interests between manager and shareholders and indirectly would motivate managers to pursue value-enhancing investment. Cho (1998) found that managerial ownership can positively affect corporate investments and its value, while Ju and Zhao (2014) found that firm in the closed-end industry with director's ownership received less fund discounts.

Loh and Venkatraman (1993) documented that managerial ownership may lead to underinvestment in risky projects and persuade managers to invest in 'safer' ventures (Mustapha & Ahmad, 2011). Himmelberg et al. (1999) found a positive

relationship between firm investment and ownership structure, due to greater opportunities for managerial discretion. The manager has more information about investment opportunities and free cash flow. Thus, due to this valuable information, the manager may reduce their shareholding when the free cash rises and possibly will overinvest it. However, if they are also the owner of the company, they will manage spending while enjoying good investment opportunities. Hence, the following third hypothesis:

H₃: There is a no relationship between the percentage of managerial ownership and the firm's overinvestment or underinvestment level.

RESEARCH METHODOLOGY

Sample Selection and Data Collection

The samples for this study consist of top 200 public listed companies based on their market capitalisation at the end of the 2011. This sample has excluded finance companies due to the differences in regulatory requirements and business nature (Arce & Mora, 2002), as well as companies listed on other than the main market and those with insufficient data. The final sample consists 163 companies. Information for similar companies was also collected for 2010 and 2009 leading to the total observations of 489 firm-years. Main sources of data were the companies' annual reports and Thomson DataStream databases.

Variable Measurements

Table 1 provides a detailed description of the variables used in the study.

As shown in Table 1, the dependent variable (firm investment position level) for the final model used in this study is

Table 1
List of Variables and Its Measurement

Variables	Measurements
Dependent variable	Residual of Y_1 . If ε_1 less than zero or negative value, then coded as 0. However, if ε_1 is more than zero or positive value, then coded as 1
Investment position level (overinvestment, underinvestment)	
Independent variables	
Board independence	Proportion of independent non-executive director of the board Total directors of the board
Board Size	
Managerial ownership	Percentage of share owned by the executive director to the total number of share issued by the company
Control Variable	
Firm size	Total assets, expresses as a \log_{10} function

the residual or error term of yet another regression model. In order to get the residual, the preliminary regression model needs to be constructed. As the study examined data from three consecutive years, beginning from 2009 until 2011, there will be three preliminary multiple linear regression models, i.e. the year 2011 (t), year 2010 (t-1), and year 2009 (t-2). The general preliminary regression models are explained below.

$$Y_1 = \alpha_0 + \alpha_1 Z_1 + \alpha_2 Z_2 + \alpha_3 Z_3 + \varepsilon_1$$

Where:

Y_1 = Investment, measured by investment in plant, equipment, land building, research and development expenditure less revenue from selling fixed asset *over* Total assets

Z_1 = Growth in revenue in the preceding years. This is coded as 0 or 1. The figure 0 means there was no growth or positive growth in years (t)* Where t is the based year 2011. The figure 1 means there was negative growth in year (t)* [*For 2010 = (t-1), 2009 = (t-2)]

Z_2 = Percentage of firm's revenue growth in year (t)* where t is based on year 2011[*For 2010 = (t-1), 2009 = (t-2)]

$$= \frac{((\text{Revenue (t)* less revenue (t-1)** over Revenue (t-1)**}) \times 100 \%)}{[*\text{For 2010} = (t-1), 2009 = (t-2)]}$$

$$[*\text{For 2010} = (t-2), 2009 = (t-3)]$$

Z_3 = The product of Z_1 and Z_2 for the year (t)*

$$= (Z_1 \times Z_2)$$

$$[*\text{For 2010} = (t-1), 2009 = (t-2)]$$

ε_1 = Residual or error term for year (t)*
[*For 2010 = (t-1), 2009 = (t-2)]

Investment level which is measured by the deviation from expected investment using the investment prediction model as a function of revenue growth is consistent with earlier studies (Biddle et al., 2009; Kangarlouei et al., 2011; Li & Wang, 2010). Biddle et al. (2009) proposed that the differences or changes from normal standards of expected investment is considered as inefficient investment. The differences will be seen through their residual error term. If there is negative residual error term, it is considered an underinvestment, whereas positive residual error term is considered overinvestment. For the purpose of running the overall regression model, the error term (residual) found in the preliminary multiple regression models will be used as the new dependent variable.

Statistical Analysis

Three main tests were run to analyse data related to corporate governance and firm's investment level. The first test is descriptive analysis. The second test uses linear multiple regression test to ascertain the residual or error term in order to get the dependent variable (firm's investment level). The final test, binomial logistic regression analysis, has been used to test the research hypothesis. This study uses logistic regressions to develop the model and test whether the independent variables will influence a firm's investment level (overinvestment or underinvestment). In

this study, there are three developed logistic regression equations representing the years 2009, 2010, and 2011. The equation for 2011 is as follows:

$$Y_2 = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon_2$$

where Y_2 = Residual of the preliminary model. If ε_1 is less than zero or negative value (indicating underinvestment), then coded as 0, whereas, if ε_1 is more than zero or positive value (indicating overinvestment), then it will be coded as 1 for the year (t), X_1 = Board independence in the year (t), X_2 = Board size in the year (t), X_3 = Managerial ownership in the year (t), X_4 = Firm size in the year (t), ε_2 = Residual or error term for the final model in the year (t). The equation models for 2009 and 2010 are similar except that for 2009 year = t-2 and for 2010 year = t-1.

FINDINGS AND DISCUSSION

Descriptive Statistics

Table 2 shows descriptive statistics of the independent variables (board independence, board size, managerial ownership), control variables (total assets) and dependent variables (overinvestment, underinvestment). The minimum value for board independence is between 0.22 and 0.25, indicating there are companies that do not comply with MCCG requirement to have a minimum of one-third (33%) independent directors in the board. However, many companies on average have approximately half of their board composed of independence director (0.45, 0.45, 0.44)

with the maximum of 0.78, 0.86 and 0.9 in 2009, 2010 and 2011 respectively.

In terms of board size, the minimum number of directors in the board was 3 in

Table 2
Descriptive Statistics of the Variables Used in the Final Model

Variables	Years	Min	Max	Mean	Std. Deviation
Board Independence	2011	0.25	0.90	0.45	0.12487
	2010	0.25	0.86	0.45	0.12399
	2009	0.22	0.78	0.44	0.11646
Board size	2011	3.00	15.00	8.29	2.06700
	2010	5.00	15.00	8.31	2.04400
	2009	5.00	15.00	8.31	2.04400
Managerial ownership	2011	0.00	73.39	6.49	13.01854
	2010	0.00	72.82	6.43	13.09102
	2009	0.00	71.73	6.02	12.31613
Total assets _{log10}	2011	5.08	7.87	6.39	0.52538
	2010	5.29	7.87	6.35	0.52752
	2009	5.20	7.85	6.30	0.53807
				No of Companies	%
Investment	2011	Overinvestment		86	52.8
		Underinvestment		77	47.2
	2010	Overinvestment		86	52.8
		Underinvestment		77	47.2
	2009	Overinvestment		85	52.1
		Underinvestment		78	47.9

2011, decreased from 5 in 2009 and 2010. The maximum number of directors recorded is 15, with an average of 8 directors for all the three years. The minimum, maximum, and mean value of managerial ownership is consistent through the years. There are companies in which executive directors do not have or have very minimal shares. The highest ownership is approximately about 70%, which is common p for family based company. The mean values are roughly 6% for all three years (6.46, 6.43, 6.02).

For the control variables, the minimum number of the log total asset is 5.08, 5.29 and 5.2 in years 2011, 2010 and 2009 respectively while the maximum number of log total asset is 7.87 for 2011 and 2010, and 7.85 for 2009. The value of the asset can be tested to see whether it has affected the firm's investment level alongside independent variables.

The dependent variables were measured as residual function of revenue growth which acted as a proxy to overinvestment

and underinvestment. Overinvestment is a positive residual of investment, whereas underinvestment is represented by negative residual of the investment. Table 3 shows that the value or data for overinvestment in 2011 and 2010 are 86 companies each (52.8%) and 85 companies (52.1%) in 2009. For underinvestment, there are 77 companies (47.2%) in 2011 and 2010 and 78 companies (47.9%) in 2009.

Logistic Regression Model Analysis

There are three types of assumptions that must be considered before using logistic regression analyses: sample size, multicollinearity and outliers (Pallant, 2010).

Sample size. This study examined 163 companies in 2009, 2010 and 2011. This amount is sufficient to run logistic regression, as the minimum sample needed is 50 (Field, 2009).

Multicollinearity. Multicollinearity has been examined with Tolerance and VIF (variance inflation factor) value. None of the variables have Tolerance value less than 0.1, and VIF value of more than 10 indicates no severe multicollinearity problem among the variables (Pallant, 2010; O'brien, 2007).

Outlier. Close examination of the scatter plot has confirmed that there was no case with standardised residual value higher than 3.3 or less than -3.3 which indicates no outlier problems in the samples (Pallant, 2010; Tabachnick & Fidell, 2013).

Final Logistic Regression Model

Table 3 presents the finding of logistic regression for 2011, 2010 and 2009. In 2011. None of the independent variables has significant relationship with the firm investment and the full model was not statistically significant (χ^2 (5, N = 163) = 6.926, $p > 0.05$). The result explains between 12.4% (Cox and Snell R square) and 16.5% (Nagelkerke R Square) of the variance in firm's investment position level in the companies and correctly classified 65% of cases. All the independent variables show very weak prediction, with an odds ratio of less than 1 (Board independence = 0.922, Board size = 0.905, Managerial ownership = 0.763). This indicates that all the independent variables do not influence level of investment of the company for either overinvestment or underinvestment.

In 2010, only board size has a significant relationship with firm investment at 5%. The full model was not statistically significant, as χ^2 (5, N = 163) = 8.019, $p > 0.05$ indicates that the model is unable to distinguish between companies with overinvestment and underinvestment. The model explains between 9.6% (Cox and Snell R square) and 12.8% (Nagelkerke R Square) of the variance in investment efficiency in the companies and has correctly classified 60.7% of the cases. The odds ratio for all the independent variables is less than 1, indicating very weak prediction. However, board size as represented by the number of directors has a negative significant correlated with the firm's investment level. This means that the larger the board size,

Table 3
Results of Final Logistic Regression Model

	Board Independence	Board size	Managerial ownership	Total assets _{log10}	Constant
2011					
B	-0.081	-0.100	-0.271	1.262	-6.709
SE	1.587	0.093	0.317	0.373	2.422
Wald	0.003	1.138	0.732	11.419	7.676
Sig.	0.959	0.286	0.392	0.001**	0.006
Odd Ratio or Exp(B)	0.922	0.905	0.763	3.532	0.001
Lower	0.041	0.754	0.41	1.699	
Upper	20.679	1.087	1.419	7.342	
2010					
B	-1.649	-0.189	-0.429	1.067	-4.044
SE	1.611	0.094	0.314	0.363	2.285
Wald	1.048	4.061	1.86	8.658	3.132
Sig.	0.306	0.044*	0.173	0.003**	0.077
Odd Ratio or Exp(B)	0.192	0.827	0.651	2.908	0.018
Lower	0.008	0.688	0.352	1.428	
Upper	4.519	0.995	1.206	5.92	
2009					
B	-0.699	-0.016	-0.235	0.879	-3.844
SE	1.649	0.09	0.311	0.342	2.199
Wald	0.180	0.033	0.574	6.600	3.056
Sig.	0.672	0.857	0.449	0.01**	0.080
Odd Ratio or Exp(B)	0.497	0.984	0.79	2.409	0.021
Lower	0.020	0.826	0.43	1.232	
Upper	12.593	1.173	1.453	4.711	

*p < 0.05, **p < 0.01, ***p < 0.1

the larger the tendency for the company to underinvest. This is possibly due to the fact that larger board size will impair a firm's corporate effectiveness, contributing to investment inefficiency.

Result in 2009 was replicated in 2011. None of the independent variables has significant relationship with firm investment. The model was not statistically significant, (χ^2 (5, N = 163) = 0.783, p > 0.05) indicates

the model is unable to differentiate the company with different level of investment (overinvest or underinvest). The result explains only between 5.8% (Cox and Snell R square) and 7.8% (Nagelkerke R Square) of the variance in investment efficiency in the companies, which is the lowest among the three years, and correctly classified 61.3% of cases. No difference in odds ratio of all independent variables is seen with

previous year results for 2011 and 2010 (less than 1).

The control variable, total assets, shows significant results in all years under examination (2011: .001, $p < 0.01$; 2010: .003, $p < 0.01$; 2009: .01, $p < 0.01$) with strong prediction value of 3.532 in 2011, 2.908 in 2010 and 2.409 in 2009. This indicates that the higher the total assets of the company, the higher the tendency towards overinvestment.

The results indicate that there is no statistical significant relationship between board independence and firm's investment for 2011, 2010 and 2009 (p -value = 0.959, 0.306, 0.672) respectively which shows board independence does not have an impact on firm overinvestment or underinvestment level. The independent directors tends to play their role effectively in monitoring the company by ensuring the company does not over or underinvest. Baesley (1996) found that a higher number of independent non-executive directors can reduce and minimise accounting fraud in financial statements. This shows that the board needs to include independent directors who do not have any affiliation with the company to enhance its effectiveness. Therefore, it can be concluded that good board monitoring is an effective mechanism to monitor firm's investment position.

Board size had a negative relationship with investment position at 5% significant level in 2010, indicating that larger boards have a greater tendency to underinvestment. This result is consistent with Rahman and Ali (2006), and Gill and Mathur (2011) that

found that larger board size may impair a firm's performance.

This finding indicates that the bigger the board size, the lower the investment efficiency due to higher underinvested capital. This may signify that to have an effective board, the company should not have too many directors as top decision makers as this will slow down the decision making process, making it difficult to control the company as well as face communication issues. Hence, monitoring quality of the board is weakened. This finding was supported by Yermarck (1996), Eisenberg et al. (1998), and Hermalin and Weisbach (2003), who suggested that smaller board size is better to minimise issues relating to free riders, communication breakdowns, monitoring problem and inefficiency. In a nutshell, quality rather than quantity, is vital to manage a company. This result however needs to be interpreted with caution. First, board size was significance in one year (2010) but not significant in the other two years, 2009 and 2011. Second, its prediction value also very weak (Odd Ratio or Exp(B) = 0.827) at less than 1.

For managerial ownership, it is predicted that higher percentage of shares owned by the management will not influence overinvestment or underinvestment. Based on this, the hypothesis is accepted. This is because there is no significant relationship among all predictors for overinvestment or underinvestment for all three years (p -value for each year 2011, 2010 and 2009 is 0.392, 0.173, 0.449 respectively). Thus, it can be concluded that managerial ownership can

be effective monitoring a firm's investment level. Managers who also own the company will put greater effort to ensure the company achieves optimal investment level and generate appropriate return.

CONCLUSION AND LIMITATIONS

The purpose of this study was to examine whether good corporate governance practices ensure companies achieve optimal investment level. Corporate governance here refers to board independence, board size and managerial ownership, while investment position level was based on whether the company was at an under or overinvestment level.

The study used logistic regression and found that all the independent variables do not have any significant relationship with investment position, except board size, which showed a significant negative relationship with underinvested capital in one of the three years' period of study. In general, this provides evidence that strong corporate governance mechanism positively contributes to the performance of the company via mitigation of potential inefficient investment levels though either overinvestment or underinvestment. Thus, investment efficiency can be attained because optimal investment can be made by having sufficient capability to finance positive NPV investment and at the same time, not giving up good investment opportunity due to limited financing.

There are several limitations of this study. This study used categorical variables for investment inefficiency as represented

by underinvestment and overinvestment. Future research can use econometric approach by using continuous variables as a proxy of investment efficiency. In terms of the sample, this research only chose 200 large companies by market capitalisation for three years. To get more robust results, future research should choose more and bigger samples. The period of study should be extended, and other type of analysis such as longitudinal analysis can be utilised.

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The Relationship between Exposure to Sexually Explicit Material and Teenage Pre-marital Pregnancy

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ABSTRACT

Pre-marital pregnancy among teenagers poses a serious and widespread health and social problem especially among those aged between 10 and 19. This study aims to find out the extent to which this out-of-wedlock childbearing by a teenager is associated with exposure to sexually explicit material or pornography. It is hypothesised that frequent exposure to sexually explicit material or pornography could have an association with an increased rate of teenage pregnancy. This is a case-control study where pre-marital pregnant teenagers between 12 and 19 years were selected (as the cases) from government shelters throughout Malaysia, and non-pregnant teenagers were randomly selected from several secondary schools around Kuala Lumpur (as the control). A total of 114 pre-marital pregnant teenagers and 101 non-pregnant teenagers participated in this study. Participants from both

groups completed a questionnaire about their frequency of exposure to pornography. Pre-marital pregnant teenagers were almost ten times more likely to have had frequent exposure to pornography compared with non-pregnant teenagers (OR = 9.9 [CI 4.3 – 22.5]). Hence, frequent exposure to pornography was shown to have a significant association with pre-marital teenage pregnancy.

Keywords: Teenage pregnancy, pornography

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INTRODUCTION

Teenage pre-marital pregnancy has become a worrying trend in most countries (Singh & Darroch, 2000; Ekstrand et al., 2005; Chandra et al., 2008). In the United States, the percentage of out-of-wedlock birth among teenagers less than 20 years ago was 23% (National Vital Statistics Report, 2009). In Malaysia, 4500 out of 18000 (i.e. about 25%) teenagers were reported to be pregnant outside of a marriage (The Star, 2013). The occurrence of teenage pre-marital pregnancy can potentially lead to many social issues such as an increased risk of morbidity. For example, previous studies have consistently reported that teenage pregnancy has an increased risk for pre-term delivery (Gilbert et al., 2004; Fraser et al., 1995; Gortzak-Uzan, 2001; Igwegbe & Udigwe, 2001; Jolly, 2000).

There are many factors that could contribute to teenage pre-marital pregnancy. One of it is frequent exposure to sexually explicit materials or pornography. In this modern world, the Internet is ubiquitous in an adolescent's life (UCLA, 2003), and hence, it has a significant impact on adolescent development (Finkelhor et al., 2000). Although young people may reap many benefits from using the Internet (Fox et al., 2000; Lenhart et al., 2001), previous studies have shown that laissez-faire nature of Internet use among young people pushes them to start exploring pornographic websites (Lenhart et al., 2000; Stahl & Fritz, 2002).

Teenagers often have a positive attitude towards casual sex, and as a result, sexual

activity becomes a normal part of their social development (Berg, 1998). One of the major causes is frequent exposure to pornographic materials. Sexually explicit materials which may contain pornography, is freely available to the public because of its widespread distribution by the mass media and is easily accessible (especially via the internet).

The exposure towards sexually explicit material may influence an individual's attitude. This is supported by the social learning theory which suggests that an individual learns attitudes by observing and imitating the behaviours of others (McDonald & Kielsmeier, 1972). An observed behavior does not have to be reinforced to be learned (Zimbardo & Leippe, 1991), and the model "can be presented on screen such as via television, video, or internet, in a novel, or by other vicarious means" (Martin & Briggs, 1986). Therefore, it has also been shown that teenagers' frequent exposure to pornography may influence the development of their sexual attitudes and behaviors (Zillmann, 2000; Haggstrom-Nordin, 2005; Rogala, & Tyden, 2003).

Numerous studies have pointed to the relationship between biological factors and increased feeling towards sex. One of the biological factors is puberty, regarded as an endocrinological event leading to sexual maturation (Peper & Dahl, 2013). This surge in hormones plays a major role within a larger set of biological changes in the process of achieving reproductive maturity, which includes rapid physical

growth, sexually dimorphic alterations, metabolic changes and a wide array of social, behavioural and emotional changes. Developing reproductive capabilities does not only involve changes in the body, but also in neural systems where the brain is a major target for sex steroid hormones (McCarthy & Arnold, 2011). Hence, this demonstrates that pubertal hormones contribute to brain-behavior interactions

The normal sexual development of a teenager can be very complex and dynamic. Children will have heightened sexual interest once they reach puberty (Ponton & Judice, 2004). Findings obtained from a survey in the US revealed that the average age of first sexual intercourse is 15.8 years (Berne & Huberman, 1999). Sexual interest usually increases with age and associated with sexual curiosity that could result in engaging in lengthy discussions about sex, and viewing pornographic material that can then eventually lead to seeking for opportunities to have sexual intercourse.

It is hypothesised that frequent exposure to pornographic material could potentially have a negative impact on the sexual development of an adolescent. The magnitude of this impact on unwanted teenage premarital pregnancy is still unknown and needs to be investigated. To date, there is still lack of research to determine whether (or not) frequent exposure to pornographic material can be a risk factor that is associated with unwanted teenage pregnancy, and also the strength of this relationship (if any), especially in Malaysia. Therefore, this study proposes

an initial hypothesis that frequent exposure to pornographic material will lead to premarital teenage pregnancy.

Theoretical framework, research question and research objective

The research question of this study: is frequent exposure to pornographic materials leads to unwanted teenage pregnancy? In addition, there are confounding factors such as ethnicity, family income and parents' level of education. This is a case control study because it is not ethical to use a prospective study design where the case group has to be exposed to explicit materials. The main objective of this study is to determine the association between exposure to pornography and teenage premarital pregnancy after having adjusted (or controlled) for the effect of confounding factors.

Significance of study

A previous study had shown that in Malaysia, frequent exposure to pornography was associated with premarital pregnancy than with marital pregnancy (Zain et al., 2015). However, this study compared two groups of premarital teenagers (i.e. between those pregnant and those not pregnant), and so it was evaluated the association between frequent exposure to pornography and teenage premarital pregnancy. Thus, it can be concluded that frequent exposure to pornography is linked to unhealthy/risky sexual behaviour. However, it is still unclear whether (or not) frequent exposure

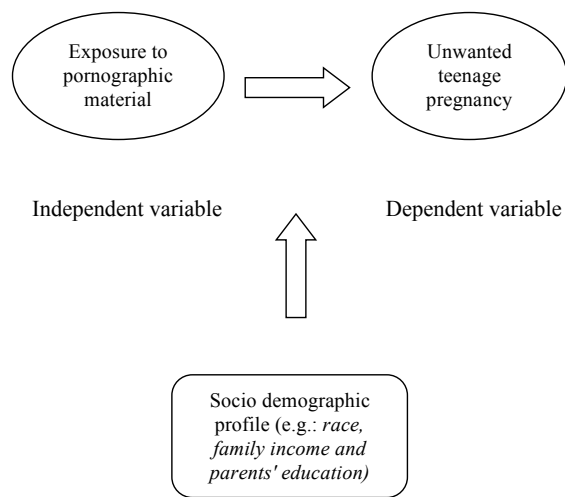


Figure 1. Research hypothesis of the study

to pornography is directly associated with teenage pregnancy.

As such, these findings add to the current knowledge base related to the adverse consequences of frequent exposure to pornography by determining whether it increases the risk of teenage premarital pregnancy. This finding is very useful for determining the impact of frequent exposure to pornography among children and teenagers to result in unwanted premarital pregnancy. This study proposed an initial hypothesis that the impact of frequent exposure to pornographic material can be very serious and thus, it serves as a platform to increase awareness among the teenagers' parents. A comprehensive prevention strategy can thus be executed to limit teenagers' exposure to pornographic materials.

METHOD

Study design and sample

This is a case-control study which consisted of a target population of teenage girls aged between 12 and 19. The sample consisted of two groups which included (i) pregnant teenagers in selected government shelters throughout Malaysia (as the cases) and (ii) teenage female students from secondary schools around Kuala Lumpur City who were not pregnant (as the controls).

The pregnant teenagers were selected from government shelters which participated in the study. Therefore, it was a purposive sampling. Once the government shelters were identified, all pregnant teenagers in there were recruited. The age group of the pregnant teenagers 15 and below and above 15 were 25% and 75% respectively. Thus, for the control group, teenage students based

on similar age group in the case group were recruited. All the students in selected classes were selected as sample to represent the control group. The selection of the classes was also done by purposive sampling.

Questionnaire

The Malay version of the questionnaire was administered to all participants in both groups, which contains questions on their socio-demographic profile and details of their exposure to pornography. Details included their age (in years), ethnicity, highest educational attainment, family income per month, and their parents' highest educational level. Three questions (to be answered either 'yes' or 'no') were:

- i. *Have you ever watched pornographic pictures/clips on the mobile smart phone?*
- ii. *Have you ever read pornographic books or magazines?*
- iii. *Have you ever browsed pornographic websites?*

Respondents who answered "Yes" to at least one question were considered to have been exposed to pornographic material.

Study Procedures

At the commencement of this study, the researchers explained in detail the purpose of this study to all respondents before administering the questionnaire. Respondents were also assured that all their personal information would be kept confidential and therefore all data gathered

from this study would be made anonymous (because they were meant for research purposes only).

Next, a set of questionnaires was distributed to each respondent. Respondents were requested to answer all these questions by drawing on their own experience on the same day and then submit the completed questionnaire to the researcher D. None of the staff from the organisations which provided healthcare services to respondents were present in the room during administration of the questionnaire.

Statistical Analysis

Descriptive statistics such as frequencies and percentages were used to explain the exposure to pornography among different demographic variables of all the respondents. Pearson's Chi-square or Fisher's exact test were used to determine the univariate association between the varying demographic profiles of all the respondents and exposure to pornographic material between the cases and the controls. The choice of either to use Pearson's Chi-square or Fisher's exact test depends on the assumption of a particular statistical test. Pearson's Chi-square test was used when there are sufficient samples in each cell while Fisher's exact test was used when there are insufficient samples (expected cell sizes is less than 5) in at least 25% from the overall number of cells. The hypothesis of the study (see Figure 1) was then tested by using logistic regression analysis in order to determine the effect from exposure of pornography towards teenage pre-marital

pregnancy after some demographic profile (race, family income and parents' education) were controlled in the analysis. Data were analysed using IBM SPSS package (IBM Corp. Released 2012. IBM SPSS Statistics for Windows, Version 21.0. Armonk, NY: IBM Corp).

RESULTS

A total of 215 respondents participated in this study, which included 114 pregnant adolescents (as the cases) and 101 adolescents who were not pregnant (as the controls). Both the case and the control subjects had both different family income ($p < 0.001$) and parents' education level (father's education with $p = 0.037$ and mother's education with $p = 0.002$), with these differences having statistical significance. Hence, these are the confounding variables for the research hypothesis (see Figure 1). There was no statistically-significant difference ($p = 0.141$) in age group. This was because this study initially planned that the age group among the control subjects and case subjects to be similar. Meanwhile, the difference in ethnicity (between the cases and the controls) was also found to be statistically significant ($p = 0.015$). Although there was a pattern of different ethnicity in both groups, however, it could not be inferred that pregnant Malay adolescents were more frequently exposed to pornographic material. This was because the participants were from government shelters where the majority were Malays and Muslims (Table 1).

About 80.7% (92/114) of the pregnant respondents were frequently exposed to pornographic material, while 34.7% (35/101) of those who were not pregnant were frequently exposed to pornography. From among the pregnant teenagers, 78.9% of them were exposed to pornographic pictures, 43.0% to pornography by surfing the internet, and 36.0% by reading pornographic magazines.

Similarly, among those who were not pregnant, 28.7% of the respondents were exposed to pornographic pictures, 13.9% by surfing the internet, and 11.9% by reading pornographic magazines.

Multiple logistic regression analysis was performed to determine the association between frequent exposure to pornography and teenage pregnancy, after having controlled (or adjusted for) three possible confounding factors, namely race, family income and parents' education level. The results showed that frequent exposure to pornography increased the odds of teenage premarital pregnancy in the case group to almost 10 times ($OR = 9.9$ [CI 4.3 – 22.5]) of those from the control group (Table 2).

DISCUSSION

The findings of this study show that frequent exposure to sexually explicit material (or pornographic material) is associated with teenage premarital pregnancy. This study also found that the odds of teenage premarital pregnancy were approximately 10 times higher than that of those from the control group (who did not have frequent

Table 1

Profile of respondents and exposure to pornographic materials between case and control groups

	Pregnant		Not Pregnant		P - value
	n	%	n	%	
Age					
≤15	28	24.56%	34	33.66%	0.141 ^a
> 15	86	75.40%	67	63.34%	
Monthly family income					
Low (<RM1500)	76	68.50%	39	41.90%	<0.001 ^a
High (≥RM1500)	35	31.50%	54	58.10%	
Father's education					
Low	80	84.21%	53	71.62%	0.037 ^b
High	15	15.79%	21	28.38%	
Mother's education					
Low	101	92.66%	64	77.11%	0.002 ^b
High	8	Of 7.34%	19	22.89%	
Race					
Malay	110	96.5%	91	90.1%	0.015 ^b
Chinese	2	1.8%	10	9.9%	
India	2	1.8%	0	0.0%	
Exposure to pornography					<0.001
Yes	92	80.7%	35	34.7%	
No	22	19.3%	66	65.3%	

Note: ^aP-value were derived from Pearson Chi-square test^bP-value were derived from Fisher's exact test

Table 2

Exposure to sexually explicit material towards teenage pregnancies

	OR 95% CI	P value
Exposure to sexual materials		<0.001
Not	reference group	
Yes	9.9 (4.3, 22.5)	

Note: The odds ratio was derived after adjusting for race, family income and parents' education using multiple logistic regression

exposure to pornographic materials). Most of them had access to pornographic pictures and also by surfing the internet. Since this was a retrospective study, causality could not be inferred and thus, the finding could

then be interpreted in one of the two ways: a) those who were already pregnant had been frequently exposed to pornographic material; b) frequent exposure to pornographic material is an important risk factor for

teenage premarital pregnancy (or teen out-of-wedlock childbirth).

A study by Collins et al. (2004) found that teenagers who watch television programmes containing sexually explicit scenes will have a higher tendency to initiate and maintain intimate sexual relationships. In a long-term study, Chandra et al. (2008) reported that teenagers who were exposed to television programmes which are sexually explicit were found to be at least twice more likely to become pregnant within the next three years compared with their peers. Brown and L'Engle (2009) also found that the exposure to sexual media was associated with an increased level of adolescent sexual activity. Our results are consistent with the findings of other researchers, in that, teenagers who exposed to pornographic material tend to engage in unsafe sexual intercourse. However, the high odds-ratio reported in this study showed that teenagers from the control group were much less exposed to pornography compared with those from the case group.

The level of exposure to pornography of children increased in tandem with their age (Longe, 2007). A study in America revealed that the average age of a child when first exposed to internet pornography was 11 years, with the majority of these children aged between 12 and 17. Almost 90% of the children between aged 8 and 16 were exposed to pornographic material when surfing the internet, while doing homework (Cheryl, 2007). These findings clearly indicate that allowing children to surf the internet at home without adult

supervision is unsafe as they do not have adequate guidance, thereby preventing their balanced psychosocial growth and development. In Malaysia, no academic studies have been undertaken to find out how these young people were exposed to pornography, except a survey conducted in 2001 which showed that they had access to pornography "without parental knowledge" (UNESCO, 2001).

A national survey of 4527 teenagers aged between 10 and 19 was conducted by the Malaysian National Population and Family Planning Development Board (NPFDB) from 1994 to 1996 (UNESCO, 2001). This survey questionnaires assessed respondents' knowledge, attitude and sexual health by mass media (e.g. using popular English, Malay and Tamil media). Respondents were from urban and rural areas of West and East Malaysia. The survey found teenagers did not have sufficient knowledge of sexual health either their parents or from the schools. Many of the adolescent respondents were alarmed to learn about the physiological changes their bodies were undergoing. As neither were available to explain these physiological changes of their, more than two-thirds of these 13 to 19-year-olds 'educated' themselves by accessing pornographic materials in the form of magazines and watching video-films without parental knowledge.

Without proper and adequate guidance by the parents, two-thirds of the respondents soon engaged in masturbation or sexual intercourse. Additionally, two-thirds of these

teenagers had also started dating at the age of 13 and 15, and 18% of the respondents had already engaged in sexual intercourse between the age of 15 and 19. More urban teenagers had started to live together, especially those who were older and/or those who intended to marry at an older age. Studies have found that over time, an increasing number of Malaysian teenagers were also becoming sexually active, from 9% in 1995 to 13% in 2000 (Zulkifli et al., 1995). Boys were more sexually active than girls. Living away from their family was also found to be associated with increased teen sexual activity, and this association was found to be statistically-significant (Zulkifli et al., 2000).

One possible solution to overcome this problem is by introducing sexual education. However, the introduction of sexual education may not be appropriate as seen from the experience of Norway. In Norway, sexual education was introduced and had always been taught as a compulsory topic since 1955; however, the abortion rate among teenagers had also gradually increased to nearly 50% (National Board of Health and Welfare, 2005). This was attributed to lack of knowledge and negligence in contraceptive use, along with having a liberal attitude toward casual sex among teenagers (Ekstrand et al., 2005). Another possible solution may be to establish a socio-culturally and religiously-sensitive approach for a holistic sexual health education, by highlighting the role of sex within the context of a loving marital relationship for procreation purposes.

In view of the easy accessibility of pornographic materials, parents and guardians play a crucial role in guiding their children and teenagers especially when they are exposed to inappropriate and sexual explicitly contents (whether these materials come from traditional sources such as television, magazines or, from internet). Another way to protect children and teenagers from the dangers to pornography is to block their access to such materials by using an internet filtering software. Although it may not be totally effective, it can still filter out many pornographic websites.

CONCLUSION

In conclusion, it was found that frequent exposure to pornography is associated with teenage premarital (or out-of-wedlock) pregnancy. Future research should explore other risk factors associated with frequent exposure to pornography among teenagers. The findings can provide valuable information to policy-makers to implement certain preventive strategies for minimising unwanted teenage pregnancies.

A major limitation of this study was data from other groups of pregnant teenagers (apart from the Malay ethnic group) were not included in this study (since it was very difficult to engage them to participate in this study). Therefore, almost all the respondents in this study were Malay Muslims.

Additionally, all the subjects in the control group are from secondary schools in Kuala Lumpur. No pregnancy test was conducted to confirm whether the

student was pregnant or not except by the respondent's own admission. Sample selection was conducted using purposive sampling. Future studies may consider collecting more representative samples for case and control group. Besides that, this study assumed that the subject in the control group understood the definition of pornographic materials without showing them examples of pornographic materials as this was considered immoral.

Besides, it was also a case-control study and therefore it would be difficult to establish the causal relationship between frequent exposure to pornographic material and teenage premarital pregnancy (because data collected were retrospective in nature). Therefore, future longitudinal studies are still warranted for elucidating the actual 'cause-and-effect' relationship between frequent exposure to pornographic material and teenage premarital pregnancy. Such future studies should consider a broader socio-economic context for gleaning a better understanding of the factors that have an impact on teenage premarital pregnancy, thereby providing us with a better preventive strategy to tackle this problem.

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APPENDIX

Borang soal selidik/Questionnaire

Sila isikan tempat kosong atau tandakan (X) pada pilihan anda

Kindly fill in the blank or mark (X) for your option

Bahagian 1: Profail demografik		
<i>Part 1: Demographic profile</i>		
No.	Data profail/ <i>Profile data</i>	Jawapan/ <i>Answer</i>
1	Umur <i>Age</i>	Nyatakan:tahun <i>State:year</i>
2	Jantina <i>Sex</i>	() Lelaki/ <i>Male</i> () Perempuan/ <i>Female</i>
3	Bangsa <i>Ethnic</i>	() Melayu/ <i>Malay</i> () Cina/ <i>Chinese</i> () India/ <i>Indian</i> () Lain- lain/ <i>Others</i>
4	Agama <i>Religion</i>	() Islam/ <i>Muslim</i> () Buddha/ <i>Buddhist</i> () Kristian/ <i>Christian</i> () Hindu/ <i>Hindu</i> () Lain- lain/ <i>Others</i>
5	Tahap pendidikan tertinggi bapa <i>Father's highest education level</i>	() Tidak bersekolah/ <i>No formal education</i> () Sekolah rendah/ <i>Primary school</i> () Sekolah menengah/ <i>Secondary school</i> () Diploma or sijil/ <i>Diploma or certificate</i> () Sarjana muda/ <i>Bachelor degree</i> () Sarjana or Doktor falsafah/ <i>Master or Doctor of Philosophy</i>
6	Tahap pendidikan tertinggi ibu <i>Mother's highest education level</i>	() Tidak bersekolah/ <i>No formal education</i> () Sekolah rendah/ <i>Primary school</i> () Sekolah menengah/ <i>Secondary school</i> () Diploma or sijil/ <i>Diploma or certificate</i> () Sarjana muda/ <i>Bachelor degree</i> () Sarjana or Doktor falsafah/ <i>Master or Doctor of Philosophy</i>
7	Pendapatan keluarga sebulan <i>Family's monthly income</i>	Nyatakan: RM..... <i>State: RM.....</i>
Bahagian 2: Pendedahan kepada bahan - bahan lucah		
<i>Part 2: Exposure to pornographic materials</i>		
8	Pernakah anda menonton klip/ gambar lucah di telefon bimbit? <i>Have you ever watched pornographic clips/pictures on the mobile smart phone?</i>	() Tidak/ <i>No</i> () Ya/ <i>Yes</i>
9	Pernakah anda membaca buku/ majalah lucah? <i>Have you ever read pornographic books or magazines?</i>	() Tidak/ <i>No</i> () Ya/ <i>Yes</i>
10	Pernakah anda melayari laman web lucah? <i>Have you ever browsed through pornographic websites?</i>	() Tidak/ <i>No</i> () Ya/ <i>Yes</i>

Standardised Age Group Mortality Trend by States, Malaysia 1995-2010

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ABSTRACT

This ecological study aims to examine the pattern of Age Standardised Mortality Rate (ASMR) among the states within Malaysia and its relationship with Gross Domestic Product (GDP), population density and age. In addition, the five-yearly patterns of ASMR for a fifteen-year period between 1995 and 2010 were studied. Death data from the National Registration Department (NRD), Malaysia and other important statistical data (i.e. data on GDP and population density) from the Department of Statistics, Malaysia from the same period were also analysed. It was found that GDP has a strong negative correlation with ASMR (Spearman's rho coefficient=-0.543, $R^2=0.295$); however, the strength of correlation between population density and ASMR is very weak (Spearman's rho coefficient=-0.084, $R^2=0.008$). Those states with higher ASMR generally have higher proportion of elderly people. In addition, states with higher GDP Malaysia showed decreasing trend of ASMR from 1995 to 2010. It can be concluded that in Malaysia, states with a higher level of ASMR have lower GDP and a higher proportion of the elderly.

Keywords: Age Standardised Mortality Rate, elderly people, Gross Domestic Product, Malaysia

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INTRODUCTION

The role of economic development as an important determinant for population health has been widely researched (Cutler et al., 2002), Khang et al., 2005; Leon et al., 1997; Men et al., 2003; Preston, 1975; Shkolnikov et al., 2001). These studies

showed that severe economic downturns could pose a risk to human health and eventually increase mortality rate. However, poverty or poor economic conditions alone may not be causally related to population health (Marmot et al., 1991; Musgrove, 1987; Notzon et al., 1998). Socioeconomic factors such as level of income and/or wealth, occupation, level of education, social class or ethnic group can also be associated with population health or mortality rate (Kawachi, 2003).

There are ongoing debates with regard to the role of income inequality as a contributing factor to worsening population health (Judge, 1995; Wilkinson, 1996; Kawachi et. al., 1999). Some studies have found that variations between the states with due to an inequality of income were associated with an increased mortality rate (Kennedy, 1996). Some studies looked at differences in mortality rates in more specific locations, such as the urban/rural differences in mortality rates (Ingram et. al., 1989; Barnett et. al., 2000; Smith et. al., 1995).

People living in the more developed states usually have better access to good education, better jobs with higher level of income, enjoy better healthcare services and good infrastructure. Therefore, this research study aimed to determine whether the states with higher GDP in a developing country such as Malaysia, have an effect on the mortality. Besides GDP, this study also aimed to find out how population density and age distribution affect mortality. In this study, we measured the mortality based on Age Standardised Mortality Rate (ASMR).

The ASMR is a method of comparing rates between two or more different geographical areas where it takes into consideration the differences of age-group distributions among the states by applying the observed age specific mortality rates for each population to a standard population. Comparing crude death-rate would provide an inaccurate assessment of the state's mortality rate as it does not take into account the different age patterns of mortality for the various age-groups. Therefore, the ASMR will provide a more meaningful comparison of mortality rates between the various states in Malaysia.

This research aims to correlate Gross Domestic Product (GDP), population density and distribution of age towards mortality rate. It was initially hypothesised that among the fourteen states within Malaysia, states with higher GDP would experience a lower mortality rate. Published research is lacking in this area, especially in Malaysia. Therefore, this ecological study will provide an insight into the pattern of ASMR in each of the states within Malaysia and its association with other factors such as population density, GDP and age-group distributions. In addition, the five yearly patterns of ASMR during the 15-year period from 1995 to 2010 were studied.

METHODS

This study collected population data by states for the 2010 while GDP data were derived from the official portal webpage of Department of Statistics Malaysia, 2010. Death data for 1995 until 2010 were obtained

from the National Registration Department (NRD). Age standardised mortality rate (ASMR) for each state within Malaysia was calculated based on population data.

The adults were grouped into three categories – adults (aged between 20 and 39), middle aged (40 to 64-year-old) and elderly (older than 65 years) (Mohamad et al, 2012). This age-based grouping helps to identify the ASMR pattern of adults among the various states within Malaysia. The difference in status of development of states is determined by its GDP. Developed states are those with high GDP which usually have good infrastructure for industry, development and living.

Each of the fourteen states in Malaysia was ranked from one to fourteen according to GDP, population density and ASMR. The ASMR was ranked in ascending order, with the state having the lowest ASMR being ranked first and the state having the highest ASMR being ranked last. This was opposite from the ranking method of both the GDP and population density, both of which were ranked in a descending order, with the state having the highest GDP and population density being ranked first.

Since this was purely a descriptive population-based study, no inferential analysis was performed. All data were analysed using Microsoft Excel 2007, and SPSS was subsequently used to calculate the correlation coefficient and the R-squared for correlation between the two variables (IBM Corp. Released 2011. IBM SPSS Statistics for Windows, Version 20.0. Armonk, NY: IBM Corp.).

RESULTS

The five states with the highest GDP were Wilayah Persekutuan (WP) Kuala Lumpur, Pulau Pinang, Selangor, Sarawak and Negeri Sembilan while the densest states were WP Kuala Lumpur, Pulau Pinang, Selangor, Melaka and Perlis (Table 1). It was shown that GDP had strong negative correlation with ASMR (Spearman's rho coefficient=-0.543, $R^2=0.295$). However, population density had a very low level of correlation with ASMR (Spearman's rho coefficient=-0.084, $R^2=0.008$) (Table 2). Kelantan, Terengganu, Perlis, Pahang and Kedah which had a higher proportion of elderly had higher ASMR (Table 3). In addition, states with highest GDP (WP Kuala Lumpur, Pulau Pinang, Sarawak, Negeri Sembilan, Melaka, Pahang and Johor Bharu) except Selangor have shown consecutive improvement by having a lower ASMR. Selangor has also shown some consecutive improvement except in 2010 (Figure 1).

DISCUSSIONS AND CONCLUSIONS

Results from this study showed an inverse association between GDP and mortality (ASMR). This supported the fact that economic conditions will have some impact on mortality (Brenner, 2005). On the other hand, population density has very little or no association with mortality (Wang, 2013). This finding shows that population density in Malaysia might not be a direct determinant of mortality, especially in a particular geographical area with a stable

Table 1
Socioeconomic indicator, population density and ASMR of Malaysia, 2010

State	GDP Per Capita at Current Price, 2010 (RM)	Ranking based on GDP Per Capita at Current Price, 2010 (RM)	Population Density, 2010 (person per km ²)	Ranking based on Population Density, 2010	Age standardized mortality rate (ASMR), 2010	Ranking based on ASMR, 2010
Johor	20,911	8	174	7	358.64	4
Kedah	13,294	13	209	6	397.62	10
Kelantan	8,273	14	111	10	473.74	14
Melaka	24,697	6	467	4	362.91	5
Negeri Sembilan	27,485	5	152	8	389.87	8
Pahang	22,743	7	43	13	402.95	11
Perak	16,088	11	117	9	393.82	9
Perlis	15,296	12	302	5	456.59	12
Pulau Pinang	33,456	2	1549	2	372.64	6
Sabah	17,242	10	44	12	277.01	1
Sarawak	33,307	3	20	14	314.41	3
Selangor	31,363	4	633	3	288.21	2
Terengganu	19,225	9	81	11	458.65	13
WP Kuala Lumpur	55,951	1	7088	1	374.45	7
Malaysia	27,113		779			

Table 2
The correlation between gross domestic product and population density with the ASMR

Factors	Pearson's coefficient	R-squared
Gross Domestic Product	-0.543*	0.295*
Population density	-0.084	0.008

*P-value<0.05

or relatively high income. However, some studies revealed that population density has association with incidence of cancer and mortality (Mahoney et. al., 1990; Howe et. al., 1993)

The association between proportion of elderly and ASMR was also studied. Results showed that most states in Malaysia with

a higher proportion of elderly will also have a higher ASMR. The findings were consistent with those of previous studies in which among the adults, mortality of people with lower socioeconomic status was higher than those with higher status (Fox, 1989; Illsley et. al., 1990; Kunst et. al., 1994; Mackenbach et. al., 1997). Hence, this

Table 3
Distribution of adults, middle age and elderly in Malaysia by states, 2010

State	Adults (20-39)	%	Mid-Age (40-64)	%	Elderly (≥65)	%
Johor	1,163,500	11.91	809,500	12.20	176,800	12.43
Kedah	567,700	5.81	491,500	7.40	119,900	8.43
Kelantan	402,900	4.12	363,200	5.47	87,500	6.15
Melaka	256,300	2.62	206,200	3.11	50,400	3.54
Negeri Sembilan	327,500	3.35	258,400	3.89	58,300	4.10
Pahang	472,300	4.83	343,900	5.18	74,900	5.27
Perak	663,200	6.79	644,200	9.70	182,600	12.84
Perlis	64,400	0.66	60,200	0.91	16,900	1.19
Pulau Pinang	552,700	5.66	422,600	6.37	100,500	7.07
Sabah	1,266,000	12.96	582,700	8.78	94,400	6.64
Sarawak	791,100	8.10	589,700	8.88	138,100	9.71
Selangor	2,273,400	23.27	1,214,400	18.29	194,700	13.69
Terengganu	304,200	3.11	227,300	3.42	50,600	3.56
WP Kuala Lumpur	663,300	6.79	424,100	6.39	76,900	5.41
TOTAL	9,768,500	100	6,637,900	100	1,422,500	100

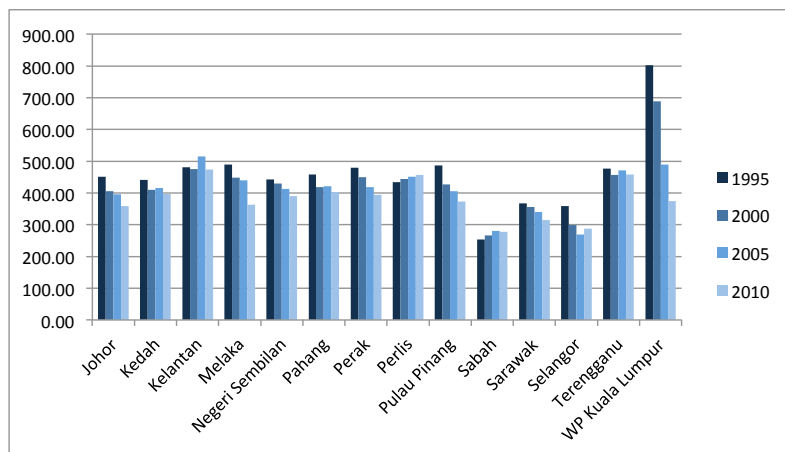


Figure 1. ASMR for states in Malaysia, from 1995 to 2010

study postulates that in general, there will be higher probability of increased mortality rate if there are more elderly people living in states with lower income level or GDP.

Generally, those who are older than 65 years may not be contributing to household income. Therefore, states with higher proportion of elderly may likely to suffer

from low GDP, which in turn may also contribute to their increased mortality rate (i.e. ASMR). Thus, the populations in these states may have a higher risk of mortality if demographic trends (i.e. proportion of elderly within the population) and overall GDP (i.e. overall economic performance) remain unchanged.

The GDP among the various states within Malaysia ranged from USD2694 to USD10,893 (Department of Statistics Malaysia, 2010). This difference had encouraged in-migration especially among people in the working age group. In-migration recorded positive correlation with the percentage of population aged between 15 and 64. Besides, there is a strong relationship between in-migration and the states' GDP (Asan Ali Golam Hassan, 2004). People migrate to more developed states to seek for better opportunities, resulting in these states becoming the focus of development, investment and industry. Between the two-year period from year 2010 and year 2011, at least 21.9% of migration was due to occupation (Department of Statistics Malaysia, 2011).

The productive age is between 20 and 50, and generating income or producing output for the state in which they live. For states with a higher proportion of the elderly, the government may consider expanding or generating more economic activities to encourage younger people to in-migrate and eventually contribute to the economic productivity of these states. States such as

Sarawak, Pulau Pinang, Negeri Sembilan and Melaka have experienced this. Although these states have higher proportion of elderly, they were among the top six states having higher end of the GDPs and as a result, those were also among the top eight states at lower end of the ASMRs.

Apart from Selangor, states which are among the top eight in GDP demonstrated a consistent decrease in ASMR for a 15-year period. Selangor experienced a decrease in ASMR for at least 10 years since 1995. This finding supported the proposition that a good economic performance is associated with better population health (Lochner et. al., 2001; Judge et. al., 2002). This proposition can be explained by various factors. There is mounting evidence of an association between an optimal delivery of primary healthcare service and an optimal level of population health, where both theoretical and empirical evidence for this association exist (Starfield, 1994; Starfield, 1998; Starfield, 2002). In addition, previous studies found that, among the medical care variables, the optimal delivery of primary healthcare service was by far the strongest contributing factor for better health outcome (Shi, 1994, 1995).

It can therefore be concluded that states within Malaysia with lower gross domestic product (GDP) and higher proportion of elderly are associated with higher ASMR. However, population density has no significant effect on ASMR. These findings suggest that it is important to develop and

strengthen the economic production and growth of each state within Malaysia. In addition, it is timely for better primary healthcare delivery system for the elderly people (especially within the less developed states) because it is expected that the proportion of the elderly in Malaysia will increase over time (Mohamad, 2012). Although Sabah and Sarawak recorded the lowest and third-lowest levels of ASMR respectively, this finding should be interpreted with caution due to the possibility of under-reporting of deaths.

LIMITATIONS

This study has few limitations. As an ecological study, the relationship of the parameters might be explained by various factors. Future studies may consider investigating these factors in relation to ASMR, GDP and population density. Besides, the results should be interpreted with caution especially with regards to the ASMR when there is possibility of under reporting of deaths especially in rural areas.

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The Effects of Work-to-family Conflict and Work-to-family Enrichment on Job Satisfaction among Academics in Malaysia

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ABSTRACT

This paper examines the effect of work-life balance from the perspective of work-to-family conflict (W-FC) and work-to-family enrichment (W-FE) in relation to job satisfaction among academics in Malaysia. A survey method using self-administrated questionnaire was adopted to gather data from 307 respondents. Results were analysed using AMOS 23 and SPSS23. Findings showed that all W-FC and W-FE dimensions were significantly correlated with job satisfaction. However, for direct effect result, only W-FE capital significantly affected job satisfaction whereas none of W-FC dimensions found to have had an effect on job satisfaction. This study contributes to the body of knowledge on work-life balance and job satisfaction among Malaysian Research University academics. The findings provide useful information for university academics and human resource practitioner for future organisational improvement and policy development.

Keywords: Work-to-family Enrichment, Work-to-family Conflict and Job Satisfaction

INTRODUCTION

Work-life balance which revolves around work and family domains is not a new issue. Greenhaus, Collins and Shaw (2003) defined work-family balance as the extent to which individuals are equally engaged

and satisfied with his/her work and family roles. Perrons (2003) argued that work-life balance is not only essential to health and well-being of individuals, but also cost-efficient for institutions towards providing a stable work environment. Those who have good work-life balance will perform better in workplace, thus, increases productivity of the organisation. It has been argued that achieving balance between work and

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family is not only critical in maximising an individual's functionality at work but also helpful in minimising occurrence of conflict between work and family (Greenhaus & Buetell, 1985).

In Malaysia, work-family balance became a hot topic when the number of dual income earners increased (Aminah, 1996). Dual-earner couple is when both spouses are earning an income. The Department of Statistics Malaysia (2013) released reports which showed a steady increase in the ratio of working women to men, 6:4. Recent statistics also revealed a high participation of woman in the work force (Labour Force Participation Rate - LFPR) at 54.1% (Department of Statistics Malaysia, 2016). Equal involvement of both genders in work reflect change in today scenario where traditional view which men function as the sole breadwinner while women function as family caretakers are no longer been practiced.

The increasing number of dual income earners is one of the reason which has caused conflict between work and family life (Panatik, et al, 2012a; Jamadin et al., 2015). This is because, work-to-family conflict happens when work domain interferes with family domain (Greenhaus & Beutell, 1985). Conflict is a result of collision between multiple roles in an individual's life. Jamadin et al. (2015) argue that excessive work stress caused by poor working conditions is one of the main factors which trigger work-to-family conflict. According to the role theory (Kahn, Wolfe, Quinn, Snoek, & Rosenthal, 1964),

conflict happens when individuals fail to live up to expectations of their role. For some individuals, multiple roles are difficult to be balanced which explain why some individuals encounter high level of work-to-family conflict (Greenhaus & Powell, 1985). Those with high work-to-family coonflict will experience physical and emotional exhaustion as well as unstable behaviour which hinders them from participating fully in both family and work activities.

In contrast, a good balance between work and life results in work-to-family enrichment. Carlson et al. (2011) argue that a good balance in this regard could promote higher occurrence of work-to-family enrichment. Greenhaus and Powell (2006) define work-to-family enrichment as a situation where participation at work helps individual to perform better in the family domain. The concept is opposite of work-to-family conflict where it and focuses on how work brings beneficial effect towards the family. According to the role accumulation theory, having multiple roles increase reciprocity in terms of benefit, privilege, resource and social relationship (Sieber, 1974). That is, positive energy and experience gained through participation in multiple roles promote higher role enhancement which improves individual gratification, skills and commitment (Marks, 1974). This is also highlighted in work-to-family enrichment theory by Greenhaus and Powell (2006) which states that multiple resources in a role generate higher performance in another role. Hamid and Mohd (2014) claim that work-to-family

enrichment provides synergistic effect which increases the individual's ability to harmonise balance between work and family domain which in turn leads to good physical, emotional and behavioural participation.

In Malaysia, academics are often confronted with issues related to work-family balance. Panatik et al. (2012a) argue that working in a research university becoming more increasingly challenging which explains why some Malaysian academics have difficulty in managing their work-life balance. However, most studies which investigating work-life balance tend to emphasise on work-to-family conflict while there is limited study investigating in on work-to-family enrichment. It is believed that having multiple perspective of work-life balance is crucial since previous studies reported that both work-to-family conflict (Panatik, Rajab, Shah, Rahman, Yusoff, & Badri, 2012a) and work-to-family enrichment (Swee Fung, Ahmad & Omar, 2012) are connected with job satisfaction. Therefore, the aim of the current paper is to investigate how work-life balance including work-to-family conflict and work-to-family enrichment affect job satisfaction of university academics in Malaysia.

LITERATURE REVIEW

Work-to-family Conflict and Job Satisfaction

For decades, job satisfaction had been associated with work-life balance (Zulfikar,

Khan, Afaq, & Khan, 2013). Job satisfaction is defined as the extent to which a person believes that his/her work has a significant impact on personal well-being and overall life satisfaction (Spector, 1997). It is part of an organisational commitment indicator which is important to develop positive work environment (Kovach, 1977). Jijena Michel and Jijena Michel (2012) argue that job satisfaction functions as an evidence-based approach that is pre-requisite in promoting positive changes in organisations.

Earlier studies have shown the link between work-to-family conflict (W-FC) and work-to-family enrichment (W-FE) with job satisfaction (Anafarta, 2011; Swee Fung et al., 2012; Goa & Jin, 2015; Choi & Kim, 2011). Panatik et al. (2012b) found work-to-family conflict significantly and negatively related with Malaysian academics job satisfaction. They observed that the increasing level of work-to-family conflict decreased the level of an academic's job satisfaction. Hence, the study showed work related stresses and conflicts has caused academics to physically, emotionally and behaviourally underperform in the family domain which in turn reduced their job satisfaction level. Their findings supported Anafarta's (2011) who found similar pattern on the negative effect of work-to-family conflict towards job satisfaction.

Some studies provided more in-depth result of the effect of work-to-family conflict and job satisfaction where they discussed the effect towards job satisfaction using

specific dimensions of work-to-family conflict. Carlson, Kacmar and William (2000) suggest that there is three important dimensions of work-to-family conflict: time-based conflict, strain based conflict and behavioural based conflict. The W-FC time-based conflict is a situation where time spent at work interferes with participation in family domain. The W-FC strain-based conflict is when strain accumulated from work brings conflict to the family domain. The W-FC behavioural conflict is when inappropriate behaviour at work causes conflict in the family domain.

For example, Zulfiqar et al. (2013) found that W-FC time-based and W-FC strain were negatively correlated with job satisfaction. They discovered that high level of W-FC time and W-FC strain correlated with lower job satisfaction among nurses in Bhakkar district, Afghanistan. According to them, excessive working time and high work strain caused poor participation in family domain which lowers their job satisfaction level. Meanwhile, Qiu and Yan (2010) highlighted negative relationship between W-FC strain and job satisfaction among manufacturing workers in China. They found that excessive work strain elevated work-to-family conflict and caused low job satisfaction among the workers. However, limited evidence was found on the effect of W-FC behavioural towards job satisfaction. Even though some studies showed negative relationship between W-FC behavioural towards job satisfaction, yet, the result was

insignificant (Khan & Khan, 2014; Qiu & Yan, 2010). Therefore, , this study proposes the following hypotheses.

H1: Work-to-family conflict time-based will significantly and negatively influence job satisfaction

H2: Work-to-family conflict behavioural-based will significantly and negatively influenced job satisfaction

H3: Work-to-family conflict strain-based will significantly and negatively influence job satisfaction

Work-to-family Enrichment and Job Satisfaction

Studies found that work-to-family enrichment was associated with higher job satisfaction (Swee Fung et al., 2012; Lu, 2011; Simone, Lampis, Lasio, Cicotto, & Putzu, 2014). Jijena Mivheal and Jijena Mivheal (2012) showed that work-to-family enrichment was positively associated with job satisfaction among academics in Economics and Finance Faculty of Juan Misael Saracho Autonomous University. They highlighted that work-to-family enrichment is important in promoting high level of job satisfaction among the academics. This was further supported by Swee Fung, Ahmad and Omar (2014) who demonstrated a found positive association between work-to-family enrichment and job satisfaction among secondary school teachers in Bangsar Zone, Malaysia.

The findings suggest that good working condition in school boosts work-to-family enrichment that increases teacher's level of job satisfaction.

Specifically, work-to-family enrichment had also been investigated by some studies based on particular dimensions. Work-to-family enrichment consist of three main dimensions that are similar to work-to-family conflict. The dimensions are W-FE development, W-FE affect and W-FE capital (Carlson, Kacmar, Wayne & Gruwacz, 2006). The W-FE development is a situation where participation in work helps increase knowledge, skills and idea to create a better family. The W-FE is a situation where good emotion experienced in work helps to build good emotion towards the family while W-FE capital is the extent to which accomplishment and success in work help individuals to be a better family member.

Empirical evidence by Mc Nall, Nicklin and Masuda (2010) suggested a positive relationship between W-FE development, W-FE affect and W-FE capital and job

satisfaction. They found that frequent experience of W-FE promotes high level of job satisfaction. This was confirmed by Carlson, Kacmar, Zynuska, Ferguson and Whitten (2011) who also reported a positive association between W-FE development, W-FE affect and W-FE capital with job satisfaction. They argued that enrichment from work towards family in numerous aspects such as development, emotion and capital could help workers feel more satisfied towards their job. Therefore, this study proposes below hypotheses.

H4: Work-to-family enrichment development is significant and positively influences job satisfaction of the respondents

H5: Work-to-family enrichment affect will be significant and positively influences job satisfaction of the respondents

H6: Work-to-family enrichment capital will be significant and positively influences job satisfaction of the respondents.

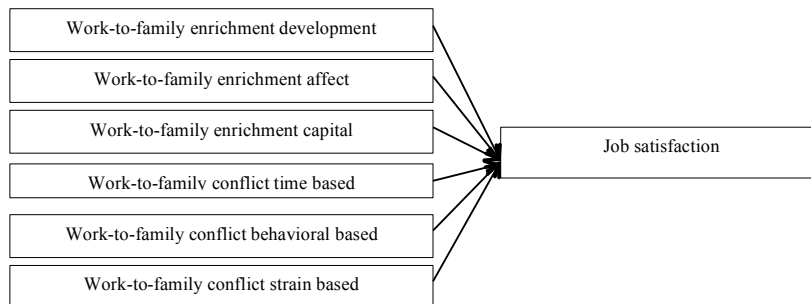


Figure 1. Conceptual Model of the study

METHODS

Sample and Procedure

A survey method using self-administered questionnaire was adopted to collect data. The questionnaire was distributed through online and self-collection. The online questionnaire was structured using Google Document and were distributed using G-mail. Three reminders were sent to the participants with interval of 2 weeks. Concurrently, self-collection was executed through drop and collect method where the questionnaire was distributed and collected 2 weeks later. During online data collection, a total of 3686 emails were sent out where 712 emails were sent to academics in UKM, 710 emails to academics in UM, 755 to academics in UPM, 701 to academics in USM and 808 to academic in UTM. A total of 150 questionnaires were sent out during self-data collection. In the end, 350 respondents had completed the survey within 6 months. However, six respondents were eliminated as missing data and 37 respondents were excluded as outliers in this study. As total of 43 cases were excluded, thus making the final sample of 307 respondents.

Measurement

Work-to-family enrichment (W-FE) was measured using nine items adopted from Carlson et al. (2006) work-to-family enrichment questionnaire. It consisted of three dimensions: W-FE development, W-FE affect and W-FE capital. Example of the item is "My involvement in my

work helps me to understand different viewpoints and this helps me be a better family member (W-FE development)", "My involvement in my work puts me in a good mood and this helps me be a better family member (W-FE affect)", "My involvement in my work helps me feel personally fulfilled and this helps me be a better family member (W-FE capital)". All items were scored using 5-point Likert scale ranging from 1=strongly disagree to 5=strongly agree. Construct validity using Confirmatory factor analysis (CFA) confirmed the scale as a three-factor model with good fit indices of $\chi^2(n=307)=73.03$, $p<0.001$, $\chi^2/df=3.04$, RMSEA=0.08, RMR=0.02, CFI=0.95, GFI=0.98, AIC=115.03, CAIC=214.29) where each items yielded high factor loading ranged from 0.84 to 0.94.

Work-to-family conflict (W-FC) was measured using nine items of work-family conflict scale adopted from Carlson et al., (2000). This scale composes of three dimensions: W-FC time-based, W-FC strain-based and W-FC behavioural-based. Items were rated using 5-point Likert scale from 1=strongly disagree until 5=strongly agree. Examples of the items are "The problem-solving behaviours I use in my job are not effective in resolving problems at home (W-FC behavioural)", "When I get home from work I am often too frazzled to participate in family activities/responsibilities (W-FC strain)", "The time I must devote to my job keeps me from participating equally in household responsibilities and activities (W-FC time)". Fit indices confirmed that the instruments yielded a good fit with

data $\chi^2(n=307)=58.92$, $p<0.001$, $\chi^2/df=2.45$, RMSEA=0.07, RMR=0.03, CFI=0.96, GFI=0.95. All items also yielded acceptable factor loading ranging from 0.60 to 0.90.

Job satisfaction was measured using eight items from Michigan Organizational Assessment (MOAQ) of Job Satisfaction Subscale (JSS). Examples of JSS items are “*Regarding your work in general. How pleased you with the people you work with?*” and “*Regarding your work in general. How pleased you with the way your department is run?*”. Answers were measured using a 5-point Likert scale with 1=very satisfied, 2=satisfied, 3=unsatisfied, 4=highly unsatisfied and 5=not relevant. Confirmatory factor analysis confirmed job satisfaction as a single-factor model with good fit in terms of the data $\chi^2(n=307)=39.25$, $p<0.001$, $\chi^2/df=2.45$, RMSEA=0.07, RMR=0.02, CFI=0.97 and GFI=0.98. All items were found to have moderate to high factor loading ranged from 0.52 until 0.83.

Data Analysis

AMOS 23 and SPSS 23 were used to analysis data. Descriptive and inferential statistic including mean, standard deviation (SD), reliability, and correlational analysis were executed using SPSS 23. Meanwhile AMOS 23 was executed to analyse confirmatory factor analysis (CFA) and direct effects analysis for purpose of examining the constructs validity and regression result for the direct effect of W-FE and W-FC on job satisfaction.

RESULTS

Demographic Profiling of the Respondents

It was found that slightly more than half of the respondent in this study were female academics, 173 respondents (56%). More than half of the respondents were ethnic Malays accounting for 251 respondents (81%), followed by Chinese accounting for 24 respondents (8%), and Indians with 8 respondents (3%) and the others representing 24 respondents (8%). For marital status, three-quarters, 260 respondents (85%), were married, 37 respondents were single (12%), nine were divorced (3%) and one classified as others. Academics from Universiti Putra Malaysia (UPM) had highest participating rate with 85 respondents (28%), followed by Universiti Teknologi Malaysia (UTM) with 78 respondents (25%), Universiti Sains Malaysia (USM) with 60 respondents (20%), Universiti Malaya (UM) with 49 respondents (16%) and lastly University Kebangsaan Malaysia (UKM) with 35 respondents (11%). About half of the respondents were associate professors accounting for 158 respondents (52%), followed by senior lecturers representing 62 respondents (20%), professor accounting for 49 respondents (16%) and lecturer with 38 respondents (12%). Nearly a quarter of the respondents have tenured post below five years with 71 respondents (23%), followed by those having between 6 and 10 years with 62 respondents (21%), 25 and above with 56 respondents (18%), 11 to 15 years with 48

respondents (16%), 16 to 20 years with 45 respondents (14%) and 21 to 24 years with 25 respondents (8%).

Descriptive and Correlation Analysis

Table 1 below presents descriptive statistic of mean, standard deviation and correlation between variables of the study. The result indicated that W-FE development ($m=3.942$, $SD=\pm 0.713$), W-FE affect ($m=3.540$, $SD=\pm 0.869$), and W-FE capital ($m=3.540$, $SD=\pm 0.738$) and job satisfaction ($m=3.739$, $SD=\pm 0.587$) were high. All the dimension of W-FC namely W-FC time ($m=3.127$, $SD=\pm 0.952$), W-FC strain ($m=2.908$, $SD=\pm 0.943$) and W-FC behavioural ($m=2.683$, $SD=\pm 0.754$) were in moderate level.

Correlation analysis showed that work-to-family conflict has weak negative relationship with job satisfaction ($r=-0.325$, $p<0.01$). Result emphasised that

high-level work-to-family conflict leads to decreasing level of job satisfaction among academics in Malaysia. The W-FC time-based have the highest correlation with job satisfaction ($r=-0.380$, $p<0.01$). Meanwhile W-FC behavioural-based have the weakest relationship with job satisfaction with $r=-0.286$ ($p<0.01$). However, result indicated that W-FC strain-based was insignificant with job satisfaction. Meanwhile, overall work-to-family enrichment has positive and moderate relationship with job satisfaction ($r=0.463$, $p<0.01$). That is, high level of work-to-family enrichment increased job satisfaction's level of research university academics in Malaysia. Specifically, W-FE affect ($r=0.442$, $p<0.01$) have the highest correlation with job satisfaction followed by W-FE capital ($r=0.441$, $p<0.01$) and W-FE development ($r=0.365$, $p<0.01$).

Table 1
Correlation of the variables

Mean	SD	1	2	3	4	5	6	7	8	9
1. WFE	3.788	0.683	-							
2. W-FEd	3.942	0.713	.879**	-						
3. W-FEa	3.540	0.869	.918**	.685**	-					
4. W-FEc	3.895	0.738	.901**	.702**	.756**	-				
5. WFC	2.906	0.761	-.631**	-.474**	-.671**	-.539**	-			
6. WFCt	3.127	0.952	-.461**	-.358**	-.497**	-.372**	.884**	-		
7. W-FCs	2.908	0.943	-.607**	-.447**	-.661**	-.507**	.878**	.673**	-	
8. W-FCb	2.683	0.754	-.561**	-.420**	-.570**	-.515**	.816**	.602**	.553**	-
9. JS	3.739	0.587	.463**	.365**	.442**	.441**	-.325**	-.380**	-.185	-.286**

Notes: W-FE: Work-to-family enrichment, W-FEd: Work-to-family enrichment development, W-FEa: Work-to-family enrichment affect, W-FEc: Work-to-family enrichment capital, W-FC: Work-to-family conflict, W-FCt: Work-to-family conflict time based, W-FCb: Work-to-family conflict behavioural based, W-FCs: Work-to-family conflict strain based, JS: Job satisfaction * $p<0.05$, ** $p<0.01$

Direct Effects Result

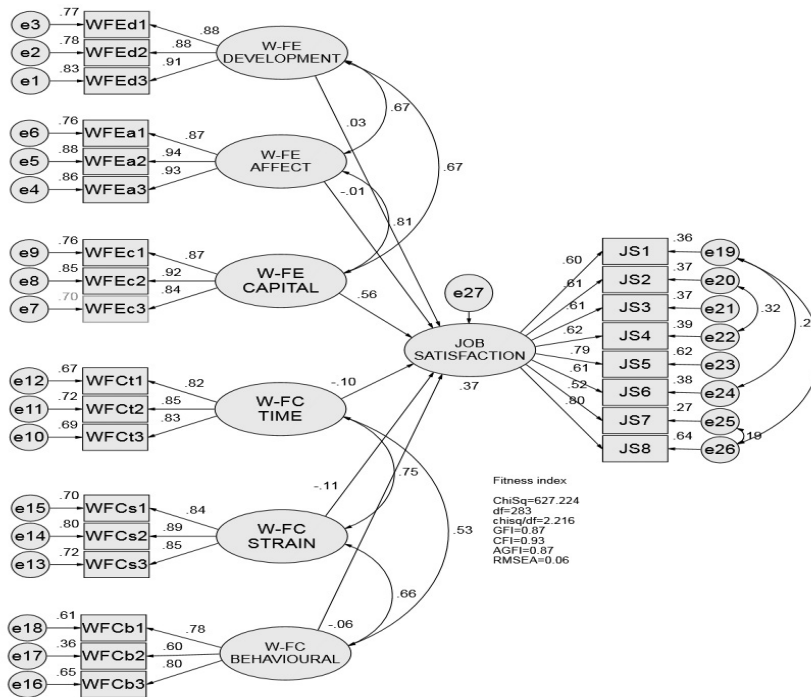


Figure 2. Final model of direct effects work-to-family conflict and work-to-family enrichment towards job satisfaction

Table 2

Result of work-to-family conflict and work-to-family enrichment towards job satisfaction

Hypotheses			Standardised Estimates	S.E	C.R.	p
H1	WF-C time	→	Job satisfaction	-.117	.031	-1.933 .053
H2	WF-C behavioural	→	Job satisfaction	-.065	.037	-1.192 .233
H3	WF-C strain	→	Job satisfaction	-.109	.026	-1.844 .065
H4	WF-E development	→	Job satisfaction	.030	.036	1.140 .254
H5	WF-E affect	→	Job satisfaction	-0.01	.030	1.716 .086
H6	WF-E capital	→	Job satisfaction	.556***	.049	6.486 ***

Notes: *p<0.05, **p<0.01, p<0.001***

Figure 2 and Table 2 above are direct effect model which show work-to-family conflict and work-to-family enrichment towards job satisfaction. It was found that the overall model has yielded good fit with data $\chi^2(n=307)=627.224$, $p<0.001$, $df=283$,

$\chi^2/df=2.216$, RMSEA=0.06, CFI=0.93 and GFI=0.87. Overall, both work-to-family conflict and work-to-family enrichment explained 37% variance in job satisfaction ($R^2=0.37$). Specifically, results indicated that only W-FE capital has significant effect on job satisfaction ($\beta= 0.556$, $p<0.001$). Results suggested that increasing level of W-FE capital was associated with increasing level of job satisfaction. However, none of W-FC dimensions have significant effect on job satisfaction. Therefore, only H6 was supported.

DISCUSSION OF THE FINDINGS

This study examined the relationship and impact of work-to-family conflict (W-FC) and work-to-family enrichment (W-FE) on job satisfaction among Malaysian academics. The findings showed that W-FC was significantly and negatively correlated with job satisfaction. This was consistent with earlier studies by Zulfiqar et al. (2013), Buonocore and Russo (2013), Burke et al. (2013) and Huffman Casper and Payne (2014) who reported high work-to-family conflict results in low job satisfaction across countries. Panatik et al. (2012b) also showed negative correlation between work-to-family conflict and job satisfaction. This study suggested that W-FE was positively correlated with job satisfaction. More specifically, it showed high level of W-FE led to reduced job satisfaction among Malaysian academics and corroborated by Swee Fung et al. (2014) where they reported a positive relationship between work-to-

family enrichment and job satisfaction among teachers in Malaysia.

This study also tested the impact of W-FC and W-FE on academics' job satisfaction. Both W-FC and W-FE were explained by 37% variance in job satisfaction. Only one dimension of W-FE, which was WFE capital, had significant effect on job satisfaction. While, all W-FC dimensions have no effect on academic's job satisfaction. The result indicated that high level of W-FE capital was associated with increasing level of academic's job satisfaction. W-FE capital is the extent to which accomplishment and success in workplace helps individual be a better family member (Stoddart and Madsen, 2007). It was found that frequent positive accomplishment and success in the workplace in terms of high W-FE capital increased job satisfaction level of the research university academics. This result is consistent with the role accumulation theory by Sieber (1974). According to the theory, having multiple roles benefit individual by increasing their privileges. This is because, accomplishment gained through multiple role-playing increases positive social interaction that leads to ego gratification and satisfaction (Sieber, 1974). That being said, when individual successfully manage their roles, it increases their chances to receive more role privileges in term of success and accomplishment. Frequent experiences of success and good accomplishment help academic to feel more satisfied and happy with their job which promotes higher level of job satisfaction.

This was supported by Granny, Smith and Stone (1992) where they argued that high job satisfaction could only be achieved if the worker had demonstrated high achievement. However, this study found that W-FE affect (i.e. emotion) and W-FE development (i.e. knowledge, skill, ideas) did not affected job satisfaction. Even though results indicated that level of W-FE affect and W-FE development were high, it was insignificant with job satisfaction. Perhaps, good emotion and high skill at the university are not important factors which contribute to higher academic's job satisfaction level compared with accomplishment and success (W-FE capital).

This study, however, failed to support work-to-family conflict for job satisfaction. Previous studies (Anafarta, 2011; Clavo-Slaguro, Carroscio-Gonzalez, Maria, & Lecea, 2010) suggested that work-to-family conflict has insignificant impact on job satisfaction, which was supported in this study. Result suggested that even though academics experienced high level of W-FC strain ($m=2.908$) and W-FC time ($m=3.127$) while near to high level for W-FC behavioural ($m=2.683$), yet they do not appear as factors that caused job dissatisfaction. Perhaps the level of work-to-family conflict and work-to-family enrichment could explain these results. Based on the result, the overall mean for work-to-family conflict was 2.906, which was lower compared with work-to-family enrichment with an overall mean of 3.788. This could be because even though

academics experience work-to-family conflict, they also experience work-to-family enrichment. Thus, work-to-family conflict is less relevant in the academic's job satisfaction.

CONCLUSION

This study showed the effect of W-FC and W-FE on academics' job satisfaction. In particular, W-FE capital was found to have strongest effect on academics' job satisfaction. It is hoped that the result from this study would assist future researcher, universities and human resource practitioners to outline proper work guideline focuses on aspect of work-to-family enrichment capital (i.e. success and accomplishment) in workplace as a way to increase job satisfaction among academics in the future. Despite these contributions, this study was subjected to few limitations. First, the findings were based on survey conducted on academics in Malaysia. Therefore, the result cannot be generalised to other populations. Second, this is a cross-sectional study, which limits its capability to ascertain causal relationship among variables examined.

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Stationarity of the Fama-French Three Factor Model Factor Premiums in India

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ABSTRACT

The monthly factor premium time series for the three factors (market, size and value) in the Fama-French three factor model in India are found to be stationary for period April 01, 1991 till March 31, 2015. The stationarity behavior for the time series is inferred from a visual examination as well as by use of the Augmented Dickey Fuller test (Said & Dickey, 1984; Said, 1991; Fuller, 2009), the Phillips-Perron test (Philips & Perron, 1987) and the KPSS test (Kwiatkowski et al., 1992). Thus, it can be inferred that the investors' return expectations from the overall market have not changed in spite of tremendous developments in the Indian economy and the transformations in the Indian stock market during the study period. It could also be noted that the Granger causality tests involving the market risk premium, size and value premium showed that size premium Granger causes value premium. This implies that at least a part of variation in stock returns due to value could possibly be explained by size.

Keywords: Fama-French three factor model, size premium, value premium, stationarity, stationarity tests (ADF, PP, KPSS), Granger causality

INTRODUCTION

The purpose of this paper is to examine the behavior of the factor premium time

series for the three factors in the Fama-French three factor model in the Indian market between April 1991 and March 2015. The three factors are market, size and value. The chosen period was a period of major transformation for the Indian capital market. This period saw the market shift from an open outcry based trading system to a nationwide automated screen based trading system, a shift from paper based

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(that is, share certificate based) trading to dematerialised trading, entry of foreign institutional investors in a huge way, and major regulatory changes.

Raghuram (2009) has studied if the asset pricing behavior in India has changed in the aftermath of the establishment of the National Stock Exchange (NSE) using the Fama-French three factor model. His method was to test if the sensitivities to the factors in the Fama-French three factor model have changed. He concluded that the asset pricing behavior has indeed changed in the aftermath of the establishment of the NSE.

The motivation of this paper is as follows. If the sensitivities to one or more factors in the Fama-French three factor model have changed in the aftermath of the establishment of the NSE, then it may be possible that the behavior of the factor premiums may have changed.

The period 'aftermath of the establishment of the NSE' does not imply that the changes in the factor premiums behavior might be solely due to the establishment of the NSE. The establishment of the NSE did lead to a major transformation in the Indian market – the shift from an open outcry trading system to a nationwide automated screen based trading system. But there had been other major changes and developments in the Indian market during this period.

The finding of this study shows that the factor premium time series for the three factors in the Fama-French three factor model are stationary for the period studied (April 01, 1991 till March 31, 2015). The frequency for the estimation of the factor

premiums is monthly. A visual examination of the time series data indicates that the time series for the three factor premiums might be stationary. A rigorous confirmation of the stationarity of the factor premium time series for the three factors is achieved by use of the Augmented Dickey Fuller test (Said & Dickey, 1984; Said, 1991; Fuller, 2009), the Phillips-Perron test (Phillips & Perron, 1987) and the KPSS test (Kwiatkowski et al., 1992).

These findings suggest that investors' return expectations from the overall market have not changed in spite of tremendous developments in the Indian economy and the transformations in the Indian stock market during the study period.

Another interesting fact that has emerged from study is that the Granger causality tests involving the market risk premium, size and value premium showed that size premium Granger causes value premium. This implies that at least a part of variation in stock returns due to value could possibly be explained by size. It could also be noted in this context that there are studies providing evidence of the value effect being stronger in small cap stocks compared with large cap stocks among which the noteworthy ones are Fama and French (2012) and Chan and Lakonishok (2004).

The Fama-French Three Factor Model: Background

Fama and French (1993) put forward a factor model that estimates the expected return on the i th portfolio, R_i , using the following three-factors:

- (i) The return on the market portfolio R_m less the risk free rate, R_f .
- (ii) The difference between the return on a portfolio of low market equity stocks and the return on a portfolio of high market equity stocks (SMB, small minus big); and
- (iii) The difference between the return on a portfolio of high-book-to-market stocks and the return on a portfolio of low-book-to-market stocks (HML, high minus low).

The Fama-French three factor model can be stated as follows:

$$R_i - R_f = \beta_i (R_m - R_f) + (s_i * SMB) + (h_i * HML)$$

Where β_i , s_i and h_i are the regression coefficients corresponding to market, SMB and HML respectively.

The developments that led to the Fama-French three factor could probably be traced back to 1970s when researchers began reporting 'anomalies' in the CAPM, that is, patterns in average returns that could not be explained by the CAPM.

One of the first anomalies, namely E/P effect, was reported by Basu (1977). He presented evidence that stocks with high earnings/price ratios (or low P/E ratios) earned significantly higher returns than stocks with low earnings/price ratios. Banz (1981) and Reinganum (1981a) put forth the size effect which meant that the average returns on small capitalisation stocks was much higher than that for large capitalisation stocks. The average returns of the small capitalisation stocks was seen

to be much higher than the CAPM return estimates. Stattman (1980) and Rosenberg et al. (1985) found that average returns on US stocks is directly proportional to their book value to market value ratio, a phenomenon unexplained by the CAPM. Likewise, many other variables were shown to have an explanatory power over and above the CAPM market factor in describing the returns on stocks. Bondt and Thaler (1985) discovered long term reversal in stock returns, that is, stocks with low long term past returns tended to have higher future returns and vice versa. Jegadeesh and Titman (1993), in a development over Jegadeesh (1990), gave more clarity to the momentum effect, that is, stocks performing well in the previous three to twelve months continued to do well for the next few months, and stocks not performing well in the previous months continued their poor performance for the next few months. The momentum effect too is unexplained by the CAPM.

Fama and French (1996) show that their three-factor model is able to explain all the anomaly in patterns except for the momentum effect.

The size and value premium in the Fama-French three factor model are of interest to both researchers and practitioners. The Ibbotson SBBI Valuation and Cost of Capital Year Book and the Duff and Phelps Valuation Handbook publish the size premium data for the US market. The size premium data is used for company valuation. Professor Kenneth R. French, the Roth Family Distinguished Professor of Finance

at the Tuck School of Business at Dartmouth College, USA maintains regularly updated data on size and value premium on his website which is available for use by researchers as well as practitioners.

The Fama-French three factor model has found support in the emerging and Indian markets too. Drew (2003) proves the applicability of the Fama-French model in Hong Kong, Korea, Malaysia and the Philippines. Bundoo (2008) states that the Fama-French three factor model well describes the returns of stocks listed on the Stock Exchange of Mauritius. Barry et al. (2002) studied size and book-to-market effects in 35 emerging markets during 1985- 2001 using monthly data on individual stocks sourced from Standard and Poor's Emerging Markets Data Base (EMDB 2000). They provide support for the existence of size and value effects in these markets.

Connor and Sehgal (2001) and Mohanty (2001) show that the Fama-French three factor model is a good descriptor of stock returns in the Indian context. Bahl (2006), Tripathi (2008), Raghuram (2009), Taneja (2010) and Balakrishnan (2016) support the applicability of the Fama-French three factor model in the Indian context.

Screen Based Trading (SBT) and Asset Pricing – Direct Tests

Jain (2005) directly tests the hypothesis that the shift to automated electronic trading from floor-based trading leads to decrease in the equity premium demanded by investors.

He studies the returns on stock exchanges in 71 countries from January 1973 to August 2001. The equity premium is estimated using the dividends growth model in Fama and French (2002) and the international asset-pricing model in Bekaert and Harvey (1995). The cost of equity (as estimated by the two models) is reduced in the long term post the introduction of electronic trading. Jain (2005) supports the logic that electronic markets lead to improvement in liquidity, informativeness and stock valuation and all these collectively aid in the reduction of the cost of equity.

Screen Based Trading (SBT) and Liquidity, Transaction Costs and Market Efficiency

Screen based trading was first launched in India in November 1994 when a new stock exchange, the National Stock Exchange (NSE), started equity trades on a screen based trading platform. A competing exchange, the Mumbai Stock Exchange (BSE) launched its screen based trading platform called the BSE Online Trading (BOLT) on March 14, 1995 (Till then BSE was functioning only with an open outcry floor based trading system.).

The impact of the introduction of nationwide electronic screen based trading (SBT) and other reforms led to a drastic reduction in the transaction costs in the Indian stock markets. This is summarised in the below table taken from Shah (1999). It could also be noted that during 1999 the Indian market was making the transition

Table 1
SBT and transaction costs

Component	India			Best in the world
	1994	1999		
		Physical	Demat	
Trading				
Fees to intermediaries	3.00	0.50	0.25	0.25
Market impact cost Clearing	0.75	0.25	0.25	0.20
Counterparty risk Settlement	Present	0.00	0.00	0.00
Paperwork	0.75	0.75	0.10	0.05
Bad paper risk	0.50	0.50	0.00	0.00
Stamp duty	0.25	0.25	0.00	0.00
Total	>5.25	2.25	0.60	0.50

Note: The values above are in percentage and for a one-way transaction. Total transaction costs of 0.6% in the demat mode in 1999 imply that a person buying shares worth Rs.100 would have to spend around Rs.100.60. The market impact cost is calculated from the bid-ask spread. Suppose the shares for XYZ Company are quoted at 114.35/114.40. These quotes are for a quantity of 50 shares. Now $(\text{bid} + \text{ask})/2 = (114.35 + 114.40)/2 = \text{Rs.}114.375$. The market impact cost for 50 shares of XYZ Company in percent is calculated as $(114.375 - 114.35) * 100 / 114.35 = 0.0219\%$.

Source: Shah (1999)

from paper (certificate) based trading to dematerialised trading (paperless trading or demat trading).

Hence, we can see that total transaction costs have declined from being greater than 5.25% in 1994 to 0.6% in the demat mode in 1999. The market impact cost (derived from the bid-ask spread) too has declined from 0.75% in 1994 to 0.25% in 1999.

Shah and Thomas (1996) study the impact of the launch of BOLT, the screen based trading platform of the Mumbai Stock Exchange (BSE). They find that the launch of the BOLT has caused an improvement in liquidity as given by two measures, namely aggregate trading volume and trading frequency at the security level. They also provide evidence for improvement in market efficiency by observing that the skewness and short-term correlation of security

returns are diminished in the aftermath of the launch of the BOLT.

Green et al. (2010) also study the impact of the launch of the BOLT on the Mumbai Stock Exchange (BSE). They use two samples of shares, one comprising the more liquid or A shares and the other comprising the less liquid or B shares. They conclude that the introduction of BOLT resulted in a significant improvement in market performance for both A and B shares, in terms of share valuations as well as the LEV (liquidity, efficiency, and volatility) measures. However, they also make an interesting observation that the gains in liquidity and share valuation were more for B shares as compared to A shares.

Studies have been conducted on the repercussions of the launch of screen based trading (SBT) in stock markets

outside India. Blennerhassett & Bowman (1998) study the impact of introduction of electronic screen trading system on June 24, 1991 in the New Zealand Stock Exchange (NZSE) (NZSE had an open outcry trading system till then.). They provide evidence in support of reduction of bid-ask spread and transaction costs.

Majnoni and Massa (2001) study the impact of various reforms introduced between 1991 and 1994 in the Italian Stock Exchange, namely creation of specialised intermediaries, obligation to trade on official markets, screen based trading and cash settlement. They conclude that all the reforms, except for cash settlement, have led to increased market efficiency.

Chelley-Steeley and Lucy (2008) examine the impact of the introduction of Xetra, a fully electronic trading system, on June 07, 2000, on the Irish Stock Exchange in Dublin (The Irish Stock Exchange had a floor based trading system till then.). They find that post the introduction of the electronic trading system, the stock prices adjust faster to arrival of new information, clearly indicating an improvement in market efficiency.

Stoll (2006) in his discussion on the impact of electronic trading (fully automated exchanges with screen based trading systems) in the US states that electronic trading has resulted in reduced brokerage commissions, reduced bid-ask spread and increased market efficiency.

Thus, it can be seen that the introduction of screen based trading has improved liquidity, reduced transaction costs and increased market efficiency in India and markets across the world.

Liquidity, Transaction Costs, Market Efficiency and Asset Pricing

O'Hara (2003) reveals a number of authors who have provided empirical evidence that asset prices do reflect liquidity costs - Amihud and Mendelson (1986, 1988), Brennan & Subrahmanyam (1996), Brennan et al. (1998), Chalmers and Kadlec (1998), Chordia et al. (2000), Pastor & Stambaugh (2001) and Amihud (2002). O'Hara (2003) goes on to elaborate that liquidity is like a cost borne by investors and that liquidity costs beyond a point can negatively affect an asset value. It is significant to note that O'Hara (2003) goes on to add that market microstructure does influence liquidity costs and that reduction of these costs through the introduction of an efficient trading mechanism would significantly impact an asset's value.

Amihud and Mendelson (1986), in a study on NYSE (New York Stock Exchange) stocks, examine the effect of illiquidity (measured by the bid-ask spread) on asset pricing. They find that average portfolio risk adjusted returns are positively related to their bid-ask spread and the return spread relationship is a concave curve with the returns increasing at a decreasing

rate with increasing spread. Brennan and Subrahmanyam (1996), in a study of the US market, find that there is a significant return premium associated with the variable transaction costs (trade size dependent) and fixed transaction costs.

Pontiff (1996), in a study on closed-end funds in the U.S., provides evidence that arbitrage costs can cause asset prices to deviate from fundamentals. Two types of arbitrage costs are considered - transaction costs (brokerage fees, market impact costs, and bid-ask spreads) and holding costs (borrowing costs, opportunity costs from not being able to fully invest short-sale proceeds, and risk exposure). By using a sample of closed-end funds he proves that discounts observed in closed end funds are due to arbitrage costs (Discount - The traded price of a closed end fund being lesser than the market value of its stock portfolio). Pontiff (1996) demonstrates that transaction costs are positively related to the observed discounts in the closed-end funds. He also suggests that the severity of asset mispricing would be positively related to, among other factors, the securities' bid-ask spreads.

Trading Technology, Market Frictions and Fama-French Factor Premiums

Some authors have directly examined the impact of trading technology and market frictions on the factors and factor premiums in the Fama-French three factor model.

Chordia et al. (2014), in a study on the US markets, provide evidence that

improvements in trading technology in the recent years have contributed to significant reduction in transaction costs and increased liquidity facilitating greater anomaly based arbitrage leading to attenuation of anomalies such as size, reversals, momentum and post earnings announcement drift.

Hou and Moskowitz (2005), study the impact of market frictions on asset pricing by examining the delay in the response of a stock's price to information in the US. They state that this delay commands a premium and a part of the delay premium can be explained by the size effect. They also find that idiosyncratic risk is priced only among the most severely delayed stocks. They also observe that the delay premium is strongest for small, value and liquid stocks and is negligible or insignificant for large, glamour and liquid stocks. We can infer from these results of their paper that the factor premiums in the Fama-French three factor model, namely market, size and value premiums, could be affected by a reduction in market frictions.

Hsia et al. (2000) state that since the CAPM beta is a function of returns observed in the market, presence of market frictions that hinder the arbitrage process distorts the returns which in turn distort the beta. The beta then needs other factors to compensate for this distortion. They state that the size and value (book to market equity) factors in the Fama-French three factor model are factors which correct for the presence of market frictions. One could also note here

that Amihud and Mendelson (1986) suggest that the 'size' effect in stock returns could be a consequence of the bid-ask spread effect, with firm size possibly acting as a proxy for liquidity.

The Joint Hypothesis Problem (Fama 1991)

While elaborating on the joint hypothesis problem Fama (1991) states that the test of whether stock prices properly reflect all information can only be done in the context of an equilibrium model (an asset pricing model). Fama (1991) adds that if one were to find an anomalous behavior in stock returns it could be due model mis-specification, market inefficiency or partly due to both mis-specified model and market inefficiency. In this context, it can be reasoned that the performance of the appropriate asset pricing model would improve if the market efficiency improves.

Screen Based Trading Impacts Asset Pricing

Jain (2005) demonstrated that screen based trading (SBT) directly impacts asset pricing and cost of equity.

It has also been seen that screen based trading improves liquidity and market efficiency and leads to reduced transaction costs. It can be inferred from the discussion above that improved liquidity and transaction costs impact performance of asset pricing models in general and in particular, can affect the factors like size in the Fama-French three factor model. Given

the reasoning of Fama (1991) on the joint hypothesis problem it is reasonable to state that improvement in market efficiency can have an impact on the asset pricing behavior of the appropriate asset pricing model. Considering all of the above, the present study, which seeks to examine if the Fama-French factor premiums are stationary over a long period of 25 years, has merits.

DATA AND METHODOLOGY

Koller et al. (2015) suggest computing stock returns monthly frequency is preferable to daily or even weekly frequency, especially when stocks could be infrequently traded. Thus, data and returns used in this paper are of monthly frequency.

Monthly closing values of the indices BSE Sensex, BSE 100, BSE 500, BSE MidCap and BSE SmallCap for the period March 1991 till March 2015 (for some of the indices the data is available only from a later date) are taken from the official website of the Mumbai Stock Exchange, BSE (www.bseindia.com).

The BSE Sensex is a popular index representing the Indian market comprising the 30 largest, most liquid and financially sound companies across key sectors. The BSE 100 is a large cap index and comprises the top 100 large cap BSE listed companies. The BSE 500 index, comprising 500 companies, constitutes nearly 93% of the total market capitalisation on the BSE and includes all the 20 major industries of the Indian economy. The BSE MidCap and the BSE SmallCap indices, as their names

suggest, represent the midcap and small cap segments of the Indian market.

Monthly closing prices of all the stocks listed on the Mumbai Stock Exchange (BSE) are taken from April 1991 till March 2015 from Prowess, a CMIE database (CMIE – Centre for Monitoring Indian Economy). Data on market capitalisation and book value to market value ratio as at the end of the February of every year from 1991 till 2015 are taken, the data again coming from Prowess. The stocks are categorised into, small (S) and big (B) on the basis of their market capitalization – stocks below the median market capitalisation are classified as small (S) and stocks with market capitalisation equal to or greater than the median market capitalisation are classified as big (B). The stocks are categorised into three value categories, low (L), medium (M) and high (H) on the basis of their book value to market value ratio – stocks with their book value to market value ratio less than the 33rd percentile are classified as low value (L) stocks, stocks with book value to market value ratio ranging from the 33rd percentile to the 67th percentile are classified as medium value (M) stocks and those with book to market value ratio above the 67th percentile are classified as high value (H) stocks. The Indian financial year is April 1st of the current year to March 31st of the next year. The intersection of the two size categories and the three value categories results in six portfolios S_L, S_M, S_H, B_L, B_M and B_H. For the six portfolios formed on the basis of market capitalisation data and book value to market value ratio

data at the end of the February of a given financial year, equally weighted monthly percentage portfolio returns are computed for the 12 months of the next financial year. For example, for the six portfolios constructed using market capitalisation data and book value to market value ratio data at the end of the February 1992, equally weighted monthly percentage returns are computed for the twelve months from April 1992 till March 1993. Thus, the six portfolios are newly constructed for every financial year.

The construction of the six portfolios, S_L, S_M, S_H, B_L, B_M and B_H as well as the computation of the size and value premiums are as per the procedure followed in Davis et al. (2000).

The size premium, SMB is computed as follows:

$$SMB = \frac{R(S_L) + R(S_M) + R(S_H)}{3} - \frac{R(B_L) + R(B_M) + R(B_H)}{3}$$

The value premium, HML is computed as follows:

$$HML = \frac{R(S_H) + R(B_H)}{2} - \frac{R(S_L) + R(B_L)}{2}$$

In the above equations, R(S_L), R(S_M), R(S_H), R(B_L), R(B_M) and R(B_H) refer to the equally weighted monthly returns of the portfolios S_L, S_M, S_H, B_L, B_M and B_H respectively. So, a time series of monthly size (SMB) and value (HML) premiums are generated for the time period April 1991 till March 2015.

Davis et al. (2000) follow the above procedure for computing the size premium

and value premium so that the former is computed neutral to value and the value premium is computed neutral to size.

The BSE Sensex is taken to be the proxy for the market. Monthly closing prices of the index between March 1991 and March 2015 are obtained from the BSE website, www.bseindia.com. Monthly percentage returns for the BSE Sensex are computed for April 1991 till March 2015.

Choice of Risk-Free Rate

Ansari (2000), in his study on the performance of the capital asset pricing model (CAPM) in the Indian context, used the interest rate offered by commercial banks on term deposits as the proxy for the risk-free rate. Deb et al. (2007), in their work on mutual funds in India, used the yield on government securities of maturity greater than five years as the risk-free rate proxy. Giri (2013), in his paper on the equity risk premium in India, used the yield on 10-year rupee denominated government securities as the risk-free rate. Saxena (2015), in his

paper on the equity risk premium in India, considered the yield on a ten-year zero-coupon government bond as the proxy for the risk-free rate.

Stowe (2007) suggests that in the case of research in the context of long term assets like equities yield on a liquid long-term government bond, say with 10 or 20 years of maturity, be considered as the risk-free rate. This view is consistent with that of Armitage (2005) and that of Damodaran (2008).

Thus, from April 1996 till March 2015, monthly data on the annual yield on Government of India bonds with time to maturity of 10 years available on the Reserve Bank of India (RBI) website (www.rbi.org.in) is considered for the risk-free rate. Of course, the annual yield is converted to monthly yield before use in the analysis.

For the period before April 1996, data on the annual yield on Government of India bonds with time to maturity of 10 years is unavailable on the Reserve Bank of India (RBI) website (www.rbi.org.in). However, the website has the annual data

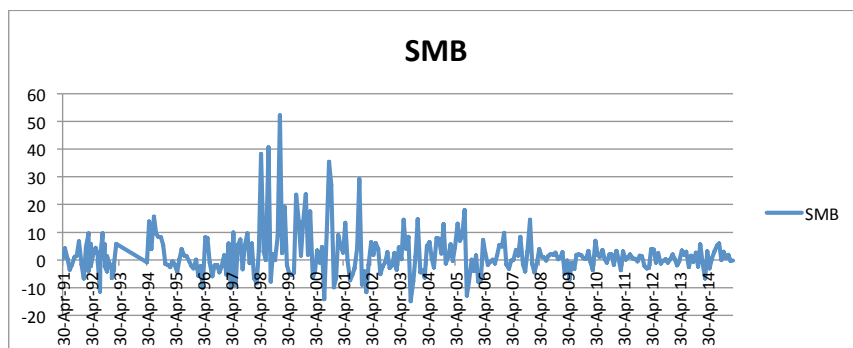


Figure 1. Plot of monthly Size premium (SMB) time series for India for the April 1991 till March 2015
Source. Author's Computation

on annual interest rates for Central and State government dated securities from 1980-81 onwards till the present. Hence, for April 1991 till March 1996, the annual interest rates of Central government dated securities are converted to monthly interest rates and taken as the proxy for the risk-free rate.

RESULTS AND DISCUSSION

Figure 1 shows the plot of the size premium (SMB) for India against time. A visual

examination of the chart tells us that the time series might very well be stationary. Also, no visible trend is seen.

Figure 2 shows the plot of the value premium (HML) for India against time. A visual examination of the chart tells us that the time series might very well be stationary. Also, no visible trend is seen.

Figure 3 below shows the plot of the market premium ($R_m - R_f$) for India against time. A visual examination of the chart tells

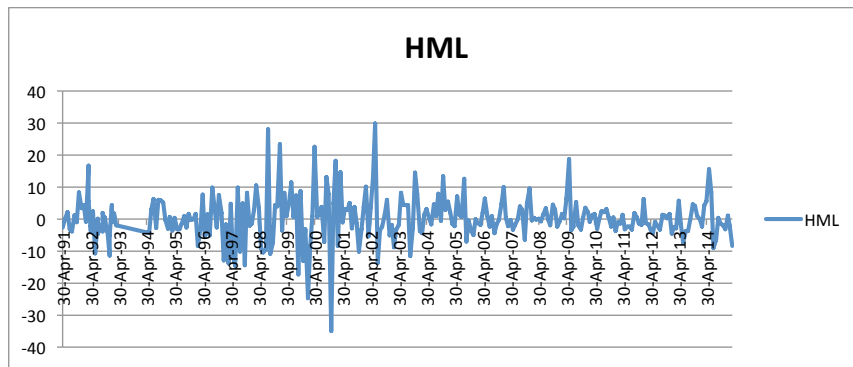


Figure 2. Plot of monthly Value premium (HML) time series for India for the April 1991 till March 2015
Source. Author's Computation

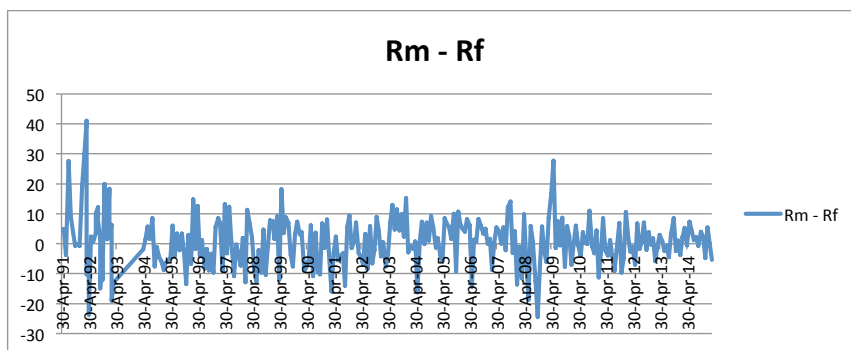


Figure 3. Plot of monthly market premium ($R_m - R_f$) time series for India for April 1991 till March 2015.
Source. Author's Computation

us that the time series might very well be stationary. Also, no visible trend is seen.

Tests for Stationarity

For a rigorous confirmation of the stationarity of the factor premium time series for the Fama-French three factor model factors, three tests for stationarity are run, the Augmented Dickey Fuller test (Said & Dickey, 1984; Said, 1991; Fuller, 2009), the Phillips-Perron test (Philips & Perron, 1987) and the KPSS test (Kwiatkowski et al., 1992).

The Augmented Dickey Fuller Test

The Augmented Dickey-Fuller test, the test with the intercept and not the trend was run for the time series of each of the three factor premiums. The formula for the test run is as follows.

$$z(t)-z(t-1) = a.z(t-1) + b(1).(z(t-1)-z(t-2)) + \dots + b(p).(z(t-p)-z(t-p-1)) + b(p+1) + u(t),$$

where $z(t)$ is the value of the variable z at time t , $t = p+2, \dots, n$, where $u(t)$ is white noise, $b(p+1)$ is the intercept.

Null hypothesis, H_0 : $z(t)$ is a unit root process: $a = 0$.

Alternative hypothesis, H_1 : $z(t)$ is stationary process: $a < 0$.

The test statistic is the t-value of a . The critical values have to be taken from the specific tables for ADF test and not the standard 't' distribution tables.

The Phillips-Perron (PP) Test

The Phillips-Perron test with intercept but no trend is used to test for stationarity in each of the three factor premium time series. This implies that the following model is used:

$$z(t) = a.z(t-1) + b + u(t), \text{ where } u(t) \text{ is a zero-mean stationary process.}$$

Null hypothesis, H_0 : $z(t)$ is a unit root process ($a = 1$)

Alternative hypothesis, H_1 : $z(t)$ is a stationary process: $a < 1$

The Phillips-Perron test involves fitting the above regression and the results from the regression are used to calculate the test statistic. The critical values for the Phillips-Perron test statistic can be said to be the critical values for the Dickey-Fuller test statistic that have been made robust to serial correlation by using the Newey & West (1987) heteroskedasticity and autocorrelation-consistent covariance matrix estimator.

The KPSS Test

The KPSS test here is used to test level stationarity in the time series. The following null and alternate hypotheses are used.

Null hypothesis, $H_0: z(t) = c + u(t)$, where $u(t)$ is a zero-mean stationary process and c a constant.

Alternative hypothesis, $H_1: z(t)$ is a unit root process: $z(t) = z(t-1) + u(t)$

The regression for the null hypothesis is run and results of the regression are used to calculate the KPSS test statistic. The

critical values for the KPSS test statistic are provided by Kwiatkowski et al. (1992).

The three tests (ADF, PP and KPSS) were run for each of the three-time series, market premium ($R_m - R_f$), size premium (SMB) and value premium (HML) for the entire time period (May 1991 till March 2015) in the EasyReg econometric software (Bierens, 2015). The results of the tests for each of the three-time series are as follows.

Table 2
SBT and transaction costs

	Market ($R_m - R_f$)	SMB	HML
Computed ADF Test Statistic	-3.8408*	-2.8129**	-3.4157*
Computed Philips-Perron Test Statistic	-226.15*	-337.05*	-262.21*
Computed KPSS Test Statistic	0.0946	0.1857	0.1565

* Significant at 5% Level of Significance

** Significant at 10% Level of Significance

No stars - Not significant

For the market premium ($R_m - R_f$) time series, the stationarity of the series is confirmed at the 5% significance level by the ADF, PP and the KPSS tests.

For the size premium (SMB) series, the stationarity of the series is confirmed at the 5% significance level by the PP and the KPSS tests. For the SMB series, the ADF test confirms stationarity only at the 10% significance level and not at the 5% significance level.

For the value premium (HML) time series, the stationarity of the series is confirmed at the 5% significance level by the ADF, PP and the KPSS tests.

Factor Premiums of the Fama – French Model for the U.S Market

The monthly factor premium time series for the three factors in the Fama-French three factor model, namely market ($R_m - R_f$), size (SMB) and value (HML) for the US market for July 1926 till July 2015 are retrieved from Prof. Kenneth R. French's website, http://mba.tuck.dartmouth.edu/pages/faculty/ken.french/data_library.html. Stationarity tests for these factor premiums in the US context are conducted to see how the results compare with the Indian case study.

There have been many studies which indicate strong relationships between the US and Indian stock markets. Batareddy et al. (2012) in a study of equity indices of India, China, Taiwan and South Korea, US and Japan between January 1998 till July 2008 report that the Indian market is cointegrated with the US and Chinese markets. Meric et al. (2011), in a study of the stock markets of the US, Hong Kong, New Zealand, Australia, India, Malaysia, Indonesia, South Korea, Taiwan and Germany from May 15, 2006 till August 5, 2010, show that the stock market returns of the US, Hong Kong, New Zealand, and Australian stock markets Granger cause returns of the Indian stock market. Mukherjee & Mishra (2007), in a study employing the daily closing prices of the major equity indices of 23 countries for the time period 1990 till 2005, provide evidence that the markets of US and five

European nations strongly lead the Indian market.

The monthly factor premium time series for the three factors in the Fama-French three factor model, namely market ($R_m - R_f$), size (SMB) and value (HML) for the US market for the time period July 1926 till July 2015 were taken from the 'Data Library' of Prof. Kenneth R. French's website, <http://mba.tuck.dartmouth.edu/pages/faculty/ken.french/index.html>.

The graphs of the three factors for the US market for the period July 1926 till July 2015 are given below:

Figure 4 below shows the plot of the size premium (SMB) for the US market against time. A visual examination of the chart tells us that the time series might very well be stationary. Also, no visible trend is seen.

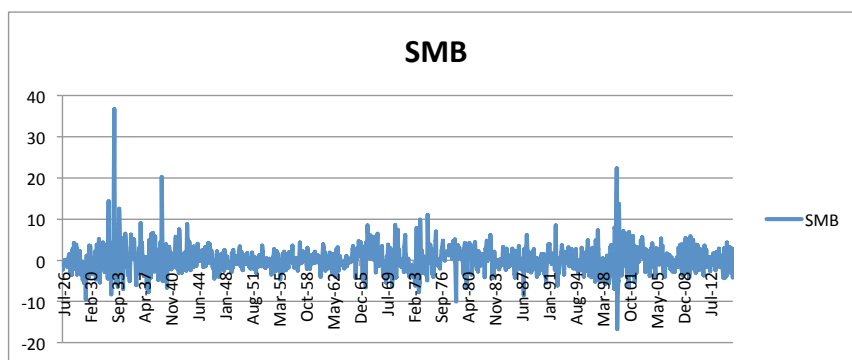


Figure 4. Plot of monthly size premium (SMB) time series for the period July 1926 till July 2015 for the US Market

Source. Author's graph based on data from the 'Data Library' on Prof. French's website

Figure 5 shows the plot of the value premium (HML) for the US market against time. A visual examination of the chart tells us that

the time series might very well be stationary. Also, no visible trend is seen.

Figure 6 shows the plot of the value premium (HML) for the US market against time. A visual examination of the chart tells us that the time series might very well be stationary. Also, no visible trend is seen.

The ADF, PP and KPSS tests for stationarity (level stationarity and not trend stationarity) all confirm that all the three factor premium time series ($R_m - R_f$, SMB and HML) for the US market are stationary at 5% level of significance. The tests were

run in the EasyReg econometric software (Bierens, 2015) mentioned earlier.

Granger Causality Tests for Market, Size and Value Premiums

The next step was to run multivariate Granger causality tests among various sets of variables. One set of variables comprised the market premium ($R_m - R_f$), size (SMB) and value (HML) premiums. The other sets

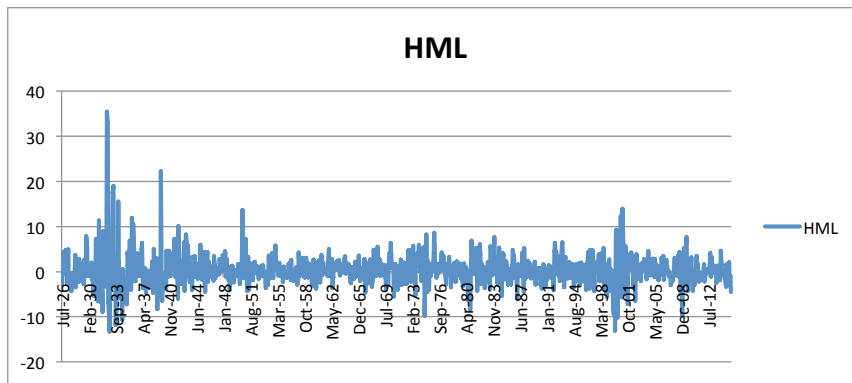


Figure 5. Plot of monthly Value premium (HML) time series between July 1926 and July 2015 for the US Market.

Source. Author's graph based on data from the 'Data Library' on Prof. French's website

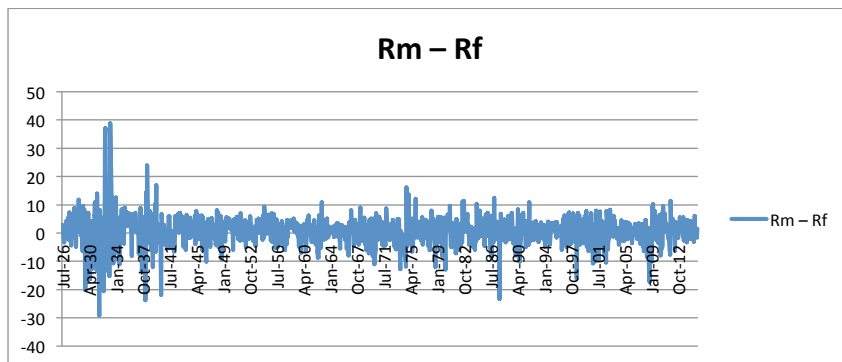


Figure 6. Plot of monthly market premium ($R_m - R_f$) time series for the time period July 1926 till July 2015 for the US Market.

Source. Author's graph based on data from the 'Data Library' on Prof. French's website

Table 3
Stationary test results for factor premiums for US

	Market ($R_m - R_f$)	SMB	HML
Computed ADF Test Statistic	-6.7418*	-5.0280*	-8.2762*
Computed Philips-Perron Test Statistic	-873.95*	-1145.98*	-684.83*
Computed KPSS Test Statistic	0.0629	0.0472	0.1168

* Significant at 5% Level of Significance

** Significant at 10% Level of Significance

No stars - Not significant

comprised monthly returns on an index, market premium, size and value premiums. The indices considered were BSE 100, BSE 500, BSE MidCap and BSE SmallCap. The monthly returns time series of the indices BSE 100, BSE 500, BSE MidCap and BSE SmallCap were all found to be stationary at 5% level of significance as per the ADF, Phillips-Perron and the KPSS stationarity tests.

The results of the multivariate Granger causality tests are given below. For the vector auto regression (VAR) run for the purposes of the Granger causality test, the lag length was decided on the basis of Akaike information criterion (AIC), Schwarz Bayesian information criterion (BIC) and Hannan-Quinn criterion (HQC).

Table 4
VAR results for $R_m - R_f$, SMB and HML

	Constant	$(R_m - R_f)_{-1}$	SMB ₋₁	HML ₋₁
$R_m - R_f$	0.6608 (0.1933)	0.1183 (0.0482)	-0.0180 (0.7756)	-0.0030 (0.9663)
SMB	1.6002 (0.001)	0.0558 (0.3237)	0.0968 (0.1064)	0.0495 (0.4659)
HML	0.6178 (0.1415)	0.0188 (0.7028)	-0.1655 (0.0017)	-0.0309 (0.6021)

Note: The table shows the coefficients for the VAR. The figures in the brackets are the observed significance levels. Time period of the four-time series is April 30, 1991 till March 31, 2015.

Table 5
Lag Order Selection for VAR in Table 4

lags	AIC	BIC	HQC
1	20.5822*	20.7457*	20.6479*
2	20.62275	20.9088	20.7377
3	20.6374	21.0460	20.8017

Note: * gives the lag order selected

It can be inferred from Table 4 that size premium (SMB) Granger causes value premium (HML).

Table 6
VAR results for BSE 100, $R_m - R_f$, SMB and HML

	Constant	BSE 100 ₋₁	($R_m - R_f$) ₋₁	SMB ₋₁	HML ₋₁
BSE 100	1.8691 (0.0010)	-0.6585 (0.0158)	0.8190 (0.0048)	0.0394 (0.5644)	-0.0550 (0.4667)
$R_m - R_f$	1.0657 (0.0457)	-0.606806 (0.0189)	0.7475 (0.0066)	0.0202 (0.7552)	-0.0218 (0.7604)
SMB	1.5537 (0.0024)	0.0696 (0.777)	-0.0164 (0.95)	0.0924 (0.136)	0.0517 (0.4503)
HML	0.8433 (0.0571)	-0.3380 (0.1146)	0.3693 (0.1047)	-0.1442 (0.0078)	-0.0414 (0.4869)

Note: The table shows the coefficients for the VAR. The figures in the brackets are the observed significance levels. Time period of the four-time series is April 30, 1991 till March 31, 2015

Table 7
Lag order selection for VAR in Table 6

lags	AIC	BIC	HQC
1	24.3357*	24.6081*	24.4452*
2	24.3700	24.8603	24.5671
3	24.4015	25.1097	24.6861

Note: * gives the lag order selected

The following can be inferred from Table 6.

1. Market risk premium ($R_m - R_f$) Granger causes BSE 100.
2. BSE 100 Granger causes market risk premium ($R_m - R_f$).
3. Size premium (SMB) Granger causes value premium (HML).

Table 8
VAR results for BSE 500, $R_m - R_f$, SMB and HML

	Constant	BSE 500 ₋₁	($R_m - R_f$) ₋₁	SMB ₋₁	HML ₋₁
BSE 500	1.3021 (0.0405)	0.3918 (0.1716)	-0.3196 (0.3192)	-0.1111 (0.2044)	0.0379 (0.6584)
$R_m - R_f$	0.5917 (0.2966)	0.1802 (0.4818)	-0.1342 (0.6401)	-0.088 (0.2613)	0.0499 (0.5163)
SMB	0.9812 (0.0659)	0.4782 (0.0476)	-0.5522 (0.0414)	0.1172 (0.1114)	0.1182 (0.1019)
HML	1.0742 (0.0402)	0.00292 (0.9901)	-0.0133 (0.9599)	-0.2786 (0.0001)	-0.0109 (0.8769)

Note: The table shows the coefficients for the VAR. The figures in the are the observed significance levels. Time period of the four-time series is March 31, 1999 till March 31, 2015

Table 9
Lag order selection for VAR in Table 8

lags	AIC	BIC	HQC
1	23.1158*	23.4861*	23.2661*
2	23.18053	23.8473	23.4511
3	23.1744	24.1374	23.5652

Note: * gives the lag order selected

The following can be inferred from Table 8.

1. BSE 500 Granger causes size premium (SMB).
2. Market risk premium Granger causes size premium (SMB).
3. Size premium (SMB) Granger causes value premium (HML).

Table 10
VAR Results for BSE MidCap, $R_m - R_f$, SMB and HML

	Constant	BSE MidCap ₋₁	($R_m - R_f$) ₋₁	SMB ₋₁	HML ₋₁
BSE MidCap	1.8444 (0.0179)	0.0392 (0.8482)	0.1934 (0.4364)	-0.3469 (0.0405)	0.2847 (0.1560)
$R_m - R_f$	1.0995 (0.0810)	0.0784 (0.6384)	-0.0230 (0.9092)	-0.1646 (0.2295)	0.1876 (0.2495)
SMB	0.9264 (0.0302)	0.1992 (0.0790)	-0.2233 (0.1035)	0.0535 (0.5631)	-0.0151 (0.8906)
HML	0.5243 (0.1968)	0.0164 (0.8793)	-0.0166 (0.8990)	-0.0999 (0.2589)	0.2061 (0.0513)

Note: The table gives the coefficients for the VAR. The figures in the brackets give the observed significance levels. Time period of the four-time series is May 31, 2003 till March 31, 2015

Table 11
Lag Order Selection for VAR in Table 10

lags	AIC	BIC	HQC
1	23.3169*	23.7839*	23.5065*
2	23.4126	24.2533	23.7540
3	23.5430	24.7574	24.0361

Note: * gives the lag order selected

The following can be inferred from Table 10.

1. Size premium (SMB) Granger causes BSE MidCap.
2. BSE MidCap Granger causes size premium (SMB) (at 8% LOS).

Table 12
VAR results for BSE SmallCap, $R_m - R_f$, SMB and HML

	Constant	BSE SmallCap ₋₁	($R_m - R_f$) ₋₁	SMB ₋₁	HML ₋₁
BSE SmallCap	2.0298 (0.0254)	0.1830 (0.3341)	0.0612 (0.8065)	-0.4479 (0.0309)	0.1873 (0.4600)
$R_m - R_f$	1.1276 (0.0719)	0.0635 (0.6277)	-0.0098 (0.9548)	-0.1801 (0.2073)	0.1738 (0.3224)
SMB	0.9911 (0.0176)	0.2568 (0.0036)	-0.2978 (0.0103)	-0.0160 (0.8653)	-0.1193 (0.3056)
HML	0.5270 (0.1911)	0.0571 (0.4990)	-0.0635 (0.5692)	-0.1170 (0.2042)	0.1715 (0.1310)

Note: The table gives the coefficients for the VAR. The figures in the brackets show the observed significance levels. Time period of the four-time series is May 31, 2003 till March 31, 2015

Table 13
Lag order selection Table 12 for VAR in

lags	AIC	BIC	HQC
1	23.7295*	24.1966*	23.9191*
2	23.8359	24.6766	24.1773
3	24.0068	25.2212	24.4999

Note: * gives the lag order selected

The following can be inferred from Table 12.

1. Small size premium (SMB) Granger causes BSE SmallCap.
2. BSE SmallCap Granger causes small size premium (SMB).

For all the VAR results tabulated, except Table 10 and Table 12, we can see that the small size premium (SMB) Granger causes value premium (HML). If size premium can Granger cause value premium, then at least a part of the variation in stock returns due to value could possibly be captured by size. In case a large portion of the variation in returns due to value is captured by size, then

that could point to the value factor becoming redundant and the Fama-French three factor model could reduce to a two-factor model in the Indian context. Taneja (2010) in a study on the Fama-French three factor model in India from June 2004 till June 2009 finds a perfect positive correlation (correlation coefficient of 0.959) between size and value premiums. Mohanty (2001), and Connor and Sehgal (2001) state that the value premium might not be essential in describing stock returns in India. Raghuram (2009), in a study of the Indian market from 1991 till 2006, suggests that post liberalisation the value factor might decrease in importance in India and that the Indian market might be moving towards a two-factor model with market and size as its factors.

According to Cheng and Zhang (1998), the value factor might not play a significant role in describing stock returns in rapidly expanding (developing) economies. In their study of the US, Japan, Hong Kong, Malaysia, Taiwan and Thailand markets

from 1970 till 1993, they found that value effect is strong in the US, relatively less strong in Japan, Hong Kong, and Malaysia and cannot be detected in Taiwan and Thailand.

It would be interesting to consider the implication of size premium Granger causing value premium in the context of Fama and French (2015). The authors conducted a study of the US market for the time period July 1963 and December 2013 with regards to a five factor asset pricing model comprising market, size, value, profitability and investment factors, and find that the high average value return is fully captured by the exposure of value to the other factors in the model, particularly the profitability and investment factors, rendering the value factor redundant. They make this statement after regressing the value premium on market, size, profitability and investment premiums and then finding the intercept of the regression statistically insignificant. Given that the present study finds size to Granger cause value in the Indian context, a regression of value premium on market, size, profitability and investment premiums in the Indian context might possibly generate a statistically significant coefficient for size. Whether the value premium is rendered redundant in the Indian context could be the subject of future research.

The phenomenon size premium Granger causing value premium can also be seen in the context of literature talking about value premium being stronger in small cap stocks than in large cap stocks. Fama and

French (2012), in a study of markets in 23 countries in four regions, namely North America, Japan, Asia Pacific (not including Japan) and Europe, conclude that in all the regions except for Japan value premiums are larger for small capitalisation stocks. Chan and Lakonishok (2004), in a study of the US market, confirm that returns to value investing are more pronounced for small cap stocks compared to large cap stocks. Dhett et al. (1999) provide evidence supporting the existence of substantial value premium within stocks in the small cap universe in the US. They go on to add that this value premium (within the small cap universe) is of practical significance to investors.

In the tables on VAR results for the various BSE indices, a few other interesting points could be noted. The BSE 500 index, representing 93% of the Mumbai Stock Exchange (BSE)'s market capitalization Granger causes size premium (SMB). There exists a two-way Granger causality between BSE MidCap and size premium (SMB), with size premium (SMB) Granger causing BSE MidCap and BSE MidCap Granger causing size premium (SMB).

CONCLUSION

The monthly factor premium time series for the three factors in the Fama-French three factor model in India are found to be stationary for the time period April 01, 1991 till March 31, 2015. A visual examination of the time series data indicates that the time series for the three factor premiums might be stationary. A rigorous confirmation of the stationarity of the factor premium time

series for the three factors is achieved by use of the Augmented Dickey Fuller test (Said & Dickey, 1984; Said, 1991; Fuller, 2009), the Phillips-Perron test (Philips & Perron, 1987) and the KPSS test (Kwiatkowski et al., 1992).

For comparison purposes, the market, size and value factor premium time series for the US market for July 1926 till July 2015 are studied. The time series for all the three factors are found to be stationary.

That the market risk premium, size and value premiums in India are stationary implies investors' return expectations from the overall market have not changed in spite of tremendous developments in the economy and the transformations in the stock market during the study period.

Another interesting fact that has emerged from the study is that size premium (SMB) Granger causes value premium (HML). This could imply that at least a part of the variation in stock returns due to value could be captured by size. One could also note in this context that there are studies providing evidence of the value effect being stronger in small cap stocks compared to large cap stocks, among which the noteworthy ones are Fama & French (2012) and Chan & Lakonishok (2004).

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Impact of Self-Efficacy and Contextual Variables on Entrepreneurial Intention

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ABSTRACT

Considering the contributions of Micro-Small-&Medium Enterprises (MSME) for a regional-economy, an empirical study of 213 MSM entrepreneurs in Odisha, in eastern-India, was conducted to validate and verify various causal-relationships of socio-economic factors associated with 'entrepreneurial-intention'. Women constituted 25% of the respondents. The study evaluated their post-facto motivation factors. It also studied gender-gap in the field of entrepreneurship and examined the differences in motivation level between genders towards entrepreneurship. The study found women take up business as the 'second income' source and for 'social wellbeing'. The findings indicated that entrepreneurial intent is related to the following factors: prior knowledge of business functions, source and evaluation of the business idea, efficacy, ability to measure business performance and satisfaction derived from entrepreneurial effort. However, intent is not related to social support, work experience, substantial wealth, starting team size and differentiation in business.

Keywords: Entrepreneurship, intent, gender, MSME, social-support

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INTRODUCTION

The role of entrepreneurs for economic growth of a nation is well established. It is argued that all individuals have some entrepreneurial spirit at least for some period of their life. But it is observed that entrepreneurship is a rarer phenomenon. Researchers continue to explore the underlying concepts and try to understand conceptual queries, such as 'Who becomes

an entrepreneur?', 'Why somebody becomes an entrepreneur?', 'How the process takes shape?', 'Does it vary across different demographic factors like gender?'

Entrepreneurship is often described as a complex, multi-dimensional, contextual and time variant process. This paper studies 'entrepreneurial-intent' in the state of Odisha in India. It uses a hybrid-conceptual-model consisting of several known-constructs associated with intention, idea generation and measures for success. The contextual factors such as social support, prior knowledge, efficacy, challenges and source of the idea influence intent. Further, the intent is bolstered by the commitment of the entrepreneur for new firm formation. The new firm formation depends on the ability to plan and also the probability of success attached to the plan. At the initial stages, the entrepreneur senses and measures the performance, differentiates the organisation from its competitors to become successful. Success is measured based on expectation to result in satisfaction. Thus, satisfaction is the final outcome of the entrepreneurial endeavour. This paper also studied 'gender-difference' in the model.

Concept of Entrepreneur and 'Entrepreneurship'

An entrepreneur is popularly known as a 'self-employed person'. According to Knight, 'entrepreneurs are a special social class who direct economic activity' (1921) while Casson (1982, pp 16) defined an entrepreneur as 'someone who specializes in taking judgmental decisions about

the coordination of scarce resources'. Additionally, 'the entrepreneur is the innovator who implements change within markets through the carrying out of new combinations' which can take several forms such as "the introduction of a new good or quality thereof"; "the introduction of a new method of production"; "the opening of a new market"; "acquiring a new source of supply or of new materials or parts"; and "the carrying out of the new organization of any industry" (Schumpeter, 1934 in Dutta, 2009, p. 5).

Entrepreneurial activity involves identifying opportunities in the economic system. The field of entrepreneurship involves "the study of sources of opportunities; the processes of discovery, evaluation, and exploitation of opportunities; and the set of individuals who discover, evaluate, and exploit them" (Shane & Venkataraman, 2000, p. 218). Entrepreneurship is a context-dependent social process through which individuals and teams create wealth by bringing together unique packages of resources to exploit marketplace opportunities. Entrepreneurship is the mindset and process to create and develop economic activity by blending risk-taking, creativity and/or innovation with sound management, within a new or an existing organisation.

This study defines an entrepreneur as someone who has started an economic activity and is employing a few others. This study excludes individuals engaged in economic activities which can be classified as self-employment. This is because self-

employment may not have an organisational form and structure. Similarly, emphasis was given to individuals who have started, rather than acquired or inherited a business.

Literature Review

Ajzen's 'Theory of Planned Behavior' (1991) and Shapero's 'Entrepreneurial Event' (SEE) model (1982) are two fundamental models on entrepreneurship. Intention is considered as the best predictor of planned behavior, 'particularly when that behavior is rare, hard to observe, or involves unpredictable time lags'. Krueger, Michael and Carsrud (2000) considered 'intention' as "a coherent, parsimonious, highly-generalizable, and robust theoretical framework". Compared with intention, situational or personal variables are considered to be poor predictors. They also indicated that, gender and ethnic differences are mostly related to differences in self-efficacy. A related study suggests strong network and high self-efficacy influence entrepreneurial intention positively (Sequeira et al., 2006). The researchers however, contend that prior (business) experience could moderate both nascent behaviour and intention.

Over a period, entrepreneurial intention has become a research area of its own. The research area is enriched by integration from different fields. The enrichment is not without criticism; it is claimed that such multiplicity has lacked coherence causing a conundrum. Fayolle and Linan (2014) categorize entrepreneurial intention research into five broad categories, viz. Core intention model, individual variations,

context and institution, education, and intention-behavior link. They emphasise that there are enough loose ends to be tied in this field and recommended research in each of these sub-areas. Many variables impact on entrepreneurial intentions (Kar, Mishra, & Mohanty, 2014) to varying degree. Arguably, the impact of factors influencing intention is dichotomous in nature. The way cumulative interplay of such factors fructify intention into entrepreneurship is worth investigating. The intent is also influenced by "historical, temporal, institutional, spatial and social" context (Welter, 2011). Although the exact mechanism is not known, it is believed that public policies, programmes and incentives influence entrepreneurial intention (Kar & Subudhi, 2014). Human capital and its constituent variables also influence entrepreneurial intention (Thurrow, 1970).

It has been established that women entrepreneurship is much lower compared with men and it was higher in countries where per capita income is less, indicating a compulsion to start a business (Malach Pines, Lerner, & Schwartz, 2010; Naude and Minniti, 2011). Naude and Minniti indicate that the socioeconomic characteristics could be possible reasons. Another study reports that women enter into entrepreneurship because of reasons like "no other choice", "by chance", "family business" (Orhan & Scott, 2001) etc. Research on 'women in entrepreneurship' indicates that ventures owned by women tend to under-perform in financial/growth terms, compared with male-owned firms (Srinivasan, Woo &

Cooper, 1994). Women have to balance their own family life and manage their new ventures as well. The barriers to access to social capital, resources and information could determine firm performance (Brush, 1990; Moore & Buttner, 1997). Lack of access to finance is linked to limited social capital (Marlow & Patton, 2005). These factors would indicate that the performance and survival of women entrepreneurs are lower. Such failures could impact further entry as well. It suggests that though women are “getting in” they not “getting on”. Glover (2002)

Career choice intentions are influenced by self-efficacy. Different dictionaries define efficacy as the ability to produce desired result. Many studies have focused on intention and efficacy in the context of entrepreneurship (Boyd & Vozikis, 1994; Pihie & Akmaliah, 2009; Zhao, Seibert & Hills, 2005). Studies (Wilson, Kickul, & Marlino, 2007) also indicate that there is stronger effect of entrepreneurship education on efficacy in case of women than for men. It indicates a gender difference with regards to education and training on entrepreneurial intention. Another study (Sánchez Cañizares & Fuentes García, 2010) found that fear of failure obstructs entrepreneurial intention among women. Impact of gender and culture (Shinnar, Giacomini, & Janssen, 2012) on intention has been studied and which indicates gender differences in barrier perceptions.

Since most of the factors influencing entrepreneurial intention are dichotomous

in nature, it is important to understand the relationship in a given context. The state of Odisha is resource rich, under-industrialised and is economically poorer compared with other states in India. However, in past few years, the state’s gross domestic product has been growing at a much faster rate compared with the others. The services sector contributes more than 50% to the state’s economy and is expanding, which could indicate an underlying entrepreneurial activity. This forms one of the basis for the current study.

Secondly, most of the investigations have been ex-ante study of entrepreneurial intention; such researches require longitudinal and complex research design to capture the changes over time till new firm formation actually takes place. At the same time, reported level of intention could be very different than the reality since the respondents are not acting on it, thus introducing a bias. Therefore, this study examines the intention ex-post facto and from the actual entrepreneurs, rather than nascent entrepreneurs. Thus, the uncertainty of intention being converted to action does not exist in this study.

Research Objectives

Entrepreneurial intent as a construct was tested for association with factors such as social support, starting team size, ability to differentiate the new firm, previous knowledge about business function, sources and evaluation of idea, work experience, invested wealth and satisfaction.

The proposed broad research objectives were:

- To understand the level of intention and ideation process among entrepreneurs.
- To explore the relationship of entrepreneurial intent with other factors that drive entrepreneurship.
- To study 'gender-differences', if any, in 'entrepreneurial intent' and 'success'.
- To study the relationship between entrepreneurial satisfaction and intent.

METHODS

These objectives warranted development of a 'conceptual model', linking various constructs/ factors, based on earlier findings. The model helped in constructing selective null hypotheses and a structured 'instrument' for capturing relevant primary data, in questionnaire-survey method [Explanatory note on instrument-construction is given in Appendix]. Intention study is usually conducted *ex ante* and followed up via longitudinal study. However, this study attempts to solicit responses about entrepreneurial intention *ex-post*. Thus, as all respondents are entrepreneurs, this research design indicates the relationship

of the factors which constitute intention and individual context.

Instrument Design

The instrument consisted of demographic factors, information about the organisation, start up team size, education and work experience of the entrepreneur. There were 20 variables as statements related to cause of the entrepreneurial intent: event or situation, forced, wealth, innovation, family environment, quest for wealth, hobby, opportunity, second income source, social wellbeing, family pressure, sense of security, social status, independence, ability to influence, tradition and profit orientation.

It also consisted of statements related to efficacy construct. Responses were sought related to entrepreneurial efficacy such as: difficulty of doing a business, uncertainty, legal issues, family demands, corruption, competition, knowledge of knowhow, funds, employee quality, market demand and resource constraints. The final score is taken as the efficacy measure and was compared with "intention" for association. Similarly, prior knowledge was included as construct related to self-reported evaluations by the entrepreneurs about different business functions such as: managing people, finance, marketing, operations and ability to create network.

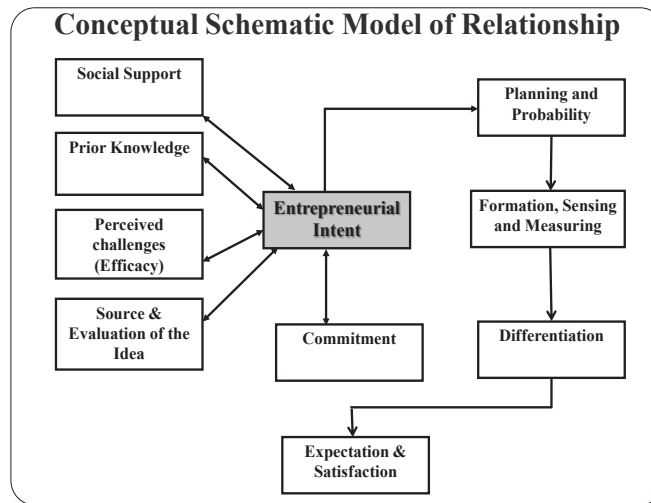


Figure 1. Broad conceptual model developed for the study

The above conceptual model summarises various broad constructs from related literature. However, considering the limited scope of this research paper, only a few possible ‘causal-relationships’ are taken to propose the following hypotheses.

Null Hypotheses

1. Social Support and entrepreneurial intent are not related to each other.
2. Entrepreneurial intent is not affected by demographic diversities.
3. Perceived challenges or self-efficacy does not impact entrepreneurial intent.
4. Entrepreneurial intent is not impacted by gender-difference.

Target Population and Sample

The scope of study was limited to the MSME entrepreneurs from Khordha district, Odisha, India. As per the Directorate of Industries annual report, Odisha had 123292 MSME

entrepreneurs by financial year 2012-13, and out of that, 7569 were in Khordha. The list of respondents initially was prepared from the researchers’ contacts and later, a snowball referencing was adopted. In this convenient sampling method, a total of 250 MSME entrepreneurs were identified and provided with a structured questionnaire (with 30 questions relating to different constructs/ variables, of which 20 items related to intent, as explained in appendix). However, only a total of 213 valid and complete-responses were collected, and the ‘women- entrepreneurs’ constituted 25% of the total respondents.

Reliability and validity of Instrument

Factors related to major intention were taken from literature (as listed in Appendix) to construct the instrument (structured questionnaire) for measurement. Expert opinions were also taken into account. The

questionnaire was subjected to a pilot survey and (Cronbach-alpha) reliability test (alpha value 0.762). The final usable response consisted of 160 males and 53 female entrepreneurs. Finally, 20 items related to intent were included in the questionnaire.

Data Analysis

Distribution of Gender, Marital Status and Age. Seventy five percent of the respondents were males while 83% of the total sample was married.

Table 1

Primary data on gender and marital status

	Married	Un Married	Total
Female	46 (22%)	7 (3%)	53 (25%)
Male	131 (62%)	29 (14%)	160 (75%)
Total	177 (83%)	36 (17%)	213 (100%)

Table 2

Primary data on 'age-group' of entrepreneur-sample

Age (Years)	<25	25-35	35-45	45-60	>60
Frequency (Percent)	9 (4%)	66 (31%)	95(45%)	35(16%)	8 (4%)

In the selected sample, the age group of 25-45 years had a total of 76% of the entrepreneurs.

Study on Factors Related to Intention

Intent vs prior knowledge of business functions (1). Original question for “Intention” as a construct had 20 variables. Factors of intentions which are predominantly applicable to existing ‘family-business’ or ‘business-community’ were dropped for analysis. This reduces bias due to under representation from the family-business or ‘business-community’ respondents. Cross-tab of two factor generated relevant bi-variate table to test the following null-hypothesis.

Hypothesis tested, H_{01} : Intent and Prior knowledge of business function are independent of each other.

The score for intent was summed up for all the related items. The mean intention score was 51.2, with standard deviation 6.69.

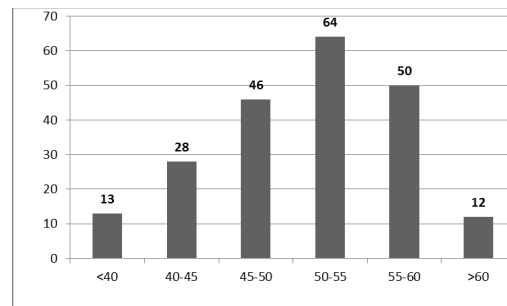


Figure 2. Distribution of level of intent

For both the parameters, item responses were added and cross tabulation was done. However, cross tabulation of the data did not satisfy the requirement of minimum 5 observations in each cell for Chi-square test. So, the total value for each construct was divided into two equal divisions, lower half of the scores (27 to 48) were classified as 1. Upper half of the scores (49 to highest 73) was taken as 2. Similarly, the score for prior business function knowledge was summed up. Lowest score up to 17 was taken as 1 and 18 to highest score 25 was taken to be 2. The results are tabulated as below. Chi-square test was conducted to test the significance of dependence between two factors.

Table 3
Prior subject knowledge and intention

		Previous Subject Knowledge		Total
		1.00	2.00	
Intent	1.00	70	17	87
	2.00	61	65	126
Total		131	82	213

The test (Pearson Chi-Square = 22.32) indicates that there is significant ($p < .001$) association between 'intent' and 'prior knowledge of business function'. The null hypothesis, stated above, is thus, rejected.

Intent vs Social Support (2). The question, 'who supported you while starting the business?' had options like, i. Spouse, ii. Parents, iii. Extended family and relatives iv. Friends and colleagues v. others. Figure

3 shows the response obtained from the 213 respondents.

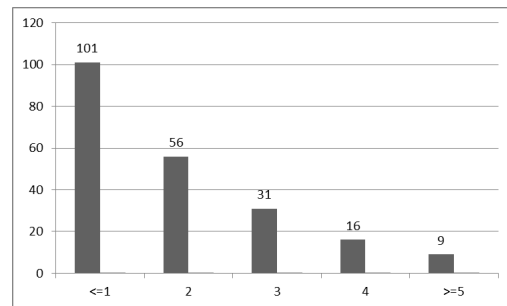


Figure 3. Distribution of responses on 'Social-support' for entrepreneurs

It can be seen that most of the entrepreneurs did not have social support while starting their own organisation. It is to be noted that the first level of support entrepreneurs would get is from their primary relationships.

Hypothesis tested, H₀₂: There is no association between Social-support and Intent.

Table 4
Cross-tab of intent and social-support

		Intent		Total
		1	2	
Social Support	1	66	91	157
	2	21	35	56
Total		87	126	213

The Pearson Chi square test (Chi-Square = .352, $df = 1$, $p = .553$) does not indicate any significant association between Intent and social support. The null hypothesis is thus,

accepted. This indicates that entrepreneurial intention is individualistic in nature. Data indicates that social support does not influence intention.

Source and evaluation of the idea vs Intent (3). Various possible options for sources of ideas were given in the questionnaire, such as: i. Work experience, ii. Publications iii. Visit to plants/ trade fairs iv. Peer advice v. Invention of my own. Similarly, for 'evaluation of the ideas', options like i. Own judgment, ii. Industry expert iii. Peer group iv. Bank and others were given.

Strength of different 'sources of ideas and evaluation' was measured. Intent was transformed as: Lowest through 48=1 and 49 through Highest=2; (lowest was 27 and highest was 73). 'Source and Evaluation' factor was transformed as: Lowest through 34=1 and 35 through highest=2). The following cross-tab was obtained:

Table 5
Intent vs source and evaluation of ideas

		Intent		Total
		1	2	
Source	1	60	69	129
Evaluation	2	27	57	84
Total		87	126	213

Hypothesis tested, H₀₃: There is no association between Intent and 'Idea-source & evaluation'.

Chi square test result (Pearson Chi-Square=4.347), shows that there is a relationship which is significant ($p = 0.03$).

The null hypothesis is thus rejected. But, correlation test indicates (Pearson's $R = 0.143$, significance $p=0.037$) that there is a weak relationship between the two.

Work Experience Vs Intent (4). Literature on entrepreneurship research indicate that intention is associated with previous work experience. This study explored the relationship between work experience and intent. In the sample, 55% of the respondents had worked before taking up entrepreneurship. Intent was transformed (Lowest through 48=1 and 49 through Highest=2; lowest was 27 and highest was 73). With work experience taken as 1, no work experience was taken as 2.

Hypothesis tested, H₀₄: There is no association between prior work experience and intent.

Table 6
Work experience vs intent

		Work Experience		Total
		1 (Yes)	2 (No)	
Intent	1	50	37	87
	2	67	59	126
Total		117	96	213

The Chi square test does not indicate any significant association with intent (Pearson Chi-Square .384, $df = 1$, significance $p = .536$). The null hypothesis is accepted. Based on the sample data it is found that prior work experience has no influence or association with entrepreneurial intent.

Substantial Wealth invested vs Intention (5). Literature review has indicated that wealth has a major role in entrepreneurial intention. Often entrepreneurial process is triggered by wealth endowment; so, wealth invested could be taken as a proxy for level of intent and commitment. Quite often, the entrepreneur has to stretch to invest in the new firm and lack of credit is indicative of the desired scale and available investible surplus. If the entrepreneur invests substantial part of his investible surplus, it could be indicative of the strength of intention as well. Response was measured using a five-point Likert scale ranging from ‘strongly agree’ to ‘strongly disagree’ to the question “did you invest substantial part of your wealth” .

The responses were regrouped to satisfy the minimum frequency requirement of Chi-square test. Scores below 3 were transformed to 1 and above 3 were transformed to 2. Cross-tabulation obtained the following bi-variate table:

Table 7
Intent vs substantial wealth investment

		Invest		Total
		1	2	
Intent	1	37	50	87
	2	48	78	126
Total		85	128	213

Hypothesis tested, H₀₅: No association between Intention and quantum of wealth entrepreneur invests.

The Chi square test (to test the significance of dependence) does not

indicate a significant association with intent (Pearson Chi-Square = 0.422, significance p=.516). The null hypothesis is accepted.

Based on our sample-data, we could find ‘independence’ of a few more factors with ‘intent’ and the result is summarised below:

1. Start team size and Intention are not associated. It was anticipated that if the entrepreneurs start as a group, it could show a stronger level of intention. In the given sample, 24% started solo and 36% started as two-member team. However, the assumed impact of ‘Team spirit’ was absent on entrepreneurial intention.
2. There is no association between Intent and ability to differentiate own business from others. Ability to differentiate provides an indication of innovation and distinguishing the new firm from the rest. The intent could consistently prod entrepreneurs to differentiate. However, it was not found in the selected sample.
3. Efficacy has significant association with Intention. Literature has shown that efficacy is significantly associated with intention. Entrepreneurs who perceived the challenges less are indicated to have higher intention level.
4. Work experience and efficacy does not show significant association. Contrary to the perception that work experience provides higher level of

efficacy, the sample data from this study does not indicate any such relationship.

5. Intent was found to have a significant association with 'measures chosen for performance of new firms'. Measuring the performance of new firm is a complex process. Absence of functional segregation, data and lack of processes could hinder the performance measure. Visible measure of profit or other parameters may not be present initially. So, if the measure is lacking progress it could not be ascertained. In this study, the performance measure construct had following variables: Monitor sales, Cash flow, Quality, price, Assets, Research and Development, promotion and Advertising, employee number and return per employee and market share. Intention was anticipated to be associated with ability to measure the performance and the association is found to be significant.

Intent vs Satisfaction (6). Satisfaction related question was based on the self-expectation of the entrepreneur and had 4 components, such as satisfaction with respect to income/ savings, social respect, in comparison with friends and peers and overall feeling. The responses to the question were summed up. The sum of the scores indicated minimum value 4, maximum 20, average 14.83 and standard deviation 2.99.

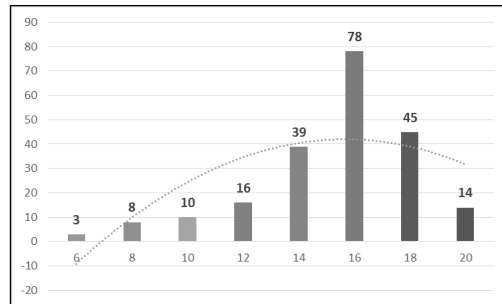


Figure 4. Distribution of satisfaction score

The satisfaction scores were transformed (lowest through 12=1 and >12 =2) and cross-tab report was drawn along with intention scores.

Table 8
Cross tab of satisfaction and intent

		Satisfaction		Total
		1	2	
Intent	1	24	63	87
	2	13	113	126
Total		37	176	213

Hypothesis tested, H₀₆: There is no association between Intent and level of satisfaction.

Chi square test indicated (Pearson Chi-Square =10.692, significance p=.001) significant association. Correlation test (Pearson's r .224, significance .001) indicated a positive correlation.

Study on Gender-Difference. A special focus of the study was to understand if perceptions (on different entrepreneurship related factors) differed across gender. Out of many 'influencing-factors', as suggested

in earlier literature, our sample data could establish significant association with the following:

Second Source of Income. Socio-economic constraints make choice of entrepreneurship as a 'second source of income'. Data (Male mean = 2.91, Female mean = 3.53, t value = -3.326, sig 2 tailed .001), indicates that women are more likely to take up entrepreneurship as a second source than men. It also indicates that the expected revenue, profit or scale is more likely to be supplementary to the regular income source and less. The indicative scale would be much less and may be vulnerable.

Social Wellbeing. The motivation for business as means to promote social wellbeing is well known, and generally it is referred to as social entrepreneurship. However, entrepreneurs also see social well-being in the process of generating employment and contributing to society. The responses (Male mean = 3.41, Female mean = 3.83, t value = -2.568, sig 2 tailed .011) indicate that women entrepreneurs are more likely to be empathetic to the social cause in starting or in continuing their business. But entrepreneurs of both genders have rated it much higher compared with the neutral value (of three).

To a gender-specific question, 'Does this intention change with regard to the gender?' the mean responses (of males was 3.14, whereas female mean response was 3.19) showed that there is no significant difference between genders.

Being independent minded is one of the hallmarks of entrepreneurs. There is no significant difference of this attribute with respect to gender (Male mean=3.57, Female mean=3.62). Wealth and influence may indicate social respectability of business persons. The response (Male mean= 3.66, Female mean=3.72) indicate a gender independence of the perception of social respectability.

One of the motives to start a new venture could be driven by the perceived insecurity in the job market. One of the questions was about the perception of the respondents regarding business security. The response (Male mean=3.73, Female mean=3.94) indicate that the entrepreneurs irrespective of gender perceive that business makes their future secure and there is no gender related significant difference.

DISCUSSION

This research investigated association between entrepreneurial intention and other factors in a specific socio-economic context. The model indicated major factors or constructs taken for evaluation of association and uses bivariate analysis method. As summarised through the schematic model, several factors may have varied degree of influence on entrepreneurial intent depending upon context. Within the limited scope of this paper, empirical evidence showed significant relationships of intent with few factors. Prior business function knowledge was found to be associated with intention whereas previous work experience was not found to be associated. The finding

was not consistent with those of earlier research findings on work experience (Kolvereid, 1996). This is an interesting observation in the sense that though the knowledge influences, experience does not! It could mean that knowledge is generic in nature whereas experience is specific. At the same time it could also indicate that entrepreneurs don't start new firms based on their prior experience. In this scenario, the 'Knowledge spill over theory' (Acs et al, 2009) is not consistent with observation. Prior experience not supporting intention also implies that entrepreneurship need not be attempted after gaining some experience as commonly believed. Impact of social support, community network and family have been discussed in literature. It is generally accepted that entrepreneurship flourishes with social support. However, this study finds there is no significant association between social support and entrepreneurial intent. In fact, data finds that 60% of the firms have 2 or less entrepreneurs, and this could be indicative of solo creative thinking process. Additionally, this research investigated source and evaluation process of entrepreneurial ideas. Ideas available in public domain are common and may be devoid of economic value, but the idea available from the private sources is often untested, and may have higher uncertainty. There may be a role of trusted network as source idea and evaluation. This study indicates that entrepreneurs get their ideas from multiple sources and evaluate them from multiple sources and this in turn influences their intent. Lack of credit

facility is harped upon by industry reports as hindering the process of entrepreneurship and level of investment as a component of entrepreneur's wealth was assumed to impact the level of intent. However, as this study suggest, the wealth invested has no association with entrepreneurial intent. This research also finds that intent and satisfaction are significantly associated. Satisfaction as broader mental state caused by the effort associated with entrepreneurial activity may not be narrowly defined by the economic gain alone from entrepreneurship.

The major finding related to gender difference in the intention context is that 'business is done as a second source of income and social wellbeing'. It indicates that sense of insecurity has to be alleviated among women entrepreneurs. The silver-line is that women as a group would like to see 'social-wellbeing' as one of the outcomes of 'entrepreneurial effort'. Such entrepreneurial motive may present as a win-win situation for social reconstruction.

CONCLUSION

This research suggests that ex post facto methodology could be one of the appropriate choices in the study of intention, rather than longitudinal study alone. This proposition needs to be evaluated by other research as well. Contrary to the perception of team motivation, entrepreneurship remains predominantly an individual pursuit. Though prior knowledge of business functions is significantly related, work experience was not found to be significantly related. Entrepreneurs may not take up

business ideas related to their earlier work experience, because of industry maturity, higher risk perception about the processes or scale requirement that the entrepreneurs can't match. Entrepreneurs, however, gain understanding of business functions which can be applied to any business and increases self-efficacy. This research thus alludes that intention is not influenced by sector specific process or technology; it is more generic in nature.

As the literature indicates entrepreneurial intent varies with context, so the findings of this study are also context dependent. A generalisation would warrant methodological and contextual diversity over time. This paper contributes to the field of entrepreneurial intention, despite its limitation.

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APPENDIX

Instrument design: Explanation of different factors of intent and its source

Items	Source of Items
1. I did not have a plan to do business, but an event or a situation forced me to do business. (example: loss of job, family difficulty etc.)	Theory of Planned Behavior (Ajzen, 1991), Global Entrepreneurship Monitor- Necessity Entrepreneur; (Kirzner, 1999; Vivarelli, 2007; Shapero & Sokol, 1982;)
2. I had no other option.	Entrepreneurship Monitor- Necessity Entrepreneur, Huges, 2003; Baumol, 1990
3. I had enough money to invest for a business.	Fazzari, Hubbard, and Petersen, 1988; Hurst and Lusardi, 2004; Kan and Tsai, 2006; Parker, 2004
4. We had a family Business and I wanted to continue	Evans and Leighton, 1989; Blanchflower and Oswald, 1998; Chlosta, Patzelt, Klein and Dormann, 2012; Djankov, La Porta, Silanes and Shleifer, 2002
5. I got a good business idea	Schumpeter, 1934, 1939; Cefis and Marsili, 2006;
6. I had good contact in Govt for a business.	David and Friederike (2001); Kar and Subudhi, 2014;
7. I wanted to become rich by doing business	Robinson (2001), Douglas and Shepherd (2002), Nergis, Friedman, Bopievac and Kelesd (2013)
8. I took up my hobby as my business	Kirk, 2007; King, and Weinstein, 2003
9. I spotted a market opportunity to make money	Shane and Venkataraman, 2000
10. I wanted a second source of Income	Petrova (2005)
11. I wanted to contribute to social wellbeing	Velamuri (2002)
12. I did not want but was forced by family	Au K. and Kwan HK (2006); (Kellermanns & Eddleston, 2004; Smyrniotis, Romano, Tanewski, Karofsky, Millen and Yilmaz, 2003); (Tu, 1984); (Hofstede, 1991); Lee & Mjelde-Mossey, 2004; C.F. Yang, 1988; Dyer and Handler (1994), Dyer, 1992
13. Business makes future secure	Gimeno (1997); Segal, Borgia, and Schoenfeld (2002)
14. I was an EXPERT in the area of business	Rider, Thompson, Kacperczyk and Tag, 2013; Acs, Audretsch, Braunerhjelm, and Carlsson, 2006; Hirakawa, Muendler and Rauch, 2010; Gompers, Kovner, Lerner and Scharfstein, 2006
15. There is Social Respect for businessman	Lavoie, 1991
16. Business can attract/ influence opposite gender	Marlow and McAdam (2011)
17. I am independent minded and don't like to work under somebody	Bird, 1989; Katz, 1994; Stewart, Watson, Carland, and Carland, 1999
18. Business persons are influential	Langan-Fox and Roth (1995)
19. It is our tradition in our community to do business.	Doepke and Zilibotti, 2013
20. Business is always about making Profit.	Lavoie, 1991; Vivarelli, 1991, 2004; Zacharakis, Bygrave, and Shepherd, 2000, Gifford (1993)

Morphological Features of Siquijodnon-Cebuano Language

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ABSTRACT

This paper delves into the morphological features of Siquijodnon-Cebuano language. Using descriptive research methodology and adapting the linguistic theory, Contextualisation Lexicalisation, the study broadly examines free morphemes, bound morphemes and other morphological features of the Siquijodnon language. Qualitative data were taken from written folk literary works, documentaries, transcripts and oral traditions of selected *Siquijodnon* folks/informants who were chosen through convenient purposive sampling. They were gathered through snowball and/or Participatory Rapid Rural Appraisal (PRRA), interview and videotaping. The units of analysis include the linguistic morphological features: free morphemes, bound morphemes and other morphological phenomena of a language. The data were analysed in the framework of Congruent Lexicalisation and interpreted through interpretive analysis. The research instrument is an interview guide. Considering the aforementioned findings, it is concluded that Siquijodnon-Cebuano is a rule-governed language, which certainly shares a number of morphological features with English and other prevalent languages or dialects. The results also manifest the essential contribution of affixation in establishing inflectional bound tense-marking morphemes and derivational bound from class-marking morphemes. They further conclude that Siquijodnon encounters with other language speakers, brought about by colonisation, greatly influenced the morphological development of their language. Hence, the *Siquijodnon* language is a twinskin of Siquijor Island's local identity, which likewise holds a utilitarian significance for its folk literary, historical, cultural and socio-cultural heritage and development..

Keywords: Morphological features, other morphological phenomena, Philippines, social sciences

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INTRODUCTION

A number of experts and linguists define linguistics as the systematic study of

language (Lyons, 2002). They stress that language refers to any distinctive linguistic diverse unit, which is mutually incomprehensible with other entities (Campbell, 2006). That is why, linguistics can be generally categorised into its three subfields of study: *language in context*, *language meaning* and *language form* (Lyons, 2002). However, some scholars explicate that language is an intellectual system which is innate to normal human being's cerebral or psychological structure (Radford, Atkison, Britain, Clashen, & Spencer, 2003; Senaratne, 2009; Ellis, 1996; Cook, 1996). This emphasises that linguistics is also a branch of cognitive science, which refers to a group of disciplines that define and analyse human being's ability to think. Thus, the discipline of linguistics, along with psychology, philosophy and computer science, is vital sub-discipline within cognitive science (Carnie, 2002). For grammarians, linguistic theory does not only refer to the speakers' knowledge of his or her language, but also to the explanation of how that such knowledge is acquired (Fromkin, Rodman, & Hyams, 2007). Language includes language acquisition, neurolinguistics, psycholinguistics, sociolinguistics, historical linguistics, and evolutionary linguistics (Lyons, 2002).

Categorically, the study of language structure or form centres on the system of rules that are observed by the speakers (or hearers) of a language to consist of morphology, phonology, phonetics and syntax. Many linguistic experts point out that "a theory of grammar specifies

the nature of all these components and the universal aspects of all grammars" (Fromkin, 2001).

This present study focusses its investigation on the morphological aspect of a language, particularly on the Siquijodnon morphological features, based on the framework of *Congruent Lexicalisation* in which Muysken (in Senaratne, 2009) that characterises the structural similarity or structural asymmetry of two grammatical systems that possibly take place between either related dialects or a dialect and a standard language. It is anchored on the notion of style shifting and variation. In CL, the two languages have either fully or partially shared the grammar of the sentence. In other words, the grammatical system/structure is lexically accessible by both systems.

In this study, Siquijodnon-Cebuano Variety and a standard language (English) are the two grammatical systems that share structural similarity, specifically in the aspect of morphology. Morphology is one of the salient branches of linguistics which deals with the study of language. The term morphology consists of two-word elements, *morph-* which means 'form' and *-ology* which means 'the study of' (Mhamad, 2016). A number of linguists and morphologists define morphology as the analysis of internal word structures or forms and/or morphemes and how they operate in the structure of words. In 1859, August Schleicher, a German linguist, utilised this term for the first time in his study on the form of words (McCarthy, 2011). Such

claim is magnified by Hamawand (2011) when he stresses that morphology aims to disclose the principles on form and meaning of morphological expression; explicates the manner of integrating morphological units and interpret the end-result of word formation; and shows the manner of organising the morphological unit in the lexicon in terms of like-mindedness and contrast.

Banjar (2012) points out that words are the smallest unit of language called morphemes with corresponding meanings; however, in some contexts morphemes may or may not have meanings. Andriyani (2013) presents a clear-cut example of such phenomenon. He explicates that morphemes have two or more syllables but with only one morpheme (for examples, *banana*, *apple*, *papaya* and *honey*). In contrary, some words may have two morphemes and only one syllable like *cats*, *runs* and *barked*. There are semantic classifications of morphemes given by Aidana and Makanbayeva (2013), namely: **(a) root-morphemes (radicals)**

which refer to the lexical nucleus of words that possesses an individual lexical meaning shared by no other morpheme of the language (for example, *write* for rewrites *hope* for hopeful, and *order* for disorder); **(b) non-root morphemes** which includes inflectional and affixational morphemes. Moghees and Malik (2010) and Miller (2006) enumerated several kinds of affixes such as:

- Prefix - a bound morpheme that precedes the root (e.g., *misplace*)
- Suffix - a bound morpheme that follows the root (e.g., *kinanta*)
- Infix - a morpheme that goes “in the middle” of a word. This is common in Borneo and Philippine languages. English has no infixes.
- Circumfix - an affix that “surrounds” the word, attached to the beginning and end of the word (e.g. *enlightenment*).
- Ablaut- is a change in a vowel that carries extra meaning.

Table 1

Some illustrations of the other categories of affix given by Miller (2006)

Categories of Affixes			
Affix	Example	Schema	Description
Prefix	un-do	prefix-stem	Appears before the stem
Suffix/postfix	look-ing	stem-suffix	Appears after the stem
Suffixoid/ semi-suffix	cat-like	stem-suffixoid	Appears after the stem, but is only partially bound to it
Infix	Minne(flippin')sota	st(infix)em	Appears within the stem – common in Borneo– Philippines languages
Circumfix	en>light<en	circumfix>stem<circumfix	One portion appears before the stem, the other after

Table 1 (*continue*)

Interfix	speed-o-meter	stem _a -interfix-stem _b	Links two stems together in a <i>compound</i>
Duplifix	teeny~weeny	stem~duplifix	Incorporates a reduplicated portion of a stem (may occur before, after, or within the stem)
Transfix	Maltese: k<i>t<e>b “he wrote” (compare root ktb write”)	s<transfix>te<transfix>m	A discontinuous affix that interleaves within a discontinuous stem
Simulfix	mouse→mice	stem\simulfix	Change a segment of a stem
Suprafix	produce (noun) produce (verb)	stem\suprafix	Changes a suprasegmental feature of a stem
Disfix	Alabama: tipli “break up” (compare root <i>tipasli</i> “break”)	st>disfix<m	The elision of a portion of a stem

Considering that Siquijor Island is popularly known for its literary, historical and socio-cultural development, there is a dire need to study its Siquijodnon-Cebuano language, which does not only serve as a mirror but also a vehicle in propagating its history, culture and tradition. This is supported by Anzaldúa (as McGroarty cited in Mackay, 1998) when she claims that language is a twin skin of cultural identity. To simply put, language is a double-edged tool in establishing local identity and in promoting socio-cultural heritage.

Additionally, the Tourism Industry of Siquijor Island will benefit much from this study. Siquijor Island will not only be known for its mystic paradise but also of its talented people through their Siquijodnon dialect (Cebuano Variety). As a result, tourists will be more enticed to come to Siquijor Island to discover more about its captivating natural scenery and its cultural heritage as revealed in pieces of literature written in Siquijodnon-

Cebuano. This academic venture will surely preserve and promote Siquijodnon lexicon, literary heritage and ethnic traditions as part and parcel of the ecotourism thrusts and priorities of Siquijor Island.

OBJECTIVES OF THE STUDY

This study delves into the morphological features of the Siquijodnon-Cebuano language. It evaluates the linguistic aspects, particularly the lexicon and other morphological features, or the phenomena of Siquijodnon-Cebuano Language, specifically its free morphemes (in terms of the words that indicate grammatical relations) and words that name items in the real world; bound morphemes (in terms of inflectional and derivational affixes); and other morphological phenomena. This academic venture promotes the Siquijodnon lexicon or Cebuano variety as a double-edged tool in establishing local identity, as well as promoting and preserving the

island's folk literary, historical, and socio-cultural heritage.

MATERIALS AND METHODS

This study is a descriptive research which uses linguistic analysis. The qualitative data were taken from documentaries, written folk literary works, documentaries, transcripts and oral traditions of selected *Siquijodnon* folks/informants who had been chosen through the convenient purposive sampling. The qualitative data were gathered through snowball and/or Participatory Rapid Rural Appraisal (PRRA), interview and videotaping. Such methods of data collection were carried out when the researchers went to various far-flung places of the island seeking for prospective local informants as identified by local folks and co-informants in the island. The Siquijodnon informants were then interviewed and videotaped. The units of analysis include the linguistic morphological features: free morphemes, bound morphemes and other morphological phenomena of Siquijodnon-Cebuano language. The qualitative data were analysed in the framework of *Congruent Contextualisation* and interpreted using interpretive analysis through documentary or context analysis (in which morphological features are analysed based on the word formations contained in the literary works, documentaries and transcripts). The research instrument is an interview guide. The research locale of this study is the island of Siquijor. It is the smallest province in Central Visayas and used to be a sub-province of Negros Oriental until it became

a separate entity in 1971. Siquijor Island has a total land area of 31,812.985 hectares. It is politically divided into 6 municipalities: Larena, Siquijor, Lazi, Maria, San Juan and Enrique Villanueva.

RESULTS AND DISCUSSION

The results of the study vividly depict that Siquijodnon-Cebuano is a rule-governed language. In the perspective of Congruent Lexicalisation theory, the morphological features of Siquijodnon language such as free morphemes, bound morphemes and other morphological phenomena are evident in the Siquijodnon language. The findings likewise manifest the morphological symmetry of the Siquijodnon and English languages.

Free Morphemes

Morphologically, the Siquijodnon-Cebuano language possesses free morphemes which can stand alone semantically. One of these are the **content words** which refer to the items in the real word. They include **nouns**, **action verbs**, **adjectives** and **adverbs**. Additionally, free morphemes refer to words that indicate grammatical relations like **functional words** (i.e., auxiliaries, articles, intensifiers, interrogatives, prepositions, conjunctions and interjections), **substitute words** (i.e., pronouns; noun substitutes, verb substitutes, phrasal or clausal substitutes) and expressions that signal the presence/absence of negatives (Tayao et al., 1998). Morpheme is the insignificant distinctive element of grammar, however, it is the main concern of morphology. It is the smallest

functioning unit in word compositions. Each word is made up of one, two or more morphemes to form one meaningful unit known as free morpheme Crystal (cited in Mhamad, 2016).

Siquijodnon Free Morphemes in Content Words (Nouns, Verbs)

This section includes the free morphemes in content words like nouns and verbs. Table 2 specifically presents data on nouns and verbs.

Table 2
Siquijodnon free morphemes in content words (nouns, verbs)

Free Morphemes <Content Words> Noun, Verb, Adjective, Adverb		Morphological Analysis	Examples
Noun			
asoy	(narration)	Siquijodnon nouns are composed of one morpheme or a root word which functions independently or in isolation <i>as subject, object of the verb or preposition</i> .	<i>Sumala sa asoy ni lola naabtan pa niya ang panahon sa ikaduhang giyera kalibutan</i>
puro	(shorts)		According to the narration of lola, she witnessed the World War II. <i>Makadaot kuno ang sugal kay daghan na kayo ang nangapurdoy ug nawagtang sa ilang puro gumikan sa sugal...</i>
gawang	(door)		
buna	(forehead)		
Verb			
gama	(make)	Siquijodnon verbs are composed of either a root word or combination of a root word and an affix. They <i>show actions or connect phrases or clauses</i> .	<i>... misapigad sa atong kalawasan.</i>
sapigad	(touch)		<i>... touched throughout our body...</i>
pahit	(bite)		<i>... bisag init hala timo.</i>
timô	(eat)		<i>... even it is hot, continues to eat.</i>

Nouns in the Siquijodnon language are composed of one morpheme or a root word which functions independently or in isolation. Affixes are not attached to the root word. They carry with them their

singular and plural meanings and functions in English.

Almost the same scenario takes place in the *Siquijodnon verbs*. They are composed of one word as they show actions or connect

phrases or clauses. They carry also with them their singular and plural meanings and functions in English. In some instances, however, affixes are attached to the base form of the verb to emphasise their tenses.

Siquijodnon Free Morphemes in Content Words (Adjectives and Adverbs)

Other Siquijodnon Free Morphemes in content words include the modifiers: adjectives and adverbs. Table 3 illustrates the corresponding data.

Table 3
Free morphemes in content words (adjectives, adverbs)

Free Morphemes <Content Words> Noun, Verb, Adjective, Adverb	Morphological Analysis		Examples
Adjective			
nagkalidadis	(varied, mixed)	Siquijodnon adjectives are composed of either a root word or combination of a root word and an affix as <i>they modify nouns or pronouns</i> .	<i>Nagkalidadis nga preskong prutas og utan...</i>
tulamis	(messy, clumsy)		
aliwaros	(annoying)		
arawon or bugirit	(boastful)		
namilagpilag	(glittering)		
Adverb			
haari or haani	(here)	Siquijodnon adverbs are composed of one word which functions independently or in isolation. as they modify verbs, adjectives and another adverbs.	<i>Murag haari sila gahulat.</i>
haadto or haadtot	(there)		
unya or dayon	(then)		
kanunay	(always)		
mudto	(noon or afternoon)		
			Mag-amping ka kanunay sa imong mga lakaw.

Like other content words, the *Siquijodnon adjectives* are composed of either a root word or a combination of a root word and an affix. They carry with them their meanings and functions in English as they modify nouns or pronouns.

The *Siquijodnon adverbs*, as one of the content words, are composed of one word which functions independently or in isolation. They bring with them their meaning and function in English as they modify verbs, adjectives and other adverbs.

Based on the aforementioned scenarios of the content words in the Siquijodnon

language, it is evident that the Siquijodnon-Cebuano shares similar morphological and syntactic features with English language, which is the second language of its local speakers. These phenomena are supported by the Matrix Language Frame Model (MLF) of Myers-Scotton, which suggests that a dominant language named ‘matrix’ language provides morpho-syntactic frame for the bilingual utterance. While the other language is the ‘embedded’ language which acts as a guest in the utterance (Senaratne, 2009). Ambridge, Pine, Rowland, Chang, and Bidgood (2016), in their study, elucidate

that there is a conventional form used by all members of the speech community for adult feedback and conventionality on the many given meanings of utterances.

Siquijodnon Free Morphemes in Function Words

Free morphemes likewise refer to words that indicate grammatical relations such as

functional words (i.e., auxiliaries, articles, intensifiers, interrogatives, prepositions, conjunctions and interjections), **substitute words** (i.e., pronouns; noun substitutes, verb substitutes, phrasal or clausal substitutes) and expressions that signal presence/absence of negatives (Tayao et al., 1998).

Tables 4 shows the Siquijodnon free morphemes with the function words *articles* and *intensifiers*.

Table 4
Siquijodnon free morphemes in substitute words (pronouns and phrasal or clausal)

Free Morphemes <Function Words> Articles, Intensifiers, Interrogatives, Prepositions, Conjunctions, Interjections	Morphological Analysis	Examples
Articles		
ang (the)	Siquijodnon articles have different word forms but they mean the same. They are composed of one word which functions independently as <i>they introduce</i>	Ang gawang sirado
ka (the)		The door is closed.
mga (the)		Ang mga gawang sirado. The doors are closed.
Intensifiers		
kaayo , (so/very)	Siquijodnon intensifier is composed of one word which functions independently or in isolation as <i>qualifier or intensifier of adjective or quantity pronoun</i> .	<i>Nahadlok sila kaayo sa gira.</i>
baling (so/very)		They are so afraid of the war.
perte/perting (so/very)		
grabi/grabing (so/very)		

The *Siquijodnon articles* have different word forms but they mean the same. Interestingly, the Siquijodnon language has only one English equivalence for its articles and that is, the. They are composed of one word which functions independently as they introduce singular or plural nouns.

In signalling or introducing plural noun, another form of the Siquijodnon article which brings the same meaning with the other forms of article is added, which is mga.

The same scenario applies to the *Siquijodnon intensifier*. They are formed with one word which functions

independently or in isolation as qualifier or intensifier of an adjective or a quantity pronoun. It is represented in various word forms but they carry the same meaning and function in English. They have two English equivalence: *so* and *the*.

Siquijodnon Free Morphemes in Function Words (Interrogatives, Prepositions, etc.)

This part presents the free morphemes in function words, specifically *interrogatives*, *prepositions*, *conjunctions* and *interjections*. Tables 5 presents the said Siquijodnon function words.

Table 5

Siquijodnon free morphemes in function words (interrogatives, prepositions, conjunctions, and interjections)

Free Morphemes <Function Words> Articles, Intensifiers, Interrogatives, Prepositions, Conjunctions, Interjections	Morphological Analysis	Examples
Interrogatives kinsa (who) kanus-a (when) asa/saa (where) unsa (what) asa ani or nila (which of this/these or which of them).	Siquijodnon articles are composed of one word which functions independently or in isolation <i>as they ask specific information.</i>	Kinsa inyong pari? Who is your priest? Asa ang tiyanggge/merkado? Where is the market?
Prepositions ang, sa (means of, in, to, as, on, in) ilalom (under) ibabaw (above, on top) imbis (instead) ubos (under) pud (also) kung (means if, of) sa laing bahin (on the other hand)	Siquijodnon articles are composed of one word which functions independently or in isolation <i>as they connect phrases and clauses.</i>	<i>Unsa</i> ang kasakyan nako punta <i>didto?</i> What means of transportation could take me there? <i>Ang mga</i> salag-on anaa sa <i>ilalom</i> <i>sa lamesa.</i> The crops are under the table.
Conjunctions ug/og (and) apan/pero (but) hinoon (however) para (for) aron (so that) kung (if) samtang (while) mao nang (that is why) unya (then) bisan man (which means, even, even if, although, though) kay (because)	Siquijodnon articles are composed of one word which functions independently or in isolation <i>as they connect phrases, clauses and sentences.</i>	... <i>tipik</i> ug kabahin sa <i>inadlaw- adlaw panginabuhian.</i> ... part and parcel of the daily life. ... <i>mapintas nga balud..</i> nga bisan <i>sa atong pagkamalinawon mokuso- kuso ...</i> ... the damaging wave tramples <i>even</i> in the midst of our peacefulness.

Table 5 (*continue*)

<i>Interjections</i>	Siquijodnon interjection is in a form of phrase or clause <i>which functions independently as they express strong emotions.</i>	<i>Hingsi-aw pud ka! noy.</i>
hingsi-aw pud ka! (<i>expressing irritation of one's action</i>) inay doy or inay lamang!, baya galing! (<i>expressing rejection or disagreement</i>) kamating gyud! Kamatay bati! masarang! Nasigaw! (<i>expressing disappointment and surprise</i>) Hala!, Yawards! (<i>expressing amazement and/or amusement</i>) Agay! or Agoy! (<i>expressing pain</i>) and many others.		You're too much! son.
		Agay! Natakilpo akong tiil.
		Ouch! My foot slid on the ground.

The data disclose that Siquijodnon-Cebuano possesses function words which exist similarly with the function words in English. This shows that Siquijodnon speakers have the linguistic capacity and facility to form words. According to Hurrford (2007), humans have innate capacity to produce myriads of words, phrases and clauses, as well as countless ideas and original sentences. On the other hand, language is noticeably flexible and extendable. Word meanings are continuously changing and new words are added to a language as the changing needs of the speaking community arise (Jindal, 2007). This implies that morphology aims to disclose

the principles on form and meaning of morphological expression, explicates the manner of integrating morphological units and interprets the end-result of word formation, as well as shows the manner of organising the morphological unit in the lexicon in terms of like-mindedness and contrast (Hamawand, 2011).

Siquijodnon Free Morphemes in Substitute Words

This section presents the substitute words that include pronouns and phrasal or clausal substitutes. Table 6 shows the Siquijodnon substitute words.

Table 6

Siquijodnon free morphemes in substitute words (pronouns and phrasal or clausal)

Free Morphemes <Substitute Words>	Morphological Analysis	Examples
Personal Pronoun		
ako (I)	Siquijodnon personal pronouns are composed of one word which functions independently or in isolation <i>as they substitute nouns</i> <i>Siquijor pagakmabulu-kon</i> mo .
akoa, kung, imo-a (mine, yours)		... Siquijor you are so wonderful.
ato-a, inyo-a (ours,yours)		Amo ikaw 'ng ampingan kay ikaw among pinuy-anan.
kanako, kanamo (we,us)		We will take care of you because you are our home.
ikaw, nimo, mo (you)		... <i>mga luha ningbaligbig</i> ning kaapingan.
siya, niya (s/he)		... tears fall on these cheeks.
sila, nila (they, them)		so afraid of the war.
iya-a, ila-a (his/her, theirs)		
sa uban (of or to others)		
sa usa ug usa (each other or one another)		
pa (else)		
Demonstrative Pronouns		
kini/ning (this/these)		
kana (that/those)		
Quantity Pronouns		
tanán/puros (all)	Siquijodnon quantity pronouns are composed of one word which functions independently or in isolation <i>as they indicate the number or presence/absence of nouns or pronouns</i> .	Tanan midayeg sa iyang kaanyag..
daghan (many, lots of, a lot of, several)		All appreciate his/her beauty.
ubay-ubay (few)		Gamay ra ang nahinumdom sa ilang panaaad.
gamay (a few)		A few remember their promises.
wala or wala ja or wala jud (none)		
Phrasal/ Clausal		
nga (which or that)	Siquijodnon phrasal/clausal is composed of one or more words which function independently or in isolation <i>as they substitute phrase/ clause</i> <i>makita ang tubod Capilay</i> nga gitawag sa mga Kastila ug <i>Agua de Makallipay</i> .
unsa nga (what)		The flowing water, which is called by the Spaniards as <i>Aqua de Makalipay</i> is seen.
nga kinsa (who)		
nga unsa (what)		
nga kanus-a (when)		

Categorically, what makes the *interrogative pronouns* and phrasal or clausal substitutes distinct with each other in the Siquijodnon-Cebuano language is the presence of **nga** in the latter. This result indicates that the second language of the speakers, which

is English, has greatly influenced the characteristics of the substitute words of their mother tongue. This is supported by the theory of Congruent Lexicalisation, in which Muysken (2009) characterises the structural similarity or structural asymmetry

of two grammatical systems that possibly take place between either related dialects or a dialect and a standard language. It is anchored on the notion of style shifting and variation. In CL, the two languages have either fully or partially shared the grammar of the sentence. This means the grammatical system/structure is lexically accessible by both systems (Senaratne, 2009). In this study, it is most prominent between the Siquijodnon-Cebuano language and the standard English language, which somehow share a grammatical system.

However, on top of the morphological similarities of the Siquijodnon-Cebuano and English, it is apparent that the Siquijodnon-

Cebuano personal pronouns are not squarely delineated or categorised. They do not possess lexical terms that specifically address a male or a female. Hopp (2016) in his experiments suggests that the variability of lexical gender assignment affects processing of gender agreement in natives and non-natives.

Siquijodnon-Cebuano Inflectional Bound Morphemes (Verb Tense, Number and Voice)

Siquijodnon-Cebuano inflectional bound morphemes mark tense. They are affixes that signal tense of the verbs like present, past, and future tense. Table 7 discloses the data.

Table 7

Siquijodnon-Cebuano inflectional bound morphemes (mark tense: present, past, future tenses and number)

Bound Morphemes <Inflectional> <i>Mark Tense</i>	Morphological Analysis	Examples
nag, gi	Siquijodnon affix is attached to the Siquijodnon root word as it indicates <i>present tense</i> .	Nagbanwag Announcing
nag, mi, naka, gi, na, nang, ki	Siquijodnon affix is attached to the Siquijodnon root word as it indicates <i>past tense</i> .	Gibanwag Announced
mu, maka, i, mag, ma, -on	Siquijodnon affix is attached to the Siquijodnon root word as it indicates <i>future tense</i> .	ibanwag to be announced
ha or _hi	Siquijodnon suffix is attached to the Siquijodnon root word as it indicates <i>present and future tense</i> .	abriha or abrihi Open
ka and an	Siquijodnon prefix and suffix attached in the root word as they indicate the <i>plural form of the noun</i> .	sapa (river: <i>singular</i>) to kasapaan (rivers: <i>plural</i>) bata (child: <i>singular</i>) to kabataan (children/youth: <i>plural</i>).

The Siquijodnon-Cebuano prefix and suffix are attached to the Siquijodnon root words. They carry with them their singular and plural meanings and functions in English. Hence, the Siquijodnon-Cebuano inflectional bound morphemes are rule-governed as they indicate past tense, present tense, future tense and number in utterances

in spite of their various word forms. The data certainly show the congruent lexicalisation of the two languages.

Other Siquijodnon-Cebuano inflectional tense-marking bound morphemes signal present, past and future passive voice. Table 8 reveals the data.

Table 8

Siquijodnon inflectional bound morphemes (mark tense: present, past, and future voice of the verb)

Bound Morphemes <Inflectional> Present, Past, and Future Voice of the Verb	Morphological Analysis	Examples
pag i gina	Siquijodnon prefix is attached to the root word as it indicates the <i>present active voice</i> .	..musikreto kita sa pagdimdim kun unsa gyu'y lami sa tubâ. ..we secretly sip to know the taste of the fermented coconut juice (tubâ).
na gi,	Siquijodnon prefix is attached to the root word as it indicates <i>future active voice</i> mulambo , og mulipang , sanglit nakadasig man kini sa atong mga kaigsuonan. ... will prosper and will flourish , hence, inspire our fellowmen
-hon (from <i>dala</i> , means bring)	Siquijodnon suffix is attached to the root word as it indicates <i>present passive voice</i> .	<i>Kining ube kasagaran dalhon sa mga bisita nga nahiduaw.</i> This ubi (crop) is usually brought by the visitors who have visited.
gi	Siquijodnon prefix is attached to the root word as it indicates <i>past passive voice</i> .	<i>Ug magbayle sila, <u>sista</u> ang ilang gigamit nga <u>panukar</u>.</i> If they had disco, guitar was used as their musical instrument.
i ma	Siquijodnon prefix is attached to the root word as it indicates <i>future passive voice</i> .	<i>Miduol ako sa Hapon sa pagtuo nga ang iyang nilikit nga basahon ihatag kanako apan sa dako kong kasayop ug kakurat iya man hinoon akong gisabak,..</i> I went near to the Japanese expecting that the rolled paper will be given to me but with my big surprise, he put me on his lap.

Meanwhile, the Siquijodnon-Cebuano inflectional tense-marking morphemes not only signal simple present, past and future tenses of verbs but also the present, past, and future active and passive voice. The Siquijodnon-Cebuano prefix or suffix is attached to the root word as it indicates the tense of the active and passive voice. They bring with them their meaning and function in English in which the analyses and presentations of Siquijod-Cebuano language tense-marking morphemes are lexically contextualised.

Another observation is, the positions of Siquijodnon-Cebuano subjects and adjectives in sentences do not have the same positions in English sentences, although they express the same thoughts. They are

evident in example sentences in the past active and future passive voices in the above presentation.

Siquijodnon-Cebuano Inflectional Bound Morphemes (Trigger Change or Omission on Some of the Vowel and Consonant Sounds of Nouns)

Some Siquijodnon-Cebuano inflectional bound morphemes in the forms of prefix and suffix are attached in the root word as they trigger change or omission on some of the vowel and consonant sounds of nouns. However, there are also the Siquijodnon-Cebuano inflectional bound morphemes that do not display such scenarios. Table 9 depicts these observations.

Table 9

Siquijodnon inflectional bound morphemes (mark affixes: trigger change or omission on some of the vowel and consonant sounds of nouns)

Bound Morphemes <Inflectional> Affix	Morphological Analysis	Examples
<i>ka</i> and <i>ran</i>	Siquijodnon prefix and suffix attached in the root word <i>trigger change on some of the vowel and consonant sounds of nouns</i> .	in the word nasod (nation/country: <i>singular</i>) in which the final consonant sound is /d/ and the word kanasuran (nations/countries: <i>plural</i> in which /d/ is changed to /r/ after the affixes are attached to the stem nasod .
<i>ka</i> and <i>han</i>	Siquijodnon prefix and suffix attached in the root word <i>trigger omission on some of the vowel and consonant sounds of nouns</i> .	in the word tawo (person/human: singular) to katawhan (people/humanity: <i>plural</i>)
<i>ka</i> and <i>an</i>	Some Siquijodnon prefixes and suffixes attached in the root word <i>does not trigger change or omission on some of the vowel and consonant sounds of nouns</i> .	in the words tugas (one tree), in which the local name is <i>Tugas</i> to katugasan (<i>more than one trees</i> of Tugas) langgam (bird) to kalanggaman (birds) the stems are not triggered by the affixes.

These data manifest the linguistic symmetry of Siquijodnon-Cebuano and English, specifically in the aspects of inflections and linguistic assimilations. This implies that Siquijodnon-Cebuano is syntactically and semantically rule-governed like that of English language. This is because historically, English as the second language of the local speakers under study brings influences to their language, which were brought about by colonisation.

In some respect, a study of Prévost and Lydia White (2016) on *Missing Surface Inflection or Impairment in Second Language Acquisition? Evidence from Tense and Agreement* depicts the manifestation of inflections of English language. Their data show that predetermined forms do not occur in non-finite contexts, that learners unveil syntactic reflexes of finiteness and that inflected forms largely show accurate

agreement. These results suggest that adult L2 learners represent limitation and agreement at an abstract level, rather than being compromised in this domain, supporting the Missing Surface Inflection Hypothesis (MSIH). This claim is justified by Chondrogianni, Vasić, Marinis, and Blom (2016), whose findings suggest that the errors of omission are not due to the lack of abstract syntactic representations, but could result from processes implicated in the spell-out of definite articles.

Siquijodnon-Cebuano Derivational Bound Morphemes

This contains noun-marking affix, verb marking affix, adjective-marking affix, and adverb-marking affix. Table 10 below illustrates the Siquijodnon-Cebuano derivational bound morphemes.

Table 10

Siquijodnon derivational bound morphemes (mark form class: noun-marking affix, verb-marking affix, adjective-marking affix, and adverb-marking affix)

Bound Morphemes <Derivational>	Morphological Analysis	Examples
Noun-Marking		
pag ka and an nang magpa/pa	Siquijodnon affix is attached to the root word, which changes the form class, from noun to verb.	<p>pag- (prefix affix) + kaón (verb: eat) = pagkaon (noun: food/s)</p> <p>ka- (prefix affix) + libot (verb: to go around) + _an (suffix affix) = kalibutan (noun: world)</p> <p>nang (prefix affix) + utang (noun: debt) = nangutang (verb: to lend money)</p> <p>magpa/pa (affix) + tagad (noun: attention) = magpatagad (verb: to call one's attention)</p>

Table 10 (*continue*)

Verb-Marking		
<i>nag-</i> ¬ <i>ha/hi</i> <i>Ma</i>	Siquijodnon affix is attached to the root word, which changes <i>the form class, from adjective to verb.</i>	ha/hi (suffix affix) + abri (adjective: <i>open</i>) = abriha, abrihi (verb: <i>open</i>) magpa (affix) + gwapa (adjective: <i>beautiful</i>) = magpagwapa (verb: <i>to beautify</i>)
Adverb-Marking		
<i>gi-</i>	Siquijodnon affix is attached to the root word, which changes <i>the form class, from verb to adverb.</i>	gi (prefix affix) + pahit (noun: <i>bite</i>) = gipahit (verb: <i>bit</i>) gi (prefix affix) + tuyo (purpose/ <i>intention</i>) = gituyô (adverb: <i>purposely/intentionally</i>)

The Siquijodnon-Cebuano derivational bound morphemes: noun-marking affix, verb-marking affix, adjective-marking affix, and adverb-marking affix are in the forms of prefixes and suffixes. The affixes are attached to the root words as they change the form classes into *from noun to verb, from adjective to verb, from verb to adjective, and from verb to adverb*. They carry with them their English meaning and function in the utterances. However, a clear-cut contradiction between English language and Siquijodnon-Cebuano language is evident in the aspect of affixes utilisation. In English language, only suffixes play a significant role in establishing class-marking

morphemes, unlike Siquijodnon-Cebuano in which both prefixes and suffixes contribute to the establishment of derivational class-marking morphemes.

Other Categories of Bound Morphemes (Affixes)

Interestingly, on top of the popular prefixes and suffix, there are *suffixoid semi-suffix, infix, circumfix, interfix, duplifix, transfix, simulfix, suprafix* and *disfix* evident in Siquijodnon-Cebuano language. Table 11 shows the examples that would justify this claim.

Table 11
Other categories of bound morphemes (affixes)

Categories of Affix	Siquijodnon-Cebuano Terms	Schema
Prefix	misapigad (touched) nagbanwag (spread /announce) nagkuroshot (pouting) mulumpag (topple down) gipahit (bit) kulu-kalisang (fearful) naaninaw (reminisced/realised) itimo (snack) iabilay (to carry on a shoulder)	prefix-stem
Suffix/Postfix	haplito (sorcerize) gisapanap (spread) abriha/abrihi (open)	stem-suffix
Suffixoid/semi-suffix	ilaha (theirs/them) inyoha (yours) akoa (mine) imoa (yours)	stem-suffix
Infix	nanimuyo (residing) hinaganas (gush) kinulasaw (restlessness, unruly act) gagmay (small/little) yag-as lagyo (far) dug-ol (near)	st(infix)em
Circumfix	masupilon (disobedient/stubborn) dagitabnon (electric) inambitay (sharing blessings) kakaraan (antiquity)	circumfix-stem-circumfix
Interfix		
Duplifix	pagpagiay-giay (to sway your hips) pagdimdim (to taste) mitapya-tapya (touched) gisubli-subli (repeated/reiterated) gakaising-ising (avoid the confuse of someone) pikpikon (to pat on the shoulders) namilagpilag (glittering) dangoy-ngoy (sob) kuha-kuhaan (reduced/subtracted)	stem-duplifix
Transfix	tukar-panokar (root: music) (gerund: playing music)	s<tranfix>te<tranfix>un
Simulfix	irog-idog (move) gisampit-gisanpit (called)	stem/simulfix

Table 11 (*continue*)

Suprafix	pánit panít- ámo- amô – túbo- tubó-	(skin) (kind of fish) (boss) (ghost) (pipe) (sugar cane)	stem/suprafix
Disfix	isdog-idog-irog kuhaon-kwaon tawo-katawhan	(move) (get) (person-people)	st>disfix<m

The Siquijodnon-Cebuano language employs a very rich affixation. With the illustration above, various forms of affixation give great influence to the word formation of the Siquijodnon-Cebuano language. Obviously, affixes are inserted and combined in the root words to establish new word formations with different degrees of meanings. Nevertheless, interfix is not popular in the Siquijodnon-Cebuano language. It implies that native speakers of the said language are creative enough to combine word parts to come up with new set of morphemes.

This goes to show that affixation plays a vital role in the word formations of Siquijodnon-Cebuano. This clearly reflects that Siquijodnon-Cebuano and English language share a fraction of their derivational morphemes. With these inflectional and derivational characteristic commonalities of Siquijodnon-Cebuano and English, the theory of Congruent Lexicalisation and Universal Grammar of Chomsky have to be reviewed. *Congruent Lexicalisation* emphasises that the structural similarity or structural asymmetry of the two grammatical systems that likely occur

between either related dialects or a dialect and a standard language. Cook (cited in Ellis, 1996) categorically explicates the Chomskyan view of *Universal Grammar*:

“The language properties inherent in the human mind make up ‘Universal Grammar’ consists not of particular rules or a particular language, but a set of general principles that apply to all languages.”

Chomsky’s assertion for the innateness of UG is that it would be impossible for a child to learn the grammar of his/her mother tongue without a set of innate principles. This is because the data from the input are inadequate to enable the child to discover specific rules. Moreover, language is an intellectual system which is innate to normal human being’s cerebral or psychological structure (Radford, Atkison, Britain, Clashen, & Spencer, 2003; Senaratne, 2009; Ellis, 1996; Cook, 1996). This emphasises that linguistics is also a branch of cognitive science, which refers to a group of disciplines that define and analyse human being’s ability to think. Thus, the discipline

of linguistics along with psychology, philosophy, and computer science are vital sub-disciplines within cognitive science (Carnie, 2002).

In this study, the Siquijodnon speakers use their knowledge in their L1 (Siquijodnon) to enable them to discover and learn the rules of the target language or the input (the English language) for communication purposes. Such scenario is further illustrated in the study of Kirkici and Clahsen (2016) on a series of masked priming experiments investigating the processing of inflectional and derivational phenomena in native (L1) and non-native (L2) speakers in a non-Indo-European language, Turkish, in which they specifically compared regular (Aorist) verb inflection with deadjectival nominalisation, both of which are highly frequent, productive and transparent in Turkish. The experiments revealed diverse priming patterns for inflection and derivation within the L2 group.

Moreover, the study of Jacob, Gunnar, Fleischhauer Elisabeth, Clahsen, and Harald (2013) on a cross-modal priming experiment, investigating inflected verb forms of a group of late learners of German with Russian as their native language (L1) and a control group of German L1 speakers, revealed that the L1 German data yielded a stem-priming effect for inflected

forms involving regular affixation and a partial priming effect for irregular forms irrespective of stem allomorph. By contrast, the data from the late bilinguals showed reduced priming effects for both regular and irregular forms. We argue that late learners rely more on lexically stored inflected word forms during word recognition and less on morphological parsing than native speakers.

With such linguistic phenomena, it is imperative that affixation is popular in various languages across cultures. This is because language refers to any distinctive linguistic diverse unit, which is mutually incomprehensible with other entities (Campbell, 2006). That is why, linguistics can be generally categorised into its three subfields of study: *language in context*, *language meaning* and *language form* (Lyons, 2002).

Other Siquijodnon-Cebuano Morphological Phenomena

What is more interesting is morphological phenomena like *blending*, *compounding*, *full reduplication*, *partial reduplication*, *derivation*, *etymology*, *cliticisation*, *borrowing*, *coinage* and *backformation* are prevalent in the Siquijodnon-Cebuano language. Table 12 presents the other Siquijodnon-Cebuano morphological phenomena.

Table 12

Other morphological phenomena (blending, compounding, full reduplication, partial reduplication, etymology, clitisisation, borrowing, coinage and backformation)

Other Morphological Phenomena	Morphological Analysis
Blending	
hugpong (sentence)	It comes from the words hugpong (<i>group</i>) and pulong (<i>words</i>)
bungi (hare-lipped)	It comes from bungal na ngipon (destroyed tooth)
ginapusil	It comes from the words ginamos (salted fish), pusil (gun) and sili (pepper).
Compounding	
Camoting kahoy (cassava)	It comes from camote (crop), nga (of) and kahoy (tree).
Full Reduplication	
balay-balay (a toy house) pusil-pusil (a toy gun) lantanay-lantanay (bamboo raft) lanat-lanat (playful act of running) kamang-kamang (a playful act of crawling) ngisi-ngisi (a playful smile) kalag-kalag (Halloween) tangan-tangan (a kind of plant) tarak-tarak (a toy truck)	The root word balay is repeated to imply sense of playfulness. Siquijodnon-Cebuano nouns receive full reduplication.
Partial Reduplication	
paghapa-hapa (crawling) pagdimdim (tasting) iring-iringon (winning the heart of someone) bato-batoon (throw stone to something/ someone) mitapya-tapya (touching on a skin/ having closer contact of something) pagpagiay-giay (to shake or sway)	The root word balay is repeated to imply sense of playfulness with prefix and suffix attached to it. Siquijodnon-Cebuano nouns receive partial reduplication because of the verb-marking affixes.
Etymology	
orasyon (oracion: <i>from Latin</i>) Isla de fuego (island of fire: <i>from Spanish</i>) kwarto (bedroom: <i>from Spanish</i>) tener (own: <i>from Spanish</i>) lamisa (table: <i>from Spanish</i>) radio (radio: <i>from English</i>) suportahan (will be supported: <i>from English</i>) balansi (balance: <i>from English</i>) pulis (police: <i>from English</i>) bisita (visitor: <i>from English</i>) ibedensiya (evidence: <i>from English</i>)	The Siquijodnon-Cebuano nouns are derived from foreign languages due to colonization influences that bring linguistic assimilations to the Siquijodnon-Cebuano language.

Table 12 (*continue*)

Clitization	
napulo'g usa wala sila'y tinguha	It comes from napulo og usa (eleven) It comes from wala sila oy tinguha (they do not have dream/ desire)
Borrowing	
toothpaste tissue paper piano kutsara tenedor	They are borrowed from <i>English</i> language. Borrowing happens because of the absence of equivalence in the Siquijodnon-Cebuano language. It is borrowed from <i>Spanish</i> language. Borrowing happens because of the absence of equivalence in the Siquijodnon-Cebuano language.
Coinage	
Colgate	Some Siquijodnons use the brand name, Colgate for the term <i>toothpaste</i> .
Gillette	Some Siquijodnons use Gillette for the term <i>blade</i>). In Siquijodnon-Cebuano, the consonant <i>g</i> is pronounced as /g/ instead of /dz/.
Rayban	Some Siquijodnons use Rayban for the term <i>eyeglasses or goggles</i> which is taken from the brand name of goggles, Rayban)
Backformation	
sapa	The plural Siquijodnon-Cebuano noun, <i>kasapaan</i> (rivers) from sapâ (noun: river)
kaon	The Siquijodnon-Cebuano <i>kaon</i> (verb: present tense of <i>eat</i>) from <i>kalan-on</i> or <i>pagkaon</i> (noun: food)
inom	The Siquijodnon-Cebuano verb, <i>inom</i> (present tense of <i>drink</i>) from <i>ilimnon</i> (noun: drinks)

It can be seen in the aforementioned data that categorically, word formations of the Siquijodnon-Cebuano language are anchored on other morphological phenomena like blending, compounding, full reduplication, partial reduplication, derivation, etymology, cliticisation, borrowing, coinage and backformation. However, among these other

morphological features, compounding is not that popular in the language under study, unlike reduplication and etymology.

It is also worth noticing that a significant number of the Siquijodnon-Cebuano terms are taken or derived from Spanish and American languages. These morphological phenomena signify that the presence of the

two groups of coloniser (Spaniards and Americans) in the lives of the Siquijodnons brings salient impacts to the word formations of the Siquijodnon-Cebuano language, in particular, and its language development at large.

Saturnino (2012) and (Defaz, 2011) explicate that morphology studies and describe word forms which include inflection, derivation, compounding and other morphological phenomena like reduplication, gender marking, cliticisation, blending, suppletion, clipping, genitive and the like. Below are some examples of word formation process with their morphological phenomenon given by Argente (2012), Rubba (2006) and Loos et al. (2004).

- a) Blending- a process of combining two words to create a new word.
e.g. motel - a blend of motor and hotel
jeggings - a blend of jeans and leggings
- b) Acronym- a process forming out of the first letter.
e.g. COE - College of Education
CBM - College of Business and Management
Telecast- television-broadcast
- c) Clipping - is the reduction of a word into one of its component parts.
e.g. app.- application
fans - fanatics
- d) Compounding - combining two or more roots to make a new word.

e.g. doorknob
guardhouse
sun Burn

- e) Reduplication - a matter of doubling a syllable to do the same. This is common in foreign languages.
- f) Full reduplication - all of the syllables are doubled.
- g) Partial Reduplication - not all of the syllables are doubled.
e.g. lapit-lalapit
dagsa-dadagsa
- h) Suppletion - replacement of the verb with one that is very different. In other words, it is the replacement of one stem with another, which has no phonological similarity to the other allomorphs (Loos et al., 2004).
e.g. go-went
good-better-best
- i) Derivation - a free and at least one bound morpheme are combined to form a new linguistic sign.

Suffixation

e.g. hopeful

Prefixation

e.g. unload

Zero-derivation

e.g. deer – deer

- j) Etymology - refers to the origin of several words. Usually these words are originated from Latin or Greek.

- k) ero morpheme - no visible prefix or suffix is attached.
e.g. put vs. put
- l) Internal Change (ablaut) – a vowel alternation that marks grammatical contrast. It affects only the vowel.
e.g. ring-rang
give-gave
- m) Criticisation - this is also known as contraction by which a complex word is formed by attaching a clitic to a fully inflected word.
- n) Borrowing - refers as the name claims when a language borrows terms from other languages.
e.g. Alcoholic (Arabic)
Yoghurt (Turkish)
Piano (Italian)
- o) Coinage - refers to the invention of new terms into a language. Most of these words use proper names or trade names which eventually become common words. They refer to a general type of products (regardless of the brand), name of inventors, etc.
e.g. zipper
nylon
Aspirin
- p) Backformation - when a word of one type (usually a noun) is changed to another different type of a word (usually a verb)
e.g. donation (noun) - donate (verb)
babysitter (noun) – babysit (verb)
- q) Genitives - a bound morpheme that is attached phonologically to a free morpheme.
e.g. The Director's car
The Principal's office
- r) Morphophonemic change – Its main focus is the change of sound in a morpheme. The pronunciation variants of a morpheme are called **allomorphs**. The phenomenon of variation in the pronunciation of a morpheme is called **allomorphic variation or morphophonemic variation/change** (since it is the phonemic aspect of a morpheme that is varying). Such variations are sometimes called *morphophonological processes* (Rubba, 2006).
- s) Allomorphic phenomenon - allomorph is any of the different forms of morphemes. Allomorph has the formula {-d past tense} = /ɔd/~/t/~/d/. These has different types such as **zero allomorph**, in which there is no change in the shape of a word through some difference in meaning is identified; **replacive allomorph** wherein these means that it will signify some difference in meaning, a sound is used to replace another sound of a word just like *drink-drank*; and the suppletive allomorph in which it signifies some difference in meaning, there is a complete change in the shape of a word, for instance, got the **suppletive allomorph** of {go} = went.

Clearly, the morphological phenomena like *suppletion*, *zero morpheme*, *internal change*, *genitives*, and *morphophonemic change* are not apparent in the Siquijodnon-Cebuano language. This is a concrete manifestation of a distinctive and limited linguistic features of one language. Thus, no two or more languages or dialects have consistent similarities and differences. Language holds any distinctive linguistic diverse unit which is mutually incomprehensible with other entities (Campbell, 2006). That is why, linguistics can be generally categorised into its three subfields of study: *language in context*, *language meaning*, and *language form* (Lyons, 2002).

This inconsistency of two languages is likewise demonstrated in the study of Zhang (2012) whose results showed that the contribution of Chinese morphological awareness to English morphological awareness was larger for compound words than for derived words, which are the exact opposite of the morphological features of the language under study.

Thus, with the emergence of linguistic cross-linguistic transfer, there is a dire need to evaluate word formations of different languages not only for linguistic uptake, curriculum enhancement and academic advancement, but also for in-depth actualisation on the indispensability of language and culture.

CONCLUSION

Considering the aforementioned findings, it is concluded that Siquijodnon-Cebuano is a rule-governed language which certainly shares a number of morphological features with English and other prevalent languages or dialects. The results also manifest the essential contribution of affixation in establishing inflectional bound tense-marking morphemes and derivational bound from class-marking morphemes. They further conclude that Siquijodnon encounters with other language speakers brought about by colonisation has greatly influenced the morphological development of their language. Hence, Siquijodnon language is a twinskin of Siquijor Island's local identity, which likewise holds a utilitarian significance for its folk literary, historical, cultural and socio-cultural heritage and development.

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Learning English in a Third Space? Malay Students in an English-Speaking University in Malaysia

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ABSTRACT

It has been suggested that the use of English among Malays is constrained by the intertwining of ethnic identity, religion and native language. This study investigated the possibility of a 'third space' (Bhabha, 1994) for a group of Malay-speaking English majors in an English-medium university in Malaysia. Using Norton's (2013) identity approach to second language acquisition, it found that the participants' identities as ethnic Malays and Malay-English speaking bilingual were often conflicted as the broader community was disinclined to use English. Despite high motivation levels, dominance of the Malay language curtailed the participants' investment in English to a great extent. The third space, when available, was confined to sites that were associated with their formal learning of English.

Keywords: Bilinguals, third space, learners' identity, use of English

INTRODUCTION

As an Outer Circle country (Kachru, 1990), the use of English in Malaysia is widespread (e.g. Nair-Venugopal, 2003; Hashim &

Tan, 2012). This, however, does not mean that English is used frequently by all Malaysians or that all speakers are equally proficient. Malays, who constitute more than half of the country's population, have been described as the least receptive to the use of English (Abdullah & Wong, 2006) and the use of this language is especially low among themselves (Ting & Mahadhir, 2011). Given the persistent calls for improvement of English proficiency among the country's younger population (e.g. Civinini, 2016; Naidu, 2015), their

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continuing disengagement from English can lead to a number of problems. Primary among these are the obstacles faced by learners from this ethnic group who wish to use English but have little or no access to willing speakers in their immediate community.

Several studies have documented the difficulty with which highly motivated Malay learners try to speak English in non-classroom contexts (Lee, 2003; Adnan, 2010; Rajadurai, 2010a; 2010b; 2011). These studies clearly show that many members of this group resist the attempts to use English by fellow Malays, preferring their native language, Malay (or Bahasa Malaysia), as the only acceptable language. The reason that is often cited for their rejection of English is the fusion of ethnicity, religion and language in the idea of 'Malayness' as held by many Malays and the Malaysian constitution (Lee, 2003; Adnan, 2010; Rajadurai, 2010a; 2010b; 2011). This suggests that the sense of being Malay manifests itself clearly when members of this ethnicity communicate with one another and a dominant use of a language other than Malay may be seen as a threat their shared ethos.¹

¹Shamsul (1994) suggests that modernisation and its resulting secularisation have prompted non-Western communities such as the Malays to intensify efforts to protect their identity. Although he focuses on the Malays use of religion (i.e. Islamisation) to do this, the fusion of ethnicity, religion and language can explain why the use of the Malay language is correspondingly favoured as the medium of communication among them.

Given the pervasive use of their native language, one way to provide more natural opportunities to use English among the Malays is to create a place where the use of English is not seen as a threat to their identity. Can such a 'third space' (Bhabha, 1994) alleviate the difficulties faced by motivated Malay learners of English? A 'third space' in this case would be a context in which common expectations to use their native language by some Malays on all other Malays are temporarily lifted. Referring to the use of English in its place, this is defined by Rajadurai as "a form of ... in-between space in which negotiation and transformation can take place" (2010a, p. 104). Available evidence, however, points to a scarcity of such contexts. In her study, Rajadurai (2010a; 2010b) discovered that it is only the participants' classrooms and on-campus sites associated with their formal learning of English that genuinely offered the reassuring support of a third space. In terms of spoken English particularly, this finding also suggests that it is difficult for Malay language learners to practise English language skills beyond the normally safe scaffolding (Vygotsky, 1997) afforded by their teachers and more proficient peers.

Building on Rajadurai's (2010a) finding, this paper aims to explore the extent to which an English-medium university in Malaysia, given its size and organisation as a community, can provide the much-needed third space to Malay learners who want to improve on their English. In order to do this, the study asks two related questions:

- (1) what kinds of investment do the participants make in learning English over a period of one year at the university?
- (2) how does the university environment influence the above outcome?

The main theory that informs the research questions is described next.

THEORETICAL FRAMEWORK

Due to the obvious connection of this study to the Malay identity and in order to understand the dynamic nature of the participants' struggles in learning English over a period of time, this research draws on the notion of 'identity', defined by Norton as "how a person understands his or her relationship to the world, how that relationship is constructed across time and space, and how the person understands possibilities for the future" (2000, p. 5).

Subscribing to a poststructuralist view of language (Norton & Mckinney, 2011), the 'identity' approach to second language acquisition eschews the primacy of structure (cf. Saussure, 1966) and is also critical of binary opposition in language learning (e.g. motivated vs. unmotivated). Importantly, it places considerable emphasis on a larger socio-historical understanding of language units such as words, sentences or discourses (e.g. Bakhtin, 1981) and strives to consider power relations (Bourdieu, 1984) among language users. In addition to poststructuralism, the 'identity' approach is underpinned by Situated Learning Theory (Lave & Wenger, 1991). In this regard,

Norton and Mckinney (2011) explain that the 'identity' approach views the learner as a member of a community and this contrasts it with the cognitivist view of the learner as an individual.

Two theoretical constructs are central to the 'identity' approach: 'investment' and 'imagined community'. These relate to the ebb and flow of learners' effort to learn a second language (Norton Pearce, 1995; Pavlenko & Norton, 2007). 'Investment' refers to the engagement that learners make with the language in lieu of the psychologically oriented and ahistorical notion of 'motivation'. Thus, learners 'invest' in the L2 both because they believe that it will pay off in terms of cultural capital (Norton & Toohey, 2011) and because the value of this payoff can vary with societal changes, the intensity of the engagement can fluctuate across temporal and spatial contexts.²

The social nature of the act of learning gives rise to the notion of 'imagined communities'. As learning is seen as an experience of 'becoming', learners may assume multiple, sometimes conflicting, identities during the process. Thus, they identify with groups of people who may

²Motivation', referring to one's "energization (i.e., instigation) and direction of behavior" (Elliott & Covington, 2001:73), is often regarded as a fixed or minimally variable trait of a learner's personality. On the other hand, 'investment' captures the shifting nature and intensity of learning efforts made over a period of time, in response to various elements in the learner's social context.

or may not be present around them due to shared values, lifestyles or aspirations. In order to understand the kinds of investment that are made by them, Pavlenko and Norton (2007, p. 675) argue for a need to “examine their multiple communities and understand who can and cannot be imagined as a legitimate speaker of a particular language variety in a specific context”. This understanding can then be used to make sense of the learning strategies they adopt at any given time (Lee, 2014).

While Norton and many other scholars have used the ‘identity’ approach to investigate cases of individual learners, the present study is interested in the participants’ commonalities given its aim to understand their thoughts and feelings as a collective (see also Cervatiuc, 2009).

METHODS

Participants and Data Collection

The study is part of a larger project that aimed to chart the development of English

proficiency by English majors over a period of one year. Selected from different cohorts, the participants were 20 ethnic Malay undergraduate students from an English Language and Literature programme. The selection of these students ensured that they fulfilled a major criterion of the study, that is, they intended to learn English. Table 1 summarises the composition of the groups with regard to the cohort and number of participants. They were interviewed in groups twice in a semester. The interviews were carried out by a research assistant who was a postgraduate student in the department. They were conducted in English but the participants were free to use Malay if needed. As the semester progressed, several of them dropped out of the project and by the time the second round of interviews was over, only nine participants remained.

The interview questions were designed to explore student experiences in learning and/or using English. They were asked to describe their perceptions, problems, future

Table 1
Composition of groups and interview intervals

Group	Interview 1	Interview 2
Group 1	Nov 2014	Apr 2015
(Years 3 & 2)	(5 participants)	(2 participants)
Group 2	Nov 2014	Mar 2015
(Years 3 & 2)	(5 participants)	(3 participants)
Group 3	Nov 2014	Jan 2015
(Year 3)	(5 participants)	(2 participants)
Group 4	Dec 2014	Jan 2015
(Years 1 & 2)	(5 participants)	(2 participants)
Total	20 participants	9 participants

plans and other issues that were related to the use of English on campus and beyond. Although it would be more common to interview participants individually, the number of participants in this study and the time allocated for data collection (10 weeks) made it difficult to adopt this format, especially in the first round. Being interviewed in a group, however, helped to put the participants at ease and make their responses more spontaneous. In the second round, during which there were fewer participants, seven of them were interviewed individually.

Data Analysis

The interviews were transcribed and analysed using Nvivo. The nodes in the analysis were created independently by the two researchers based on the research questions posed. Later, the two sets were compared. Shared themes were identified and explored with repeated reading. Themes unique to one researcher made up only two percent of the total and were resolved by subsuming them under existing ones.

Context of the Study

The medium of instruction in public universities in Malaysia is Malay as a result of the language policies adopted after Malaysia gained independence from Britain in 1957. The university in which this study took place, IU,³ is a public university incorporated under the Malaysian

Companies Act (1965). This allows it to use English as its official language and the medium of instruction as well as enrol a slightly higher number of international students than otherwise allowed. The presence of international staff and students has made English its lingua franca. Although other languages may be spoken too (e.g. Arabic and French), English is the most common language after Malay (whose frequency of use by the Malay students forms the backdrop of the study). IU was set up as an Islamic university and thus, the local students are mostly Malays. It is largely funded by the Malaysian government and like other public universities in the country, it abides by the Universities and University Colleges Act (1995).

RESULTS AND DISCUSSION

In order to explore the extent to which IU served as a third space to the Malay-speaking participants intending to learn English, the discussion is organised around two broad themes that address the research questions – ‘motivation and investment’ and ‘impact of the campus environment on language learning’.

Motivation and investment

As students majoring in English, the participants’ motivation to learn English was unsurprisingly high. In both interviews, the participants (18 out of 20 in Interview 1 and five out of nine in Interview 2) variously mentioned the need to learn English and how motivated they were to do so. In both interviews, the above 50% rate

³A pseudonym.

of participants indicating their high level of motivation suggests that this was a group determined to improve their proficiency in English. The question remains as to how far they can go in their learning of the language with this kind of motivation. As can be seen below, some of them wanted to do it for their studies and some for their professional future.⁴ This would equate with what is called instrumental motivation in cognitive psychology (Dörnyei, 2005).

Participant 19: *I think I'm positive because yeah, learning English is... learning English prepares you for the future because... because I think because I think this is only the place where I can speak in English and so, it... it encourages me to use more English because I sometimes, I feel inferior because my friends can speak better than me. And so, I need to improve my English.* (Group 4, Int. 1)

Participant 1: *Yes, I am motivated to learn English because as an English major, I need to practise daily to improve my English so that I can be more fluent, and also in terms of writing and performing better in my chosen major.* (Group 1, Int. 1)-

Participant 6: *In...in my opinion, yes, I am looking forward to enhance my*

English because in order for me to be in the real world later in...I mean, in my career, people nowadays tend to choose those who are very fluent in English, so there will be a lot of competitions when getting in the job markets. So, I think it is compulsory for us to always improve our English daily. (Group 2, Int. 1)

Participant 18: *Em.. I'm not saying that I don't have any other choice, it's just that this is what I.. I will be doing and what I am doing it currently and in the future. Yea, I'm pretty much motivated. I tried, try and I'm still trying to..* (Group 4, Int. 2)

As an English-speaking institution, the supposed prevalence of English in the university was seen as useful in providing an ideal environment to the students. In this regard, 11 out of 20 participants (55%) in the first interviews even mentioned the fact that IU being an English-medium university was motivating:

Participant 2: *I think of course, it... it... of course, it influences us to use English more because already in IU the... the... the medium for conversation, right, in IU is English. IU is an English-speaking campus and plus, what we are studying is English language. So, it's more for motivation for us to speak English actually.* (Group 1, Int. 1)

However, when we explored this possibility through questions on their investment, a different story emerged. In the first

⁴All quotations are verbatim from the transcripts of the recordings. Personal names are concealed for privacy reasons. IU-specific terms, if present, are glossed.

interviews, only two out of 20 participants (10%) brought up the difficulty of finding opportunities to speak English. In the second interviews, however, this figure dramatically increased to 90% (eight out of nine).

Participant 2: *Well, I have mixed feelings actually about committing-communicating in English here in IU. Basically, if in class, I feel comfortable speaking in English in the classroom context. But if with my Malay friends, mostly, I speak Malay because if I were to speak English, it would look like I'm a show-off or something like that. So, I refrain myself from communicating in English with Malay friends.* (Group1, Int. 1)

Participant 3: *I seldom use English daily. Just same like [personal name], we use English when in class, when you have presentation or something like that and when at mahallah [hostel], we use our mother tongue. So, it would be easy for us to communicate with others. So, not, not so much English to use.* (Group1, Int. 1)

Participant 11: *I just use English mostly in formal environment, whether to attend classes or anything like that. But I don't... I don't really use English in my daily conversation unless I were to explain something that is related to English subjects, then only I speak English. Yeah, basically I use Malay in daily conversation.* (Group 3, Int. 2)

As can be seen in the excerpts above, the opportunities to use English only presented themselves during classes or interactions that had to do with their learning.

Others, like Participant 4 below, also mentioned using English with the non-Malaysians. However, in the next section it will be shown that this type of interaction is limited.

Participant 4: *For communicating in English in IU I feel all restricted to classroom sort of environment and also with foreign, international students.* (Group 1, Int. 2)

With their levels of motivation remaining high despite what they saw as a lack of opportunities to use English, did they remain invested and if they did, what did they do in order to learn the language? In the face of the obstacles they described, many participants channelled their energies towards activities that required little or no involvement from members of their community at large. 12 out of 20 participants (60%) in the first interviews and eight out of nine participants (90%) in the second reported that they watched English movies with or without subtitles, listened to English songs, read books or other materials in English and used online social media (mostly with English speakers outside IU).

Participant 16: *And I think movies... and movies do help a lot. I... I love movies and so, I think everyone love movies. So, you... I love the... I, I... even though*

the movies doesn't have the subtitle, I downloaded the subtitles in order for me to learn the languages, the... the words that they use, the synonyms, the vocabulary and how the native speakers use English because sometimes, they... they do not use the standard English language. They may use varieties and shut- and such. So, I learn English, I learn a lot from movies. (Group 4, Int. 1)

Participant 18: *I think it's the same for all of us that watching movie is the most effective way to improve our English because through movies, we can learn their language, learn their dialects, learn their accents. And in terms of enhancing our vocabulary, I think by reading novels, we can improve our vocabulary because for me, when I read novels, I will find... I will find like, like for example a word that I can't understand. So, I will search in the dictionary and like, write in my... my own dictionary book, the new words. Then, when I... when I encounter the word, I already know the meaning of the word like... so, we can improve the vocabulary through reading novels. (Group 4, Int. 1)*

Participant 11: *Yeah, nowadays I post in social networking, I use more English for the caption, and I check it from the Internet also if there is something wrong in my sentence and during my studies here I think my English has improved*

and also my grammar, because before this I just write it and not, not really pay attention to this grammatical rule, but now I know this mean what, and what should we do, past tense, present tense, I know more compared to before. (Group 3, Int. 2)

It is apparent from their narratives that the otherwise common pursuits by many other university students were often followed up with more formal learning activities such as checking meaning of unfamiliar words, determining accuracy of grammar and noting down new vocabulary items. This means that these activities have gained an extra dimension in terms of their significance to the students. We will return to this point in the next section.

Given these findings, for the majority of them the status of IU as an English-medium university did not transform the institution into an enlarged 'third space'. The third space, where negotiation may be possible, turns out to be their classrooms and other sites related to their programme, not unlike Rajadurai's (2010a, 2010b) study. In the excerpt below, the participant describes an incident in which her pronunciation was corrected by a classmate and how she views this moment, and others like it, as a learning experience.

Participant 6: *oh, em.. for presentation, it do helps me a lot..er.. and I also remembered one of my classmate.. er.. correct me in my pronunciation, a lot. But it happens, er.. during my CFS*

[Centre for Foundational Studies] because here I rarely got complains. I rarely got myself being corrected because.. you know, when it comes to presentation you need to practice a lot before that, right? Em.. Yeah, presentation is good for me. For me, it's... it is good because you know...you can practise speak in front of people and you feel good, you will feel good after the presentation. When you have the chance to talk about what.. about what you're presenting. Yeah. (Group 2, Int. 2)

Some participants (four out of 20 or 20% in the first interviews and three out of nine or 33% in the second) expressed disappointment over the state of affairs in the predominance of Malays and Malay language but for many more (seven out of 20 or 35% in the first interviews and three out of nine or 33% in the second), see it as result of their own insufficient proficiency and the resulting lack of confidence:

Participant 19: I think the biggest obstacle for me is from myself. I don't have confidence to speak in English because I think I don't have... beca- a choice. I don't... I don't have much... much vocabulary and my grammar... and my grammar is also does not... does not... does not... grammar, grammar... does not...

Interviewer: Good enough?

Participant 19: Ahh, yeah. Not good enough and because... because my friends, everyone speak in Malay. So, I think... I think I also need to speak in Malay to them. (Group 4, Int. 1)

In the next section, we will explore the impact of the campus environment on the students' investments. We will examine how the identities that they adopted and the imagined communities which they aligned themselves with are implicated in the outcome above.

Impact of the campus environment on language learning

How did IU not manage to be that in-between place, a third space that allows a language other than the students' native tongue to be used as a tool for communication? First of all, despite English being touted as the official language of the university, the predominance of Malays on campus led to the overriding use of the Malay language and this was seen as a constraint on investment by many participants. As the excerpt below shows, the need to use this language with other Malay speakers may well have stemmed from their shared ethnic identity.

Participant 13: For me, I think in IU, yes, I learn English but then, because of the environment I can't... I can't speak English frequently because of this people, you know, Malays and if we speak English with them, it's like, I don't

know, it's not very good for, for them. They... they prefer we speak in Malay compared to English. (Group 3, Int. 2)

For the participants, the conflict arose when they saw themselves as English speakers who were actively bilingual and had no issue with being Malay at the same time. In the excerpt below, the participant can be seen trying to highlight her deeply embedded Malay identity via the use of a regional dialect with her family and adherence to a Malay eating custom at home despite her increased use of the English language as an English major:

Participant 16: *Yeah, I think lots of us, I mean, the BENL [English major] student, we learn English, we use English, we live with English but when I come home, I do speak in dialect, in Perak-ian dialect. So, it's... it's really... it's different you know. I'm not really using Bahasa Malaysia, the pure... or the standard Bahasa Malaysia but I don't- I use dialect and you know, I eat with my- using my hands. It's not using fork and spoon at all. So, I think it's depends on the situation and depends on the person if he really wants to be westerner. I... maybe he, he does- maybe he or she doesn't like her first language. I think that's her problem. But I think in most cases, no. If you learn English, if you use English; it doesn't make you... it does not make you western. (Group 4, Int. 1)*

Consistent with previous studies, it is obvious that in a dominant Malay community the Malay language is used as a marker of shared ethnic identity. While it is easy to think of this decision to use Malay along with the others as willingness on the participants' part, it is important to remember that any effort to deviate from this expectation would be inconsistent with the Malay identity that also formed a part of them. This was their response to the unequal power relations which existed between these aspiring bilinguals and the rest of the university's Malay-speaking population, and thus following Norton (2013), it would be more useful to view this as two conflicting identities that were simultaneously adopted by the participants.

Interviewer: *What do you think that make you to speak in English? What drives you to speak in English?*

Participant 17: *What drives me to speak in English?*

Interviewer: *Like, should it come from you yourself or your surrounding?*

Participant 17: *Surrounding. I think surrounding. When I speak- when... when my friends speak English, so... that is when I can... I... I speak English with... with them. But if they only use Bahasa, so, I just use Bahasa with them. (Group 4, Int. 1)*

In talking about their future, however, this conflict was either played down or did not

seem to be an obstacle for their plans. For example, the same participant's articulation of his self as an English major and future English-speaking professional suggests that other than being Malay (and a Malay speaker), his identity also includes that of a competent bilingual:

Participant 17: *In 10 years' time, I... I can envision myself in terms, I involved in business and English play a major role for me.*

Interviewer: *How?*

Participant 17: *How? Because for me to grow in business area, I need to meet with people, I need to tend to speak with... to speak with people a lot, in terms of meetings, in terms of... of dealing business. So, English will play a major role for me to get the contract, something like that. That's... that's how I visualise myself and for me to be... to be noticed by the public through my business. (Group 4, Int. 1)*

In a community in which such aspirations are shared, using English among themselves as part of an extensive practice of bilingualism is not likely to be a problem but this does not appear to be the case in IU. This can explain why their classrooms and other sites of learning were almost the only places they used English consistently on campus.

Based on the findings, it is likely that due to the lack of opportunities to use English,

coupled with the inclination to use Malay with other Malays, the participants aligned themselves with communities of English speakers outside the campus. Given the prevalence of Malay-speaking domains for ethnic Malays in Malaysia (see above), these communities seem to exist outside the university, some possibly even outside their country. These are their imagined communities, which in turn, usually let them to participate in activities that did not involve other Malay members of IU:

Participant 7: *I also watch English movies that has the English subtitles, and I also read novels, English novels. Usually I'll start with children English novel, I start with the easy one first, and then I improve to the next level of English novel okay. And then, sometimes I do feel confident, sometimes I don't. If I...I want to be confident, I will make some preparation first. So, I'll be thinking in my head what to say to that English speakers and construct my sentence in my head. Then, only then, I would speak to him or her. (Group 2, Int. 2)*

It is interesting to note that the participants did not see the international students in their midst as a group of people who they could use English with. In the interviews, although such interactions were mentioned, they were few and sporadic. Elsewhere in the data, it was hard to find the clues as to why this was the case. Previous studies investigating socialisation patterns of

local and international students in English-speaking countries (e.g. Yates & Wahid, 2013; Sawir, 2013) have identified various social and psychological factors affecting the social distance between the two groups. Whether or not the same factors are at play in the Malaysian context such as this is an issue to be addressed in future research.

CONCLUSION

What can then be learned about learning a second language from the findings? This study suggests that an English-medium university with a large population of individuals sharing the same first language is not likely to be a successful 'third space'. Factors may vary across contexts, but from the perspective of the participants, Malay non-English majors were disinclined to use English and expect their native language to be used in informal interactions. Literature suggests that a possible factor is the confluence of Malay ethnicity, Islam and Malay language as Malayness. This issue lies outside the scope of the study and is thus, not confirmed in this investigation. Nevertheless, the study has revealed that many highly motivated learners are not likely to challenge the status quo due to factors such a lack of confidence and more importantly, the fluidity of their own identity.

As in Rajadurai (2010a; 2010b; 2011), the bilinguals in the learners' imagined community do not find English and Malayness conflicted, rather they complement each other. Given their motivation levels, these learners may

continue to invest in the target language although their strategies tend to be less socially involved. There are unequal power relations between such learners of English and the broader Malay community of which they are part of and clearly there exists a dominance of the social over the individual in this study in that the former can frequently constrain the latter's access to the target language.

It appears that a successful third space can only occur when the group's goals regarding the target language are aligned. A policy may be instituted to require widespread use of the language in a confined physical area but in less formal situations where its observance may be relaxed, continuing use of this non-native language usually gives way to ethnic identity allegiance. Possibly due to a complex set of values associated with the Malay language in the configuration of the Malay identity, the kind of goal alignment mentioned above is not easy to achieve and this is usually at the expense of the minority group who want to improve their proficiency in the target language. The findings suggest that, given Malaysia's socio-cultural dynamics, a smaller-scale site such as the classroom or an out-of-classroom task-based discussion are more likely to succeed as a third space than a whole university, at least for the Malays.

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Academic Dishonesty: An Empirical Study of Personal Beliefs and Values of Undergraduate Students in Malaysia

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ABSTRACT

The relationship between academic dishonesty and personal beliefs and values has been studied in many Western countries. However, the relationship between these variables have not been widely examined among higher education students in Malaysia. The purpose of this study is to determine the influence of personal beliefs and values, which consist of idealism, relativism and religious faith, on undergraduate students' academic dishonesty. A total of 2447 undergraduate students from four research universities in Malaysia participated in this study. The findings revealed that personal beliefs and values are significantly related to academic dishonesty. This study also indicated that idealism and religious faith are negatively related with academic dishonesty. Meanwhile, no significant relationship exists between relativism and academic dishonesty. Furthermore, the study found, after controlling for social desirability, idealism is the highest contributor to academic dishonesty. Based on the findings, it can be concluded that idealism and religious faith are important deterrents to academic dishonesty.

Keywords: Academic dishonesty, personal beliefs and values, unethical behaviour, idealism, relativism and religiosity

INTRODUCTION

Much has been written about academic dishonesty in higher education. Academic dishonesty has also been referred as academic misconduct, academic cheating, academic fraud and misrepresentation to explain the scenario of academic dishonesty (Mavisakalyan & Meinecke, 2015; Idrus, Asadi & Mokhtar, 2016). Academic

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dishonesty is a pressing issue and remains a concern in academia (McCabe & Trevino, 1997; Mavisakalyan & Meinecke, 2015; Meng, Othman, D'Silva, & Omar, 2014; Idrus, et al., 2016). Most notably, these studies reported that academic dishonesty may reduce the total welfare of a society and increase the potential of corrupted employees. Hence, universities enhance ethical values among undergraduate students (Meng et al., 2014). Lambert, Ellen and Taylor (2006) reported 342 allegations of academic dishonesty and more than 92% of the staff reported student academic dishonesty, including paraphrasing and copying directly from websites, books or periodicals without quoting the source. Meanwhile, in another study, Olafson, Schraw, Nadelson, and Kehrwald (2013) revealed that 51% of students cheated during exams and 43% of them copied directly from websites (plagiarism). Harding, Carpenter, Finelli, & Passow (2004) conducted a study among engineering students and found that 79.2% of these students indicated that they cheated at least once while 63.8% of them indicated that they cheated at least a few times in a term. Thus, the study showed academic dishonesty was rampant among students.

There are many forms of academic dishonesty such as cheating at tests, cheating at assignments, plagiarism, falsification/fabricating information, copying information without footnoting the source and helping others to cheat, alteration of materials, using technical devices (cell phones, cameras) to record or send data illegally to students'

advantage (McCabe & Trevino, 1997; Marsden, Carroll & Neill, 2005; Corll, 2007; Walker, 2008; McCabe, Feghali & Abdallah, 2009). Studies have shown that exam-related dishonesty and plagiarism are the most serious and common acts of dishonesty (Lambert et al., 2006; Levy & Rokavski, 2006; Olafson et al., 2013) rather than submitting assignments done by others, allowing someone to submit one's work, allowing someone to copy homework, copying a paper or project, or copying from the internet without giving the source (Levy & Rokavski, 2006).

In Malaysia, several studies have been conducted on the prevalence of academic dishonesty among undergraduate business, accounting and engineering disciplines (Ahmad, Simun, & Mohammad, 2008; Ismail & Yusoff, 2016; Idrus et al., 2016). For example, a recent study conducted among Malaysia accounting students revealed that 65.3% to 76% of students admitted cheating in final examinations, mid-semester examinations, quizzes and class assignments (BavaHarji, Chetty, Ismail, & Letchumana, 2016; Ismail & Yusoff, 2016). The common dishonest acts among students include paraphrasing materials from internet, books and journals without acknowledging the sources and cheating in quizzes (Ahmad et al., 2008; Daniel & Eng, 2016). Therefore, this study attempts to examine academic dishonesty among Malaysia undergraduate student from various disciplines.

Prior studies have reported that idealism, relativism (Rawwas, Khatib, & Vitell, 2004;

Rawwas, Swaidan, & Khatib, 2006; Rawwas, Swaidan, & Isakson, 2007; Ellahi, Mushtaq, & Khan, 2013) and religious faith (Rawwas et al., 2006; Robertson, 2008; Bloodgood, Turnley, & Mudrack, 2008) contribute to academic dishonesty. Idealism refers to the extent to which the individual believes that right action is based on universal rules on moral principles. Meanwhile, relativism refers to the extent to which the individual believes that an action should depend on the particular situation or circumstances (Rawwas et al., 2007). Rawwas et al. (2004) examined the relationship between personal beliefs and values and academic dishonesty among marketing students in a Midwestern public university in the US and a northeast public university in China. Their findings revealed that idealism is negatively associated with academic dishonesty while relativism is positively associated with academic dishonesty. In another study, Rawwas et al. (2006) stated that idealists were less likely to engage in cheating because they believe it is an unethical behaviour. Additionally, idealism was found to be a negative determinant of dishonest academic dishonest practices (Rawwas et al., 2007; Sierra & Hyman, 2008). Hence, it was suggested that increasing the number of idealistic students may reduce cases of cheating among higher academic students (Sierra & Hyman, 2008). Bloodgood et al. (2008) reported that students who are highly religious cheated less than students who scored relatively low in religiosity. They also found that the highly religious individuals cheated less under any circumstances.

Rawwas et al.'s (2006) study also found that the relationship between religiosity and academic dishonesty is negative. Robertson (2008) found that religiosity is associated with ethical judgment. In addition, religious beliefs may influence ethical judgments of students, and a person who has a high level of religious belief tend to act more ethically than someone who has a lower level of religious belief (Lung & Chai, 2010).

Though studies have been conducted to investigate ethical ideologies which include idealism and relativism (Chai, Lung, & Ramly, 2009; Ismail, 2014; Ismail & Mohamed, 2016) and religiosity (Saat & Porter, 2009; Lung & Chai, 2010), in Malaysia, those studies were not related to academic dishonesty. The link between academic dishonesty and personal beliefs and values is well researched (Chai, Lung & Ramly, 2009; Ismail, 2014; Ismail & Mohamed, 2016; Saat & Porter, 2009; Lung & Chai, 2010), but a study that linked idealism, relativism, religious faith with academic dishonesty is still limited. Therefore, this study attempts to examine these three dimensions of personal beliefs and values to determine which factor contributes leads to academic dishonesty.

Although several studies have been conducted to examine academic dishonesty in Malaysia (Ahmad et al., 2008; Ismail & Yussof, 2016; Idrus, et al., 2016), the results of studies could not reveal the real scenario of academic dishonesty among Malaysian students due to limited number respondents. The issue of academic dishonesty in Malaysia has also been discussed by Mohd

Isa, Jusoff and Abu Samah (2008) and Moten (2014). Their study focused on academic dishonesty in higher education e-learning and ways to curb plagiarism respectively. Imran & Ayobami (2011) reported that societal and environmental factors have direct and indirect effect on academic dishonesty. However, the study only focused on Nigerian students who studied in three universities in Malaysia. D'Silva, Meng & Othman (2015) examined the relationship between ethical ideologies (idealism and relativism) and academic dishonesty, but religious faith was not included. Thus, it is clear the study on the relationship between academic dishonesty and personal beliefs and values which consist of idealism, relativism and religious faith still received little attention among Malaysian scholars. The specific objectives of this study are to determine the (1) level academic dishonesty, 2) relationship between personal beliefs and values (which comprises idealism, relativism and religious faith) and academic dishonesty, and (3) factors contribute most to students' academic dishonesty.

ACADEMIC DISHONESTY

The term academic dishonesty refers to copying assignments, cheating on tests, and plagiarism (Lambert et al., 2006). Zito (2009) defined academic dishonesty as "the deliberate copying of another's work on tests, examinations, reports, or homework" (p.8). Kisamore, Stone and Jawahar (2007) defined academic dishonesty as any form

of academic misconduct or deviance which includes, but not limited to, test cheating, plagiarism and inappropriate collaboration. Corll (2007) defined academic dishonesty as cheating which involves "any behaviour that abrogates or threatens the validity of academic assessment or even of learning itself" and listed seven types of cheating which consist of "using crib notes on a test, copying another's homework or test answers or essays, plagiarizing in any form, using technical devices like cell phones, cameras, etc. to record and/or send data which illegally gives a student advantage over another, using attendance procedures to beat the system (false excuse making), using system-wide policies, procedures, and/or mandates to gain unfair advantage over other learners, to beat the system (false excuse making) and collaborating with others on work where collaboration should not take place" (p. 8). Other types of academic dishonesty include "alteration of materials" which is related to "an intentional and unauthorized alteration of students, lecturers or library materials", "fabrication" which is related to "any intentional falsification or invention of data", and "plagiarism" and "forgery" which are related to "any unauthorized signing of another person's name to a school related to document" (Walker, 2008, p. 5). For the purpose of this study, academic dishonesty is defined as a form of unethical behaviour by higher education students such as cheating at tests and assignments, plagiarism, obtaining an unfair advantage and fabricating information.

PERSONAL BELIEFS AND VALUES: IDEALISM, RELATIVISM AND RELIGIOUS FAITH AND ITS LINKAGES TO ACADEMIC DISHONESTY

Personal beliefs and values refer to the extent to which people make decisions based on their acknowledgment of something (Caswell & Gould, 2008). In other words, people tend to follow a behaviour if they believe it can produce positive impacts and refrain from it if produces negative outcomes. This study defined personal beliefs and values as the internal belief system of a person which consists of idealism, relativism and religious faith. Personal beliefs and values can be defined in many forms and are related to personal moral philosophy which consists of idealism and relativism (Rawwas et al., 2004; Rawwas et al., 2006; Rawwas et al., 2007; Sierra & Hyman, 2008) and religious faith (Hogg, Adelman & Blagg, 2010; Kay, Gaucher, McGregor & Nash; 2010). Scholars have used the term personal beliefs and values as personal moral philosophy which can be defined as an integrated conceptual system of personal ethics (Caswell & Gould, 2008). According to Rawwas et al. (2007), there are several categories of personal beliefs and values such as tolerance, intolerance, idealism, relativism, achievement, experience, positivism, detachment, theism, and non-theism. Granitz and Loewy (2006) examined the reasons for students' cheating by focusing on six ethical theories such as deontology, utilitarianism, rational self-interest, Machiavellianism, relativism and contingent ethics, all of which were related

to personal beliefs and values. While several researchers have focused on many categories of personal beliefs and values, there is a dearth of studies that examined religious beliefs as a part of personal beliefs and values and their possible effects on dishonest acts among students (Bloodgood et al., 2008).

Relationship between idealism, relativism and academic dishonesty behaviour

Idealism is considered as a component of personal beliefs and values that explains students' academic dishonesty (Rawwas et al., 2007). Idealism can be defined as a person's beliefs in doing the right thing which would influence a person's behaviour to do so (Caswell & Gould, 2008). Forsyth, Nye & Kelley (2001) stated that idealism refers to an individual's awareness about the welfare of others in making decisions. Idealistic people accept moral principles in making ethical judgments (Sierra & Hyman, 2008). Furthermore, idealists believe the goodness or badness of an action will affect the ethical judgments of a person (Rawwas et al., 2007). In other words, idealists seem to have a strong belief in particular actions of an individual. According to Forsyth et al. (2001), an idealist is a person who makes actions and decisions without any intention to harm others and they believe that the right actions will lead to positive consequences (Yurtsever, 1999). Idealists accept moral principles that do not affect others badly in making decisions (Chai et al., 2009). They tend to avoid practicing an immoral act

where they believe it will affect their lives and others' (Forsyth et al., 2001). According to Ellahi et al. (2013), idealists prefer to rely on moral principles in making ethical judgments. They tend to reject engaging in academic dishonesty in their study life.

Relativism refers to the extent to which a person refuses to accept universal moral rules in making decisions (Caswell & Gould, 2008). According to Forsyth et al. (2001), relativism refers to a person who makes decisions based on their "personal moral philosophies" on universal moral principles. Tannsjo (2007) defined relativism as a belief that the truth about certain moral values are variously described by others. In other words, when relativists make a judgment that the action is right, the same action is probably wrong to others. Relativists have their good reasons for the respective judgments. In line with the existing definition, this study described relativism as the extent to which the individual believes that an action should depend on the situation or circumstances involved. In contrast to the idealist, the relativist will accept an act if it produces positive consequences for all people (Rawwas et al., 2007). In other words, the relativist refuses to accept moral rules and judge an act based on the consequences of the act for all people. If an act is seen to produce positive impact for them, relativists tend to accept that behaviour without thinking about the negative effects for others. Chai et al. (2009) examined ethical behaviour among

consumers in Malaysia. The result revealed that idealists decline any illegal activities and are less engaged in those acts. They believe that the ethics of a behaviour is based on situations involved, whether it is bad or good (Yurtsever, 1999). Similar to idealism, relativism is the moralistic philosophy of a person. However, contrary to idealists, relativists tend to refuse moral principles if they believe they produce a negative impact for them (Yurtsever, 1999). They would involve themselves in unethical behaviour without considering the moral principles if they believe it produces a positive impact for them. In addition, sometimes they tend to harm others if their action can produce a good consequence (Forsyth et al., 2001).

The influence of these two belief components, namely idealism and relativism in academic dishonesty behaviour is explained using Forsyth's (1980) two-dimensional model of moral philosophy. Forsyth (1980) suggested that individual differences in ethical ideology may vary as a function of a rejection of universal rules in favour of relativism and idealism in the evaluation of actions and consequences. Forsyth (1980) argued that two basic dimensions, namely idealism and relativism, underlie differences in moral thought. Individuals with high idealism tend to be concerned for the welfare of others, and insist that one must always avoid harming others. Relativist individuals on the other hand, they refuse to accept universal ethical rules in order to protect their interest (Rawwas et al.,

2007). A study revealed that idealism was significantly and positively related to ethical judgment, but on the other hand, relativism was significantly and negatively related to ethical judgment (Ismail, 2014; Ismail & Mohamed, 2016). There are studies that revealed that idealism is negatively associated with academic dishonesty, while relativism is positively associated with academic dishonesty (Rawwas et al., 2004; Rawwas et al., 2006; Rawwas et al., 2007; Ellahi et al., 2013). These results further strengthened by D'Silva et al (2015) which revealed that more students who have higher relativism score tend to engage in academic dishonesty compared with idealistic students. Recently, a study conducted by Ballantine, McCourt Larres, and Mulgrew (2014) reported that idealism has a significant negative association with academic cheating behaviour. However, no significant association was found between relativism and academic dishonesty. Inconsistency of results of association between relativism and academic dishonesty can be a topic that should be investigated.

Based on the above, it is hypothesized that:

Hypothesis 1: Idealism negatively influences academic dishonesty

Hypothesis 2: Relativism positively influences academic dishonesty.

Relationship between religious faith and academic dishonesty

Religious faith refers to the strong belief of a person in God or in spiritual matters (Nethery, 2007). In fact, it is a powerful route

in contemporary life which may influences the person's lifestyle and behaviour (Lung & Chai, 2010). This study defined religious faith as personal beliefs of a person in God which is related to spirituality that can influence a person's behaviour, opinion and lifestyles. In other words, people who have strong religious faith are commonly guided by their religious principles in making decisions. Religious belief is closely related to religiosity because religiosity is seen as the strength of a person's beliefs in religion (Barnett, Bass, & Brown, 1996). Various definitions of religiosity exist in previous religious studies. Saat & Porter (2009) defined religiosity as an individual's beliefs which contains a spiritual connection or commitment and affiliation of a person to religious. Knotts, Lopez, & Mesak (2000) divided the term religiosity into two categories: (1) religious commitment, and (2) religious affiliation, whereby religious commitment can be divided into two other categories which are intrinsic and extrinsic religiosity. According to Robertson (2008), intrinsic religiosity can be defined as "religious motivation that is internalized and highly personal". In simple words, intrinsic religiosity refers to someone who has religious aspects which are highly integrated into his/her life. Conversely, extrinsic religiosity refers to incentives arising from practical actions that can fulfil a person's needs. People who have extrinsic religiosity tend to use the aspect of religiosity only when they need support from others to achieve their own social or economic interests (Robertson, 2008). In a

study, Bloodgood et al. (2008) revealed that religious beliefs are negatively associated with cheating behaviour. The finding was supported by studies which found a positive relationship between religious faith, ethical judgment and ethical beliefs (Knotts et al., 2000; Robertson, 2008; Lung & Chai, 2010). In other words, highly religious individuals are unlikely to cheat compared with individuals with low religious beliefs.

Research examining religiosity and behaviour have generally been a theoretical (Weaver & Agle, 2002). This study used the self-control theory developed by Gottfredson & Hirschi (1990) to explain the linkages between religion and academic dishonesty. This theory, also known as the general theory crime, was built to explain the causes of crime. This theory postulates that criminal acts or deviant acts provide easy and simple gratification of desire as they provide speedy outcomes such as “money without work”, “sex without courtship”, and “revenge without court delays” (Gottfredson & Hirschi, 1990, p. 89). Hence, people lacking in self-control may tend to engage in deviant behaviour for immediate pleasure. Self-control is defined as being “the tendency to consider the full range of potential costs of a particular act” (Hirschi, 2004, p. 543). Hirschi (2004) argues that self-control is an individual’s inhibitions against committing criminal or delinquent acts. Gottfredson and Hirschi (1990) suggest that individuals with low self-control are the product of ineffective or poor parenting practices early in life. Looking beyond crime, self-control is regarded as “the capacity to suppress

personally desirable behaviours (e.g., taking a nap) or impulses (e.g., lashing out in anger at other people) to bring behaviours in line with more socially acceptable goals and standards (e.g., helping with the harvest)” (Rounding, Lee, Jacobson & Jun-Ji, 2012, p. 636).

In addition to the parental factor, scholars have suggested that religion may also function as a self-control mechanism to restrain an individual from engaging in deviant acts. McCullough and Willoughby (2009) suggested that religion also has the ability to promote self-control. Carter, McCullough and Craver (2012) suggested that religion may promote self-control by fostering the belief that one is being monitored by God or other people. Furthermore, it provides a building block in a person’s cognition to define the right thing (Lung & Chai, 2010). Welch, Tittle, & Grasmick (2006) contended that people with strong self-control find it easier to resist temptation and follow religious dictates. Hence, people may not engage in deviant acts if their religion dictates so. Reisig, Wolfe and Pratt (2012) argued that religious beliefs might motivate people to exercise self-control. They assert that beliefs regarding positive (e.g., eternal salvation) and negative outcomes (e.g., eternal torment) after death can serve as powerful inducements to improve self-control efforts. Most notably, a study revealed that students who attend the religious schools tend to have higher levels of ethical sensitivity (Saat & Porter, 2009). Additionally, various religious activities such as prayer and

meditation provide opportunities to monitor one's own behaviour, which in turn may facilitate greater self-control in the future. Finally, religion provides believers with moral guidelines to defer to and exemplars to emulate. Hence, all these suggested that strong religious faith may inhibit a student from engaging in acts of academic dishonesty. Studies have found a positive relationship between religious faith and ethical judgment (Knotts et al., 2000; Robertson, 2008) as well as ethical beliefs (Lung & Chai, 2010). Bloodgood et al. (2008) also found that religious beliefs are negatively associated with cheating behaviour.

Based on these, it was hypothesised that:

Hypothesis 3: Religious faith negatively influences academic dishonesty.

Figure 1 shows the conceptual framework of the study. From literature review, a research framework was outlined in order to explain the relationship between the investigated variables. This study framework represented two variables: (1) academic dishonesty, and (2) personal beliefs and values which comprises of idealism, relativism and religious faith. The conceptual framework of this study explained the influence of personal beliefs and values (PBV) on academic dishonesty.

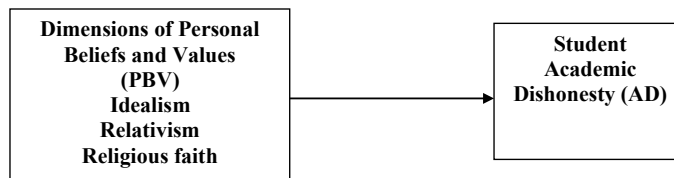


Figure 1. Conceptual framework of the study

METHODS

This study employed a correlational-descriptive study. Self-administered questionnaires were utilised for data collection at four research universities in Malaysia.

Population and Study Sample

The population of this study comprised 45,750 undergraduate students from four research universities in Malaysia. The sample

included 3220 undergraduate students from a wide range of academic disciplines that had been identified by programme of study to avoid inequity in the results of the study. They were selected using quota-cluster sampling. First-year students were excluded from this study because they were new students and may not be completely exposed to the tertiary students' behaviour. A total of 3220 questionnaires were distributed. Enumerators from each university were

hired to assist the process of data collection in all the selected universities. A drop-and-collect method was used in collecting data and this process took 8 months to complete. The questionnaires were collected from the respondents after they had completed the questionnaires. Out of 3220 questionnaires, 2606 were returned with an overall response rate of 80.9%. However, only 2447 questionnaires were useable. In general, 778 were male (31.8%) and 1669 were female (68.2%). Furthermore, 76.9% respondents were Malays and 16.8% respondents were Chinese. Meanwhile, both Indians and others comprised 3.0% and 3.3% of the respondents respectively. Among the respondents, 78.3% were Muslims, 9.5% Buddhists, 4.4% Hindus, 7.4% Christians and 0.4% were from other religions.

Measurements

Five aspects of academic dishonesty are measured, namely cheating on tests (8 items) such as “Passed answers to other students” and “Used unauthorised notes during class exam”, cheating on assignments (7 items) such as “Worked on assignments with others when asked for individual work”, “Did less of your share of work in group project” and “Allowed someone to copy my homework or lab work”, plagiarism (5 items) such as “Used exact words or ideas from a book or other printed publication without acknowledging the source”, obtaining unfair advantage (6 items) such as “Receiving a higher grade through the influence of a family or personal connection” and “Taking advantage as a result of being a

student athlete or member of a campus organisation”, and fabricating information (4 items) such as “Fraudulent excuse making to postpone exams or assignments”, which was adapted from Chun-Hua & Ling-Yu (2007); Rettinger, Jordan & Peschiera (2004) and Rawas et al. (2004). The respondents were asked to indicate their frequency of doing each activity using a 4-point scale ranging from “1” indicating “never” to “4” indicating “frequently”. The scales’ alpha reliability is 0.92.

Idealism (8 items) and *relativism* (9 items) were measured using the Ethics Position Questionnaires (EPQ) developed by Forsyth (1980). Examples of the items measuring idealism is “The existence of potential harm to others is always wrong, irrespective of the benefits to be gained”. An example of item measuring relativism is “What is ethical for everyone can never be resolved since what is moral or immoral is up to the individual”. Respondents were asked to indicate their level of agreement based on a 5-point scale ranging from “1= strongly disagree” to “5= strongly agree”. The internal consistency and reliability of this scale were 0.80 and 0.70 respectively.

Religious faith was measured using the 10-item Santa Clara Strength of Religious Faith scale developed by Plante and Boccaccini in 1997 such as “I look to my faith as providing meaning and purpose in my life” and “My relationship with God is extremely important to me. Respondents were asked to indicate their level of agreement based on a 5-point scale ranging from “1= strongly disagree” to “5=

strongly agree. The scales' alpha reliability is 0.93.

Social desirability was measured using a shorter version of the Marlowe-Crowne Social Desirability Scale (Crowne & Marlowe, 1964) developed by Reynolds (1982) which comprised 13 items such as "I sometimes feel resentful when I don't get my way" and "There have been occasions when I took advantage of someone". Social desirability questions were used to measure social desirability bias in a survey. Social desirability bias refers to the tendency of respondents to give answers that are socially desirable which do not reflect their true attitude or behaviour (Tourangeau & Yan, 2007). The bias may occur in answering the socially sensitive questions such as religion, politics or personal issues in terms of dishonesty, cheating and others socially undesirable behaviour. Social desirability bias was recognised as a type of measurement errors of a scale due to the underlying reasons of personal traits (Kaminska & Foulsham, 2013). This study used social desirability scale as a control variable to the relationship between dimensions of personal beliefs and values and academic dishonesty. Respondents were asked to state whether the statements are true or false as it pertains to them personally. Social desirability is used as a control variable in the relationship between personal beliefs and values and academic dishonesty, respectively. Originally, the score is recorded as 1 representing "True" and 2 representing "False". Then, the score for every item was recorded as

zero for wrong answers and one for right responses. The score for respondents' social desirability was obtained by summing up the responses of the recoded 13 items. The scales' reliability estimates tested using the Kuder-Richardson formula is 0.76.

Data Analysis

Data collected were coded and the SPSS statistical package version 21 was used to analyse it using descriptive and inferential statistics. Descriptive statistics were used to present the demographic profile of the respondents, the level of academic dishonesty and the level of dimensions of personal beliefs and values. The scores of variables were summed up into three categories: low, moderate and high in order to determine the level of variables. The calculation was based on the overall mean. The Pearson product-moment correlation coefficient was used to investigate the relationship between personal beliefs and values and academic dishonesty. A hierarchical multiple regression analysis was useful to determine the relationship between personal beliefs and values and academic dishonesty by controlling for social desirability. This analysis helped identify factors that influence academic dishonesty.

RESULTS

Descriptive statistics

In order to examine the scenario of academic dishonesty among public university students in Malaysia, the frequencies, means and

standard deviations of respondents' academic dishonesty were measured as shown in Table 1. The overall mean of academic dishonesty was $M= 1.64$ with $SD= 0.42$. About 83.5% of the respondents indicated low incidences

of academic dishonesty, while 15.1% indicated occasional incidences of academic dishonesty and only 1.4% indicated high incidences of academic dishonesty.

Table 1
Levels of academic dishonesty

Level	<i>f</i>	%	Mean	SD
			1.64	0.42
Low (1.00 – 1.99)	2043	83.5		
Occasional (2.00 – 2.99)	370	15.1		
High (3.00 – 4.00)	34	1.4		

Based on the result shown in Table 2, a majority of respondents indicated high level of idealism (85%) and high level of religious faith (82.2%). Meanwhile, approximately half of the respondents were reported to have high level of relativism (52.4%) while the rest were moderate (43.7%). Based on

the mean score, the result showed that the respondents scored higher for idealism ($M=4.28$, $SD=.74$) than relativism ($M=3.60$, $SD=.70$). The result also showed that the respondents possess fairly strong religious faith ($M=4.31$, $SD=.83$).

Table 2
Descriptive statistics

Variables	Low (1.00 – 2.32)		Moderate (2.33 – 3.65)		High (3.65 – 5.00)		Mean	S.D
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%		
Idealism	67	2.7	300	12.3	2,080	85.0	S.D	0.74
Relativism	92	3.8	1,070	43.7	1,283	52.4	3.60	0.70
Religious Faith	102	4.2	333	13.6	2,011	82.2	4.31	0.83

Relationships between idealism, relativism, and religious faith, and academic dishonesty

A Pearson Product Moment Correlation was performed to test the relationships between idealism, relativism, religious faith, and academic dishonesty as shown in Table

2. The results revealed a small significant negative relationship ($r=-.274$, $n=2447$, $p < .05$) between idealism and academic dishonesty, and no significant relationship between relativism and academic dishonesty ($r=-.021$, $n= 2,445$, $p=.299$). Religious faith was found to also have a small yet

significant negative relationship ($r = -.236$, $n = 2447$, $p < .05$) with academic dishonesty.

Table 3
Correlation coefficient between personal beliefs and values and academic dishonesty

Personal beliefs and values	r	p -value
Idealism	-.274**	.000
Relativism	-.021	.299
Religious faith	-.236**	.000

**Correlation is significant at the 0.01 level

Further analysis was performed using a hierarchical linear regression to test the influence of idealism and relativism on academic dishonesty while controlling for social desirability bias. Since relativism is not significantly related to academic dishonesty behaviour, the influence of relativism was not tested. This also suggests that Hypothesis 2 is not supported.

Table 4 presents the result of the hierarchical linear regression analysis. The unstandardised regression coefficient,

standardized regression coefficients, R square (R^2), R square change (ΔR^2) and F change (ΔF) are presented in Table 3.

Social desirability as seen in Step 1, explaining 8.3% of the variance in academic dishonesty. After entering idealism and religious faith in Step 2, the total variance explained by the model as a whole was 27.3%, $F(10, 2535) = 95.03$, $p < .001$. Idealism and religious faith explain an additional 19% of the variance in academic dishonesty, after controlling for social desirability, with R square change = .19, F change (9, 2535) = 73.321, $p < .001$. In the final model, all variables were statistically significant, with idealism recording the highest beta value ($\beta = -.175$, $p < .001$) indicating that idealism has the strongest influence on academic dishonest behaviour. Religious faith also has significant negative influence on academic dishonesty. Hence, both Hypothesis 1 and 3 are supported. The findings revealed that social desirability also has significant influence on the responses on academic dishonesty.

Table 4
Hierarchical regression model of social desirability effect on the relationship between personal beliefs and values and academic dishonesty

Variable	b	SE b	β	R^2	ΔR^2	ΔF
Model 1				.083	.083	231.243
Constant	2.028	.027				
SD	-.718	.047	-.289*			
Model 2				.273	.189	73.321
Constant	2.033	.079				
SD	-.335	.045	-.135*			
Idealism	-.101	.012	-.175*			
RF	-.068	.010	-.132*			

* $p < .001$; SD: Social desirability; RF: Religious faith

DISCUSSION AND CONCLUSION

This study has shown the level of cheating among Malaysian students was low. This finding is consistent with that of D'Silva et al. (2015), and Daniel and Eng (2016) who reported low level of academic dishonesty among students. This study was aimed at investigating the influence of personal beliefs and values (idealism, relativism and religious faith) on academic dishonesty among undergraduate students from selected public universities in Malaysia. Based on the results, the level of idealism among respondents is high whereby idealism was negatively associated with academic dishonesty. In other words, as the level of idealism increased, academic dishonesty among students decreased. The result of this study is consistent with that of Rawwas et al. (2004). The level of relativism is moderate. In contrast with prior studies (Rawwas et al., 2004; Rawwas et al., 2006; Rawwas et al., 2007; Ellahi et al., 2013), the results of this study showed there was no significant relationship between relativism and academic dishonesty. However, it confirmed Ballantine et al.'s findings (2014). There is a negative relationship between religious faith and academic dishonesty. That means as the level of religious faith increases, the level of academic dishonesty decreases. Thus, this finding suggests that people with stronger religious faith exercise greater self-control as they believe that God monitors their behaviour (McCullough & Willoughby, 2009; Carter et al., 2012). In other words, if the respondents have high

levels of religious faith, they may avoid committing academic dishonesty. This study supports Bloodgood et al. (2008).

Therefore, this study suggests that it is important to intensify students' level of idealism and religious faith to ensure that academic dishonesty decreases. This can be achieved by inculcating idealism as part of the philosophy of education in universities. Hence, applying idealist principles may help universities to shape the individuality of students to a life of purity and virtue as well as encourage students' spiritual development (D'Silva et al., 2015). This suggest that students can be trained towards an expected behaviour by inculcating them with moral values in universities. Moreover, students should be encouraged to participate in religious activities in order to expose them to positive behaviours that are endorsed by their religions. Individuals who strongly obey the rules of their religion may have better ethical awareness and sensitivity (Saat & Porter, 2009). The great honour of one's religion could be a foundation to be have a good ethical behaviour all the time. The continuous exposure to religious practices tend to enhance students' spiritual growth. The universities also have to develop programmes to educate students to be more alert to the impact of academic dishonesty on their future.

The result of this study not only confirms those of previous studies (Rawwas et al., 2004; Rawwas et al., 2006; Rawwas et al., 2007; Ellahi et al., 2013 and Bloodgood et al., 2008) that idealism

and religious faith are associated with academic dishonesty, it also contributes to the body of knowledge in the area of education and human resource development. Surprisingly, it is noted that there is no significant association between relativism and academic dishonesty. Indeed, this study confirmed the inconsistencies in the findings of previous studies (Rawwas et al., 2004; Rawwas et al., 2007; Ellahi et al., 2013) of the contribution of relativism to academic dishonesty. Hence, it is recommended that future researchers expand this study by investigating the factors that mediated the relationship between relativism and academic dishonesty. It is possible to state that the existence of mediator effect tend to be the factors of inconsistency of finding in studies. Furthermore, future research should focus on the association between ethical ideologies which include idealism and relativism and cheating behaviours. This is the other implication of the study. The results of this study showed that people tend to make decisions either right or wrong based on their beliefs. Therefore, awareness programmes can be conducted among first-year students during their orientation. Earlier exposure on the issue of academic dishonesty can better prepare the students right from the start and such awareness programmes also need to be continued throughout the students' academic lives. It is also important to produce a competent human resource from the early stages of human development (education).

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Shared Arabic and Sanskrit Loanwords Beneficial for Teaching Malay Vocabulary to Nepali Speakers

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ABSTRACT

Sanskrit and Arabic are the first and second largest donor languages to the Malay language respectively. From a vocabulary survey of 30 Malay words of Arabic and Sanskrit origins, this study examined the utility of a comparing Malay loanwords and their Nepali equivalent in teaching Malay to Nepali speakers. The participants were 25 Nepali speakers working in Kuala Lumpur. They averaged 23.16 correct answers and learned 11.32 new vocabulary items. At a 5% confidence level, a significant difference was found between the participants' scores before and after the presentation of the equivalent Nepali words ($p = 0.000$). This study concluded that presenting Arabic and Sanskrit loanwords in Malay and their related Nepali equivalent could assist Nepali speakers in learning Malay.

Keywords: Sanskrit, Arabic, loanwords, Malay, cognates

INTRODUCTION

Nepalese Workers in Malaysia

There were approximately 700,000 Nepalis workers in Malaysia in 2015 (Awale, 2016b) stated, most of whom worked

as security guards, factory workers, or plantation workers. Awale (2016a) reported that 3,000 Nepali workers have died in Malaysia since 2004. The major reasons for their deaths were overworking under extreme temperatures and mental pressure aggravated by communication problems with their Malaysian superiors because they were not proficient in Malay.

It has been suggested that legal and political measures be taken to improve their working environments. Additionally, for foreign workers to live comfortably in another country, some knowledge of the

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local language is essential. In Kuala Lumpur and other major Malaysian cities, English is the medium of communication between Nepali workers and their colleagues and superiors. However, basic competency in Malay is beneficial when communicating with other people who have limited English proficiency. Basic command of the Malay language entails learning several hundred words and simple grammar which are used by many non-native speakers (including ethnic Chinese and Indians) and foreigners for daily communication.

Valitherm (2014, p. 2) found that lack of proficiency in Malay among Nepali workers is causing not only common communication problems with their Malaysian superiors but also serious in workplace safety issues such as at construction sites. He suggests that Malay language proficiency would reduce misunderstanding and hence, accidents at workplace. Between Nepali and Malay vocabularies, cognate words such as the Nepali word for [roti:] (bread) and its Malay equivalent *roti* share the highest degree of similarity. Therefore, the Malay cognates are the easiest category of vocabulary for Nepalese workers who learn Malay for general and vocational purposes. The shared vocabularies between Nepali and Malay will assist them in improving their proficiency in the Malay language. This could foster a more comfortable and collaborative environment for the Nepali speakers and strengthen economic and cultural relationships between Malaysia and Nepal.

Arabic as a Donor Language to Malay and Nepali

The Malay language belongs to the Austronesian family of languages (Crystal, 2010, p. 328). The basic word orders of Arabic, Malay, and Nepali are one of the most differentiated features of these languages. In modern written Arabic, verb, subject, and object (VSO) is a common word order of verbal sentences for indefinite subjects (Badawi et al., 2016, p. 348). In Malay, subject-verb-object (SVO) is the basic word order, while Nepali and other Sanskrit-based languages such as Hindi follow the order of subject-object-verb (SOV) (Liaw, 2007, p. 199; Delacy & Joshi, 2014, p. 7).

Watson-Andaya and Andaya (1982, p. 14) had earlier pointed out that many Sanskrit-origin words had been included in Old Malay in the seventh century because of the cultural and economic influence of the Indian subcontinent. In the 15th century, several Malay kings in the Malay Peninsula had accepted Islam (p. 53). As Islam was mainly practised in Arabic, thousands of Arabic words were adopted into Malay language over the following centuries. Jones, Grijns and de Vries (2007) found that Arabic was the second-largest donor language to the Malay vocabulary after Sanskrit.

Richards (1995) examined the history of the Mughal Empire that ruled over a part of the Indian subcontinent between 1526 and 1720 and found that “overall cultural and

religious climate of sixteenth-century India was more open and tolerant to change [than in the 17th century]” (p. 34). As the Muslim-ruled empire expanded in the 16th and 17th centuries, Sanskrit-based languages in the northern part of the Indian subcontinent, such as today’s Hindi and Urdu, and other close languages, such as Nepali, inevitably borrowed many Arabic words, such as [mawsam] (“season, weather”), which correspond to *musim* (“season”) in Malay.

Therefore, knowledge of such Arabic loanwords could assist the Nepalis in learning basic Malay vocabulary. This study seeks to elucidate the benefits of providing examples of Nepali words of Sanskrit and Arabic origins when teaching Malay to Nepali speakers in Malaysia.

In this paper, Nepali and Arabic words are transliterated into a slightly simplified International Phonetic Alphabet (IPA). The IPA is used for two main reasons: The a) precise pronunciation of words and short vowels using Nepali (Devanagari) script and Arabic alphabet are not possible ; b) many readers of this article may not be able

to read Nepali or Arabic. Further, as the voiced pharyngeal fricative and the sign of pharyngealisation that follows a consonant appears garbled on some computers, these are simplified as [‘] in this paper, and the glottal stop is simplified as [’]. In addition, the symbol indicating a long vowel is simplified as [:] and voiceless and voiced palato-alveolar fricatives are simplified as [š] and [ž]. An Arabic–English dictionary was the primary reference for Arabi this study (Cowan, 1994).

The Shared Vocabularies of Arabic and Sanskrit Origins

Table 1 provides five examples of Arabic-origin words that appear in both Malay and Nepali. In Malay, the long vowels in Arabic have been shortened, and the diphthong [aw] in Arabic [mawsim] simplified to [u]. Regardless of these changes, the Malay and Nepali words in Table 1 still retain phonetic and semantic similarities, although the Nepali word [mawsam] has a broader meaning than its Malay equivalent.

Table 1
Examples of shared Malay and Nepali words of Arabic origin

Malay (with the Original Arabic)	Nepali Equivalents
dunia (“world”) < Arabic [dunia:]	[dunia:] (“world”)
faedah (“benefit”) < Arabic [fa:’ida]	[fa:’ida:] (“benefit”)
musim (“season”) < Arabic [mawsim]	[mawsam] (“season, weather”)
tarikh (“date”) < Arabic [ta:ri:x]	[ta:rikh]/[ta:rix] (“date”)
umur (“age”) < Arabic [‘umr]	[umer] (“age”)

Source of English translations: Cowan (1994) and Harper Collins (2005)

Table 2 provides five examples of Sanskrit-origin words in Malay and Nepali. The Nepali word [kã:tš] (“glass”) stems from the Sanskrit [ka:tša]. The corresponding Malay word kaca, pronounced [katšə], retains the original sound except for the shortened and weakened vowels (Jones et al., 2007, p. 138). In addition, aspirated consonants such as [tʰ] are indicated by the symbol [h]. For example, the Nepali [pratʰam] and Malay *pertama* both stem from the Sanskrit [pratʰama] (Jones et al., 2007, p. 241). In Malay, the distinction between the aspirated and unaspirated consonants has now disappeared.

In some loanwords in Malay, the original [a] sound has changed to an [ə] (schwa), spelled with an e. Examples include *pertama* (“first”) from the Sanskrit [pratʰama] with an identical meaning, and the Malay *kerana* (“because”) from the Sanskrit [ka:rana] (“reason”). In the first pair, the syllable [pra], comprising a double consonant [pr] in Sanskrit, is changed in Malay to the syllable [pər]. In addition, all the Malay words in Table 2 still maintain a final *a* sound (usually pronounced [ə]) from Sanskrit, which has disappeared in Nepali and other contemporary Sanskrit-based languages such as Hindi.

Table 2
Examples of shared Malay and Nepali words of Sanskrit origin

kaca (“glass”)	[kã:tš] (“glass”) < Sanskrit [ka:tša]
pertama (“first”)	[pratham] (“first”) < Sanskrit [pratʰama]
suara (“voice”)	[swar] (“voice”) < Sanskrit [svara]
suria (“sun”)	[su:rja] (“sun”) (same as in Sanskrit)
utara (“north”)	[uttar] (“north”) < Sanskrit [uttara]

Source of English translations: Verma & Sahai (2003) and Hawkins (2011)

Hypothesis and Objectives

The hypothesis of this study. An explicit presentation of Arabic- and Sanskrit-origin Malay words that include one or more simplified consonants or vowels and their Nepali equivalents could assist Nepalis in learning Malay.

The objective of this study. To examine the benefits of explicitly presenting Arabic- and Sanskrit-origin Malay words containing one or more modified consonants or vowels and

their Nepali equivalents in expanding Malay vocabulary among Nepali speakers.

Using this method, the learners may effectively speak and write in Malay in the workplace with Malay-speaking colleagues and superiors. Cognate words shared between Malay and Nepali are limited. In general, the meanings of Sanskrit-origin Malay words such as *bahagia* (“happy”) from the Sanskrit [bʰa:gja] (“luck, fate”) have been shifted more than those of Arabic-origin Malay words. Frequently

used Arabic-origin Nepali words, such as [sa:bun] (soap), [ta:rik^h] (date), and [umer] (age), have meanings which are almost identical to their Malay equivalents. For the Nepalis knowing only several hundred Malay words, the existence of cognates between the shared vocabularies with such high frequency may be more important than the number of shared cognates in the Malay vocabulary. If we include shared cognates with different frequencies between the two languages, such as the Nepali [hawa:] (“air”) and the Malay *hawa* (“air”), the number of Arabic-origin Malay words that can be demonstrated through this method will exceed 100.

LITERATURE REVIEW

Characteristics of Arabic Loanwords in Malay

Jones, Grijns, and de Vries (2007), an etymological dictionary of Indonesian and Malay, contains thousands of loanwords from Sanskrit, Arabic, and other languages. The principal differences in pronunciation between the original and loanword forms are as follows: long vowels in Sanskrit and Arabic have been shortened in Malay, double consonants in the original words have been simplified in Malay, and the voiceless uvular stop [q] in Arabic corresponds to the [k] in Malay, for example, *baki* (“remainder, balance”) from the Arabic [ba:qi:] (“remainder”).

Many studies have been conducted on Arabic loanwords in Malay. For example, Uni (2015) examined the usefulness of

Arabic-origin Malay words in assisting Arabic-speaking university students to learn basic Malay. However, Uni’s (2015) research focused only on Malay words of Arabic origin, but did not discuss any vocabulary of Sanskrit origin. Abdul Jabar (2004) examined the phonetic differences between Arabic words and their pronunciation by Malay-speaking students. Ahmad and Jalaluddin (2012) explored the major factors behind the phonetic simplification of Malay nouns and verbs. However, none of these studies explored the utility of presenting Malay words of Arabic and Sanskrit origins when teaching Malay as a foreign language.

Benefits of “Cognates” in Learners’ First Language and Target Language

Ringbom (2007, p. 73) highlighted the benefits of cognates, defined as “historically related, formally similar words, whose meanings may be identical, similar, or partly different,” when teaching and learning foreign languages. Lightbown and Spada (2006) also believed that cognate words in the target language that had partly different pronunciations could be explicitly demonstrated because learners are not always conscious of the similarities between their first language and the target language (p. 99). Such cognates are, for example, the English noun *cost* and its French equivalent *coût* [ku], which originated from a Latin verb meaning “stand at a price” (Stevenson & Waite, 2011, p. 323).

These studies affirmed the benefits of utilising cross-linguistic similarities regarding cognates to teach a foreign

language, especially when there were phonetic and semantic similarities between the learners' first language and the target language.

MATERIALS AND METHODS

Participants

All participants were native speakers of the Nepali language and were working as security guards in a 30-storey condominium in Kuala Lumpur. Their religion was Hinduism, practiced by approximately 81% of the total population of Nepal (Central Bureau of Statistics of Nepal, 2014, p. 18). The Muslims constitute 4% of the total population of Nepal. All participants frequently used English and Hindi, the national language of India, to communicate with non-Nepalis. All of them had not completed any Malay language studies in a language school or other institution. Twenty out of 25 participants had completed five years of primary education and further five years of lower secondary education in Nepal. These 20 possessed the Nepalese School Leaving Certificate that officially proved their education as lower secondary level. The other five participants had dropped out of secondary education. However, their educational level appeared to be sufficient for them to understand the English used in the questionnaire. At the time of the survey, all the participants had been working for more than one year as security guards in a condominium and shopping mall.

The author of this study held a brief session with the 25 participants to explain the objectives of the survey which was

followed by the distribution of the first page of the questionnaire. They were given approximately 15 minutes to complete the first page before receiving the second page for which an additional 15 minutes was allowed. The questionnaire was presented in English but contained Malay and Nepali words. On the first page, only Malay words were included and, on the second page, Malay and Nepali words were shown with their original spellings.

After the participants had finished answering the check sheet on Page 1 of the questionnaire and the multiple-choice questions on 30 loanwords in Malay on Page 2, each participant's correct answers and newly learned words were counted. The average numbers of the correct answers on Pages 1 and 2 were analysed using a t-test to determine the benefits of presenting these Malay loanwords and the Nepali equivalents when teaching Malay vocabulary. The "newly learned words" in this study referred to words that were unknown from Page 1 of the survey but were understood after the participants had read the Nepali forms presented beside each Malay word on Page 2 of the survey as shown in Table 3 of this article. No additional treatment was given.

Questionnaire

The multiple-choice vocabulary survey included 14 Arabic and 16 Sanskrit Malay loanwords. With a few exceptions such as "mosque" and "remainder," English words used as the correct answers on Page 2 of the questionnaire were from the 3000 most frequently used words according to the

Oxford Advanced Learner's Dictionary (Hornby, 2010). Therefore, the selection of words taught and tested here was appropriate for beginners of Malay as a foreign language. The pronunciation of the 30 Malay words still retained many features of the original Arabic and Sanskrit forms, although one or more Malay consonants or vowels may have changed over time. For example, the Malay word *sabun* ("soap"; pronounced [sabun]), originating from Arabic [sʻa:bu:n] ("soap"), includes a simplified *s* sound and shortened vowels. Phonetic changes are mainly observed in consonants in Malay loanwords because nine of the Arabic single consonants and more than 10 of the Sanskrit single consonants do not exist in Malay. Therefore, this study mainly focused on the influence of the phonetic differences in the consonants between the Malay loanwords of Arabic and Sanskrit origins and their related Nepali equivalent.

The questionnaire had two pages. Page 1 was a simple check sheet used for the verification of the participants' previous knowledge of the listed Malay

words. On this page, 30 Malay loanwords were presented with a yes/no column. If participants thought they knew the meaning of the Malay words, they checked "yes" and wrote the primary meaning in the blank space. If they encountered an unknown word, they simply checked "no." On Page 2, the 30 words were accompanied by the Nepali equivalents and multiple-choice questions, from which the participants had to choose the most appropriate meaning for each Malay word from the four options provided. For example, the options on Page 2 for the Malay *dunia* ("world") were "region," "society," "world," and "community." Even if the participants correctly identified and defined a word on Page 1, that answer was not considered correct if they had selected an incorrect answer on Page 2. The Nepali equivalent for each Malay word was shown alongside to assist participants in guessing the correct meanings of the Malay words. The questionnaire did not provide any instructions on the phonetic and semantic changes for the listed words.

Table 3

Example from page 1 of the questionnaire

<i>Do you know the meaning of the following Malay words? Please check "YES" or "NO." If yes, please write the main meaning of the word in English in the blank space.</i>		
asli	(NO/YES) ()
bahagia	(NO/YES) ()
bahasa	(NO/YES) ()
baki	(NO/YES) ()
cahaya	(NO/YES) ()
cuti	(NO/YES) ()
dunia	(NO/YES) ()

Table 4
Example of questions on page 2 of the questionnaire

(In this table, the Nepali equivalents shown in parentheses were transliterated using a modified IPA.)				
Please check the most appropriate meaning for the following Malay words. The Nepali words related to the listed Malay words are written in parentheses.				
asli ([asli:])	1. original	2. early	3. old	4. new
bahagia ([bha:gja])	1. sad	2. happy	3. grateful	4. angry
bahasa ([bha:ša:])	1. talk	2. dialect	3. language	4. speech
baki ([bā:ki:])	1. stop	2. remainder	3. result	4. stay
cahaya ([tšahakilo])	1. light	2. beam	3. laser	4. ray
cuti ([tšhutti:])	1. festival	2. absence	3. freedom	4. holiday
dunia ([dunia:])	1. region	2. society	3. world	4. community

Survey Vocabulary

Consonants. A number of the consonants in these 30 words have changed from their original forms in the Malay language. The voiced pharyngeal fricative [ʕ] in Arabic that precedes a vowel disappears when adopted by Malay and Nepali. The Arabic word [ʕumr] (“age, life”) corresponds with *umur* in Malay and [umer] in Nepali. Many Sanskrit-based words and their contemporary forms in Nepali have retroflex consonants such as the retroflex [ɖ] sound in [roti:] (“bread”) and [topi:] (“cap”); however, in Malay, these have been simplified to *roti* (“bread”) and *topi* (“hat”).

The voiceless uvular stop [q] in Arabic usually corresponds to a [k] in Malay and Nepali. For example, the Arabic [ba:qi:] (“remainder”) eq is *baki* (“remainder, balance”) in Malay and [bā:ki:] (also pronounced [ba:ki:]) (“remainder”) in Nepali. There is a simplification of double consonants in Malay, such as in *utara* (“north”) that was derived from the Sanskrit

[uttara] (“north”) with the Nepali equivalent being [uttar].

Vowels. In Malay, multiple consonants rarely appear in syllable codas. Arabic loanwords therefore include epenthetic vowels, usually an additional [a], to break up such consonant sequences. For example, the Arabic [sʕabr] (“patience”) became the Malay *sabar* (“patient”). In addition, some long vowels in Arabic and Sanskrit have become simplified and shortened in Malay such as the Arabic [sʕa:bu:n] (“soap”) has become *sabun* (“soap”) in Malay and the Sanskrit [swa:mi:] (“owner”) has become *suami* (“husband”).

RESULTS AND DISCUSSION

The average number of correct answers after the presentation of the Nepali equivalent words was 23.16/30 and was 11.32 for the newly learned words. Table 5 shows the number of correct answers on Pages 1 and 2 for the participants, who are labelled N1 through N25.

Table 5
Numbers of correct answers on page 1 (top row) and page 2 (bottom row)

	N1	N2	N3	N4	N5	N6	N7	N8	N9	N10	N11	N12	N13	N14	N15	N16	N17	N18	N19	N20	N21	N22	N23	N24	N25
5	6	6	6	7	8	8	8	9	10	10	10	10	10	11	11	11	12	12	13	13	13	14	14	15	19
28	24	24	27	26	21	22	26	23	19	22	24	26	27	22	23	24	24	27	23	24	26	24	26	25	27

Correlations between the test scores before and after the participants were given the Nepali equivalents were statistically analysed. At a 5% confidence level, a significant difference was found between the before and after performances ($p = 0.000$). Table 6 presents the statistical results. The t -value was 6.439.

Table 6
Results of the t -Test

	Total Numbers of Correct Answers on Page 2	Total Numbers of Words Known before the Presentation of Nepali Words on Page 2
Total Scores	579	296
p -Value	0.000*	
t -Value	6.439	
Df	23	

Table 7 shows the 12 most newly learned Malay words. The number of participants who recognised the correct meaning of the listed Malay words after the demonstration of the Nepali equivalents ranged from 13 (for *pasar*) to 25 (for *cahaya*). After the presentation of the Nepali words on Page 2 of the questionnaire, all 25 participants selected the most appropriate answers for *cahaya* (“light”), *jawapan* (“reply”), *pertama* (“first”), and *suara* (“voice”). The second, third, and fourth words contained endings ([an] or [a]) that did not occur in the Nepali equivalents [džawa:p^h], [prat^ham], and [swar]; however, these differences did not appear to affect the respondents’ understanding.

Differences between the voiced and unvoiced consonants confused only one participant: the *Malay* pasar (“market”), which originates from the Arabic and Persian [ba:za:r] (“bazaar, market”), has unvoiced [p] and [s] sounds, which are voiced in the Nepali [ba:dža:r]. Twenty respondents correctly identified *kaca* (“glass”) and *musim* (“season”). The former Malay word and its Nepali equivalent [kã:tš] (“glass”) stem from the Sanskrit [ka:tša] (Jones et al., 2007, p. 138); however, the nasalised long vowel [ã:] in Nepali hindered only five participants’ understanding. The Malay *musim* (“season”) corresponds to the

Nepali [mawsam] (“season, weather”). The semantic difference negatively affected five respondents.

The Malay *faedah* and its Nepali equivalent [fa:’ida:] share the meaning “benefit” and maintain phonetic similarities, but the incorrect options in the questionnaire such as “interest” and “success” were selected by six people. Likewise, *baki* (“remainder, balance”) and the Nepali [bã:ki:]/[ba:ki:] share the meaning of “remainder” and retain phonetic similarities; the incorrect options “stay” and “result,” however, were selected by seven participants.

Table 7
Twelve most newly learned Malay words

Malay	Relevant Nepali Words	Numbers of Correct Answers on Pages 1 and 2 (<i>n</i> = 25)
<i>cahaya</i> (“light”)	[tšahakilo] (“bright”)	0 (25)
<i>pertama</i> (“first”)	[pratham] (“first”)	3 (25)
<i>suara</i> (“voice”)	[swar] (“voice”)	3 (25)
<i>jawapan</i> (“reply”)	[džawa:ph] (“reply”)	5 (25)
<i>pasar</i> (“market”)	[ba:dža:r] (“market”)	11 (24)
<i>suria</i> (“sun”)	[su:rja] (“sun”)	12 (24)
<i>asli</i> (“original”)	[asli:] (“genuine”)	6 (23)
<i>kaca</i> (“glass”)	[kã:tš] (“glass”)	5 (20)
<i>musim</i> (“season”)	[mawsam] (“season, weather”)	0 (20)
<i>faedah</i> (“benefit”)	[fa:’ida:] (“benefit”)	5 (19)
<i>baki</i> (“remainder, balance”)	[bã:ki:]/[ba:ki:] (“remainder”)	4 (18)
<i>utara</i> (“north”)	[uttar] (“north”)	3 (18)

Table 8 presents the results from the other 11 words correctly identified by most participants. Phonetic similarities retained in the Malay and Nepali words in Table 8 would have been the primary reason for

the high percentage of correct answers. Shortened vowels in Malay, such as in *cuti* from [tš^hutti:] and *suami* from [swa:mi:], did not negatively affect the participants’ recognition of the correct meanings. The

Malay *suami* (“husband”) and Nepali [swa:mi:] (“owner”) share less semantic similarities; however, 16 participants indicated that they knew the correct meaning in Malay on the Page 1 check sheet, and all

25 participants selected the correct answer on Page 2. The Malay *dunia* (“world”) was correctly identified by 11 and 19 participants respectively, before and after the presentation of their Nepali equivalent.

Table 8

The other eleven words correctly identified by most participants

Malay	Nepali Equivalents	Number of Correct Answers on Pages 1 and 2 (<i>n</i> = 25)
<i>cuti</i> (“holiday, leave”)	[tʃhutti:] (“holiday”)	25 (25)
<i>roti</i> (“bread”)	[roti:] (“bread”)	20 (25)
<i>guru</i> (“teacher”)	[guru] (“master”)	23 (25)
<i>umur</i> (“age, life”)	[umer] (“age”)	18 (25)
<i>suami</i> (“husband”)	[swa:mi:] (“owner”)	16 (25)
<i>bahasa</i> (“language”)	[bha:ʃa:] (“language”)	23 (24)
<i>sabun</i> (“soap”)	[sa:bun] (“soap”)	18 (24)
<i>tarikh</i> (“date”)	[ta:rikh]/[ta:rix] (“date”)	16 (24)
<i>dunia</i> (“world”)	[dunia:] (“world”)	11 (19)
<i>maaf</i> (“forgiveness, sorry”)	[ma:f]/[ma:ph] (“forgiveness”)	17 (18)
<i>topi</i> (“hat”)	[topi:] (“cap”)	12 (16)

Table 9 shows the seven words most infrequently identified by the participants. The meaning of *wakil* (“agent, representative”) was correctly identified by only 9 out of 25 participants; most participants chose “chief” as the correct definition as this may have appeared to be close in meaning to its Nepali equivalent [waki:l] (“lawyer”). The Malay *bahagia* (“happy”) was correctly recognised by 12 out of 25 participants; most participants who chose an incorrect answer selected “grateful.” Most of the latter respondents said they were more familiar with *gembira* (“glad, happy”) than *bahagia* as a Malay word equivalent to “happy.” Thirteen respondents selected the correct meaning of

the Malay *perdana* (“prime”) whose Nepali equivalent [praɖʰa:n] has an almost identical meaning; most participants who failed to correctly identify the word’s meaning chose “powerful” as the definition. *Jaya* (“success”) was correctly identified by 14 participants; the incorrect meanings “joy,” “happiness,” and “luck” were chosen by the other 11 participants.

The Malay *masjid* and its Nepali equivalent [masdʒid] share the meaning “mosque”; however, only 15 out of 25 respondents correctly guessed the meaning. Since the Muslim Nepalese constitute only 4% of the total population of Nepal, the Hindu majority are unlikely to have any significant exposure to Nepali words related

to Islam. The Malay *kerana* (“because”) (“reason”) share less phonetic and semantic similarities than the other listed pairs, but it was correctly recognised by 17 participants. This word and its Nepali equivalent [ka:ran] was only confusing for eight participants.

Table 9
Seven least recognised Malay words

Malay	Relevant Nepali Words	Numbers of Correct Answers on Pages 1 and 2 ($n = 25$)
<i>wakil</i> (“agent, representative”)	[waki:l] (“lawyer”)	1 (9)
<i>bahagia</i> (“happy”)	[bha:gja] (“luck, fate”)	0 (12)
<i>perdana</i> (“prime”)	[pradha:n] (“prime”)	0 (13)
<i>jaya</i> (“success, victory”)	[džaj] (“victory”)	0 (14)
<i>masjid</i> (“mosque”)	[masdžid] (“mosque”)	9 (15)
<i>sah</i> (“valid”)	[sahi:] (“true”)	0 (16)
<i>kerana</i> (“because”)	[ka:ran] (“reason”)	0 (17)

CONCLUSION

The present study has examined the benefits of a comparative presentation of Arabic- and Sanskrit-origin Malay words and their Nepali equivalents in teaching Malay to Nepali speakers in Malaysia. The participants completed a 30 Malay loanword vocabulary survey in which they were required to choose the correct meaning. They provided an average of 23.16 correct answers and learned 11.32 new words. A significant difference was found between the scores before and after the demonstration of the Nepali equivalents ($p = 0.000$). From these results, it could be concluded that the introduction of Arabic- and Sanskrit-origin Malay words and their Nepali equivalents could benefit those teaching Malay vocabulary to Nepali speakers.

The findings of this study point to the benefits of comparative demonstration of Malay words and their Nepali equivalents, such as *kaca* (“glass”) with the Nepali [kã:tš] (“glass”), *musim* (“season”) with its equivalent [mawsam] (“season, weather”), and *pertama* (“first”) with the Nepali [prat^ham] (“first”). However, the results also suggested that Malay words, such as *wakil* (“agent, representative”) with its Nepali [waki:l] (“lawyer”) would be better presented as loanwords having very different meanings from the original.

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The Driven Readers amongst Private Higher Education Institution Students: A Case Study

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ABSTRACT

The development of reading habits and the detrimental effects of its decline are intriguing issues to the proponents of reading. Findings or related research around the globe have resulted in discomfiting outcomes, giving an indication that the habit is now facing a challenging period. However, an interesting phenomenon observable is that despite the unfavourable circumstances, there are individuals who are avid readers. This case study attempts to gather in-depth information on what motivates and influences private higher education institution students to become avid readers. Employing qualitative methods, information from two informants were analysed for essential clues on how motivation to read could be catalysed and sustained. Eleven major themes, namely, *enjoyment, self-development, self-initiative, social support, reading friendly environment, unfriendly reading environment, reading motivates reading, curiosity motivates reading, author attraction, alliteracy awareness* and *spiritually motivated*, surfaced from the analysis and they could prove invaluable towards the development of strategies to inculcate the reading habit.

Keywords: Reading habits, reading motivation, alliteracy

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INTRODUCTION

Inderjit (2014) pointed out that Malaysian adults are poor readers while the children prefer reading for the purpose of examination instead of for entertainment or to acquire knowledge. Fatimah et al. (2005) highlighted that the problem of reading in Malaysia is not due to the lack of skills in reading but arising from the attitude and

culture that do not inculcate the reading habit, and thus bring about the looming threats of alliteracy. Hence, motivation and inculcation of reading habit is indeed a point of concern.

Subsequently, Gambrell, Palmer, Codling, and Mazzoni (1996) highlighted that motivated readers are driven to generate effort and time for reading out of curiosity, involvement, social interchange and emotional satisfaction. These characteristics reflect strength and commitment in the readers towards their reading activities, as well as resilience towards the advent of alliteracy.

Identifying what motivates a person to read will allow the identification of reasons to a person's interest in reading. Working upon this basis, the study attempts to gather in-depth information on avid readers' motivation in reading that will significantly provide essential clues on how motivation to read could be catalysed and sustained. Findings of the study could be included as part of the repertoire of strategies for developing the reading culture and subsequently curb alliteracy.

LITERATURE REVIEW

Reading and its development has long intrigued researchers. In the context of this study, it would be suited that literature on issues of the importance of literacy, the significance of reading, alliteracy and its threats and motivating reading should be looked into.

The Importance of Literacy

Hedgecock and Ferris (2009) explained that literacy is a part of the "highest human impulse to think and rethink experience in place" and thus, with literacy a person will be able to develop competency and knowledge in specialised areas. Bhola (1994) further expanded that literacy could be understood as a skill of "powerful potential", a tool for freedom allowing individuals to employ their minds in new and different ways, a social process that brings new respect and social status and a vehicle of development.

The Significance of Reading

In discussing reading, one should not avoid from making reference to the most complete reference of all, the Al-Quran. In Surah Al-Alaq 96:1-5, it is proclaimed that the importance of reading is something not to be taken lightly for Allah has promised that man will acquire knowledge from the paper and pen and indeed all the knowledge is bestowed by Allah. Thus, it is part of man's responsibility, as Allah's vicegerents, to look for ways and device methods to strengthen reading for the sake of propagation of knowledge and human development.

Hedgecock and Ferris (2009) describe reading as a complex multifaceted pursuit requiring the continuous deployment and integration of multiple operations such as decoding, fluency, and vocabulary. While Inderjit (2014) suggested that reading is a cultural activity that will enable humans to acquire new ideas and knowledge,

obtain needed information, relax the mind and improve command of language and vocabulary. Besides that, Akabuike and Asika (2012) explained that reading involves one's acquisition of the intended meaning of the author, as well as one's contributions in the form of interpretations, evaluations and reflections about these meanings. Subsequently, findings of studies done in Fiji and Singapore, as reviewed by Ratnawati and Ismail (2003), have proven that reading, especially if done extensively, is found to enhance the language use, language knowledge and academic performance of students. Thus, it is imperative that Malaysian students' reading habits be improved.

Alliteracy and its Threats

Olufowobi and Makinde (2011) define alliteracy as the quality or state of being able to read but being uninterested in doing so and they cited physical reasons such as fatigue, nature of environment, tight schedule and lack of motivation as the causes of alliteracy. Ilogho (2011) identified that alliteracy is due to the negative attitude towards reading and an efferent attitude (reading with the intention of seeking and accumulate information to be carried away at the end of reading). Another inevitable cause highlighted by Abdul (2014), Ilogho (2011), and Olufowobi and Makinde (2011) is that the advent of media and ICT is becoming tough competitors to the reading habit.

We are aptly warned as Inderjit (2014) pointed that "when adults in today's age, who can read, choose not to read, they are likely to create a generation of non-readers and perpetuate the problem of reading reluctance", and this will result in what Olufowobi and Makinde (2011) highlighted as the loss of stimulation for imagination, a reduction of creativity and innovation capabilities and reduction of vocabulary capacity.

Therefore, it is important that the reading habit must be motivated to curb alliteracy and for the habit to be sustained.

Motivating Reading

Proficient reading skills should be developed and enhanced through a societal effort of strengthening the curriculum and effective implementation of appropriate teaching practice, as well as the use of enjoyable and motivating reading materials. These efforts will lead to the generation of a sense of competency and positivity towards reading. (Inderjit, 2014; Abdul, 2014; Malekoglu & Wilkerson, 2013; Akabuike & Asiska, 2012; Hedgecock & Ferris, 2009; Guthrie, Wigfield, & Pencevich, 1997).

Secondly, intrinsic motivation development should be encouraged as it is more generative towards language and reading skills development. Intrinsic motivation could also lead to a positive attitude towards reading. The motivation could be made sustainable through enjoyable extracurricular activities that

may involve extensive reading and through group activities (Inderjit, 2014; Malekoglu & Wilkerson, 2013; Akabuikie & Asiska, 2012; Hedgecock & Ferris, 2009; Guthrie, Wigfield & Pencevich, 1997).

Sufficient and interesting reading materials, either in the conventional or digital form, should be made available either at home or in libraries. Concurrently, there should be control over the use of digital devices such as the mobile phones, computers, the internet, and other media devices. Inculcation of the reading habit should be done from as young as possible and at the initial stage, and reading activities should be rewarded. (Inderjit, 2014; Abdul, 2014; Akabuikie & Asiska, 2012; Nor, 2006).

With all these suggestions in hand, an identification of the source of reading motivation is a good measure of the suggestions' suitability and selection for reading habit development strategy.

METHODS

This study employed a qualitative research design, specifically the Instrumental Case Study. Creswell (2012) pointed out that a case study would allow the research to be focused on a programme, event, or activity involving individuals resulting in a description of the informants' activities instead of the shared patterns exhibited by a group.

In the context of this research, the phenomenon was the informants' eagerness and interest in reading to the extent that they

could be termed as avid readers. Thus, the research questions were:

1. What motivates and influences selected students from a private higher education institution in Kuala Lumpur to become avid readers?
2. What are the reasons for their interest in reading?
3. What are the factors that influence the informants to read?
4. What are the subjects' perceptions on the reading habit?

Data for this study were collected via a one-to-one interview as the interview method allows the researcher to assess and further confirm that the informants are indeed avid readers through an observation of their enthusiasm, passion and language used when talking about reading. The interview also allows the collection of in-depth, detailed and authentic information. Thus, a total of 23 questions investigating on the informants' motivating and influencing factors for interest in reading were constructed to guide the interview.

Extreme case sampling was employed for informant selection as according to Creswell (2012), it is the best tool to study a "particularly troublesome or enlightening or a case that is noticeable for its success or failure". In the context of this research, the informants were students of a private college in Kuala Lumpur, who have shown a strong affinity towards reading. The top three

book borrowers from the college's library within the time frame of January 2014 up to March 2015 were targeted. The potential informants were recorded to have borrowed 34 (the highest number of books) and 23 (equal number of books between the 2nd and 3rd highest borrower) books, respectively throughout the period.

Upon communication, two of the targeted informants agreed to be interviewed on the 24th of March 2015, while the other one declined to be interviewed. Both informants were female. For the purpose of anonymity, the informants were identified as Avid Reader 1 (AR1) and Avid Reader 2 (AR2). AR1 was a student of a Professional certification programme, while AR2 was a third-year Diploma programme student. Both were doing well in their studies, academic awards recipients for their achievements, and shortlisted for readership awards by the library.

Informed consent was received from both the respondents prior to the interview. The interviews were recorded using a digital recorder with prior agreement from the informant. Upon the request of both informants, the interviews were conducted in English instead of their mother tongue. However, there were incidents where codes were switched for clarity.

The interviews were transcribed verbatim while analysis was done in multiple stages. The first stage involved the analysis of the transcription, where the informants' responses were analysed based on the appropriate interview questions. This

involved categorising the responses and identifying the main ideas of the responses, while extracting irrelevant responses. Each unit of interaction was marked as a discourse unit (DU) and numbered according to sequence. This activity reflects Creswell's (2012) preliminary exploratory analysis, allowing the researcher to immerse in the data to get an understanding of the context of the input.

The second stage was a refinement process of the analysis of the first stage. Responses from both the respondents were combined, and patterns in the responses were traced. Colour coding was implemented as what Creswell (2012) defined as the process of segmenting and labelling the data so as to make sense of the data. At this stage, 10 themes surfaced; however, upon further analysis, it was found that the themes were a bit too broad and thus, categorisation was not done satisfactorily inundated with over generalisations.

At the third stage, further refinements were made. The main ideas were re-categorised and re-coded and made to be more focused. Specific stand-alone themes were allowed to surface while generalisation is limited. As a result, 26 themes surfaced. The analysis arrived at the point of saturation at this stage and no new themes could be found.

Finally, inter-relating themes were combined into major themes. Defined as layering by Creswell (2012), it adds "rigor and insights" to the study and organises the themes into more sophisticated ones. All in

all, 11 major themes were generated after the interrelation had been done through contextualisation.

Two copies of the inter-rater template of the analysis were then submitted to two co-raters. Both raters were English teachers with masters qualifications in English language teaching and 18 years of experience in the field. The first rater gave a 95.4% agreement with the analysis, while the second rater gave a 94% agreement, bringing to an average of 95% agreement. Thus, it could be said that the reliability of the analysis is high.

RESULTS

Upon analysis, eleven major themes were generated from the interviews answering the research questions and leading to an in depth discussion based on the feedback received. The major themes generated were:

Enjoyment

A major reason for the respondents to read was their enjoyment in reading. When asked “*Do you like to read?*”, AR1 agreed by saying “*Yes*” (DU4), and when asked to put her liking on a scale of 1 to 10, she identified it as “*...maybe 8*” (DU6). AR2, on the other hand, gave a resounding “*Yes, I love it*” (DU4).

AR1 clarified that, “*....we have to read for pleasure because it is also one of the factors for us to continue reading...*” (DU140) and explained that she “*...read to past the time*” (DU8). In agreement, AR2 informed that “*...first reading is one of my hobbies, so I read a lots...*” (DU6). Thus,

it could be said that the informants find reading as enjoyable.

It is also noted that the informants’ responses indicated that reading brings a sense of satisfaction and accomplishment. This is apparent when, AR1 informed that reading is “*...it’s just something nice to do...*” (DU100). While, AR2 informed that “*I feel so happy [ehm] because it is not easy actually to complete one book, so if I can complete one book, let’s say for one week, it’s very-very happy*” (DU10).

This information is reflective of Guthrie, Wigfield and Pencevich’s (1997) explanation that engaged readers take satisfaction in their reading activity and they will be persistent in exerting continuing effort in reading despite of the difficulties as they find the challenge enjoyable.

Self-development

The informants perceived that reading would help them in self-improvements through knowledge enhancements and language ability development. AR2 informed that “*...so I read [ehm] to improve myself, to gain many knowledge outside the class*” (DU6), and further explained that reading “*...can give impact so much in my academic because it can motivate me [ehm]*” (DU28).

AR 1 highlighted the importance of reading for the development of language abilities when she informed that, “*I think I am able to construct more good sentences, I think, without reading I wouldn’t have, I wouldn’t have a wide vocabulary, I would say I am better at writing than speaking...*”

so...which is why I like to read a lot, I get to widen all types of...mmm...I mean, I could write at all angles...and betterlah” (DU24).

Ilogho (2011) and Inderjit (2014) highlighted that enhancements of knowledge and language skills are among the benefits of reading. Similarly, both AR1 and AR2 indicated that they were expecting the same impacts from their reading activities.

Self-initiative

Reading was found as a self-initiated activity as informed by AR1 that *“...I read because I want to read, ...I don’t even feel like I need any encouragement to read...”* (DU92), while AR2 stressed that *“I study accounting and finance...so I think I should learn something outside the class, so I have to take aaa...action, that I have to be knowledgeable not only in accounting...”* (DU16).

The willingness to take action upon their own initiative is an indicator that the informants have developed perceived autonomy towards their reading activity. According to Guthrie, Wigfield and Pencevich (1997), this will lead to a higher intrinsic motivation as the person “perceives” that they have control over their actions instead of being controlled. The information gained is a strong indicator that intrinsic motivation towards reading exists within the informants and plays a role in motivating their reading habits.

Social support

Three sub-themes emerged in the context of social support. They were:

1. **Parental support.** In terms of parental support AR1 informed that *“I think it’s more about the people around me who encourage me to read, becoz, having brought up by parents who also loves books”* (DU46), while AR2 informed that *“Aaa...she, err...my parents, they are very open when I want to buy book, ha... a signal that my parents actually encourage me...”* (DU80).
2. **Teacher support.** AR1 informed that *“...teachers who happens to love to borrow (lend) me books when I was young so becoz of that I think what encouraged me to read”* (DU46) and she went on to describe her teachers as *“...the English teachers are all, they were very passionate about it (reading)”* (DU122). AR2 described that her teachers *“... will remind us the importance [ehm] of reading...the teacher will always ask us to read a lots”* (DU122).
3. **Third party support.** The third party would refer to people who do not have any relationship with the informants but are influential and supportive of their reading motivation. This was made apparent by informant AR2 who

informed, *“Ahhh...ok...first I love to see successful people...one of the factors why they are success in their field, because of they read a lots than others so when I know about this, I encouraged myself to reads...”* (DU82) and subsequently she informed that *“...when I meet new people, aaa...and I look at the way they communicate, then I will ask their secret,[ehm] so they will tell one of the secret is reading [ehm]”* (DU132).

Interestingly, the information received manifested that the support for reading habit development occurs in a wide space ranging from the family, school and society. This is in tandem with Inderjit's (2014) discussion that reading skill development is not limited to the schools as it could occur not only in the classroom but also within social settings, at home and in the wider community. Thus, the effort of reading habit development could and should be done on a bigger circumference and in the context of the informants; the social support that they received from parents, teachers and the third party has apparently influenced their motivation to read.

Reading friendly environment

A reading friendly environment is hereby defined as a situation that promotes and encourages the interest in reading. There

are three relevant sub-themes identified, namely:

1. **Reading family.** AR1 when asked *“Does your family read?”* answered *“Yeah, I would say so”* (DU60) and the use of pronoun “we” and “us” when she elaborated *“we would just read it after school in the evenings mmm....and mmm... usually she is the one who is encouraging us to buy books whenever we go out and....”* (DU56), indicating that reading is a family activity.
2. **Good reading environment.** AR2 highlighted that, *“...of course we have, must have environment that love to reads...we can consider it easier for me, but for others, which is they really-really hate the books, first we have to create the environment...”* (DU168) while physically, the environment should reflect *“I love to read at the place that no noise, err... very peaceful, clean haa...”* (DU84) and with a competitive climate *“... ok, my school, they will give an award if the student, amm... have the, the, the best numbers err...reading books, so that one also encouraged me, because I want to get that award.”* (DU106).
3. **Readers' character.** The informants gave an outline of their personal perceptions on how readers behave.

The perceptions enable them to identify with and blend in with readers or reading communities. AR1 informed that readers “...are not chatty, because I can’t stand chatty people” (DU72) and there is a sense of camaraderie as “Aah... we share books [ehm], ahh...which we like and we recommended each other books and we get excited about books” (DU70). While AR2 informed that “...actually I really love to gather with all these people because they are the knowledgeable person.” (DU98), and “usually...I can trace a person that love to read, emm... and then the person, umm... most quiet [ehm] they don’t love, aaa...they don’t love to talk much because talk is waste of time, better reading something haa...other than that I find out that a person maybe likes to read the way he or she communicates, the way she or he presents her or his self...” (DU96).

Abdul (2014) highlighted that environment is a major element that shapes desire or attitudes towards reading and a family who is actively involved in books would provide a positive reading environment. Subsequently, Olufowobi and Makinde (2011) suggested that the creation of a reading conducive atmosphere would increase the enjoyment of reading. It is interesting to note that the informants were able to characterise and outline their own perspective of a reading friendly environment, giving the notion

that such environment is influential to their reading motivation.

Unfriendly reading environment

The informants were also able to identify environments that could be regressive towards the development of reading habit. The emerging sub-themes were:

1. **Lack of reading friends.** AR1 informed that she lacked reading friends “Oh...ok [ehm], I have one or two friends...just one or two friends who really really love reading.” (DU68), while AR2 informed that “...I don’t know so far, in my hostel...only me that love to read.” (DU92) and “but not in my class, because my class, the majority, not, they don’t like to read.” (DU100).
2. **Ineffective reading campaigns.** AR1 opined that reading campaigns such as “In school...ahhh...they use to have this “Buku nilam” (name of an extensive reading campaign), but I don’t know if there is any point on it...” (DU78) and she further elaborated that the campaign “... was just something that I felt obligated to do because the school said so, the teacher said so” (DU82). AR1 also found that other reading campaigns as “...not so attractive...” (DU84). In support, AR2 suggested that “Err..., we have a to change, umm... the style,

err...more attractive campaign because most of the campaign that I see, the way they write, the way they present, is not suit for the teenagers...” (DU 176).

3. **Language barrier.** Notably, AR1 highlighted that the lack of language ability is a hindrance towards the building of reading culture when she mentioned, “...most of my peers they can’t grasp English sentences very well, and maybe that’s the big obstacle” (DU132).

The lack of a reading community around the informants may undermine the informants’ motivation to read as it deprives them from having peers of the same interest. Inderjit (2014) highlighted that peers would allow the opportunity for cooperative learning to occur, while Ilogho (2011) suggests that reading could actually be promoted through “Readers club” as group activities could be conducted for the readers whilst promoting the reading habit.

Interestingly, the information from AR1 with regards to Nilam is contrastive to the finding by Fatimah et al. (2005) which suggested that the Nilam reading campaign as relevant to schools as it is accepted by teachers and students and promoted the reading habit. This is a point to ponder as AR1’s information may indicate that Nilam might have an undesirable impact upon avid readers.

Hence, the informants’ feedback that the lack of reading friends, ineffective reading

campaigns and language barrier should be observed as significant unfriendly reading environment that could be detrimental to reading habit development.

Reading motivates reading

AR2 informed that her reading habit was catalysed once she was able to read as she informed, “*I cannot read, until eight years old [ehm] so, when...I knew how to read, so, it’s very happy for me, start from that, I read a lot,...*” (DU40). Concurrently, AR1 informed that starting reading early may generate a reading habit similar to her own self- experience, “*...as soon as you are able to (read)...that it worked for me (to read more)...*” (DU114).

In another instance, AR2 indicated that reading would motivate more reading activity as, “*...but when I read motivational books, they encourage me to read other books...for me if I want to read a lot, I must read motivational books, because in that book actually they encourage to read other books...*” (DU140).

The theme arising from these feedbacks was echoed Abdul’s (2014) and Inderjit’s (2014) suggestion that the reading habit should be started as early as possible. Subsequently, Ilogho (2011) suggests that libraries expand their activities through promotions that take into consideration the interest of the readers. These suggestions would catalyse reading activities that would result in the motivation for more reading to be done, as reflected by the informants’ perceptions.

Curiosity motivates reading

AR1 informed that her curiosity made her read more, even though the topic is not really interesting to her, “.... *something related to history, because I have a very... mmm...a very...like a narrow interest mmm... was that Dracula from Brian Stoker, from Fantasy, I searched its real history about the prince...*”(DU50).

This theme is reflective of Abdul’s (2014) suggestion that parents should intrigue children with continuity and the curiosity of how a story would develop to make them want to read more. The curiosity to know more about what they have read would increase a person’s desire to read.

Author’s attraction

AR1 in contemplating on her motivation to read related that, “...*I think the authors, you have a favourite author, you like the book, you would try, you would definitely find another book with the same author, that works for me...*” (DU140). AR2, in retrospective informed that, “...*the book is interesting, the sentence, the way the author aaa...write, right? So, their, actually the words, the words is important [ehm], because, when the author writes, ummm... words that can attract people to reads[ehm], ok, we, we as a reader will continue reading the book...*” (DU62).

The affinity towards a particular author is quite the norm as a reader may find the way that an author writes and shares his ideas suitably appealing to the reader. In this context, Abdul (2014) reminded that readers must be able to identify and select

books that are of quality and not be limited by superficial aspects such as loyalty to an author. Therefore, it could be perceived that *author’s attraction* could be seen as influential to the reader’s motivation.

Alliteracy awareness

AR2’s awareness of her family’s reading habit and her intention to change the reading behaviour of her siblings indicates that the effort to curb alliteracy is a motivation for her as a reader.

When asked “*Does your family read?*”, AR2 replied, “*Yes, but not so...err...many like I do.*”(DU68). She explained “... *I have so many little siblings, so for the reading is not err... to said like our habit, for right now...so...the level of reading not so good.*”(DU70). AR2 then described her family reading habit as “...*they read but maybe just for their homework aaa...for reference only...*” (DU72), and “*My parents, because my parents is so busy taking care of us, so they don’t have time to read, haa.*” (DU74).

AR2 then voiced her commitment to change her siblings’ reading habit by stating that “*I be the model to motivate them, haa...because they are just little, still ahh...young...*” (DU70), and when enquired “*Would you encourage someone else to read?*”, AR2 replied “*Yes, InsyaAllah, especially my siblings first...*” (DU146).

It is interesting that AR2 gave such a feedback because as Goodwin (1996) highlighted that the causes and impacts of alliteracy are complex due to the many variables involved. AR2’s response

indicated that she might have unknowingly perceived the occurrence of alliteracy at home. Concurrently, AR2 portrayed the thoughts of a reader with strong intrinsic motivation especially by her determination to change the family's reading scenario by making herself as "*the model to motivate them*". Therefore, it is apparent that her perception on alliteracy has played an influential part in her motivation as a reader.

Spiritually motivated

Being a Muslim, it is not a surprising that AR2's motivation in reading is also influenced by her commitment to the religion. AR2 mentioned that, "...in *Al-Quran* also, already encouraged us to read, in surah *Al-Iqra* right, aaa...so this already find factor a muslim or anybody should read." (DU136).

Alizi and Mohamad (2005) stated that extrapolation that a Muslim might perform *ibadah* (obeying and devoting self to Allah) was due of the joy of submitting to Allah (intrinsic motive) or because of the possible consequences (of being rewarded with heaven or punishment in hell; extrinsic motive) could be contextualised to better explain AR2's feedback. As reading is an action stipulated in the *Al-Quran*, it could be considered as an *ibadah* to Muslims, and therefore, AR2's response indicates that the spiritual perspective is influential to her motivation to read.

CONCLUSION AND RECOMMENDATIONS

Both AR1 and AR2 indicated that they are motivated, passionate and matured readers. Information gained from the interview has shown that they have an awareness of the motivating and influencing factors for their interest in reading. Essentially, the feedbacks given are relevant to and could be substantiated with literature. Hence, the effort of investigating the avid readers has managed to garner in depth information that could be useful towards the promotion of reading habit.

It could be concluded that in the context of the avid readers, the influencing factors that drive their reading habits are: (1) *Enjoyment* in reading, as the primary motivating factor, followed by the interest for (2) *Self-Development*. Their motivation to read is sustained by strong (3) *Self-Initiative* and (4) *Social Support*, whilst the study has also made apparent that avid readers would require a conducive (5) *Reading Friendly Environment*. On the other hand, the motivation to read could also be affected by an (6) *Unfriendly Reading Environment*. Subsequently, (7) *Reading Motivates Reading*, (8) *Curiosity Motivates Reading*, and (9) *Author Attraction* would potentially be assistive to motivate reading. (10) *Alliteracy Awareness* is also a driving factor, especially if readers are made to play a part in curbing its dangers. Finally, all these factors could be complemented by

making reading a (11) *Spiritually Motivated* activity.

The findings of this research could be considered as a glimpse of what is possibly in the minds of the avid readers with regards to the factors that motivate and influence them to read. It is thus recommended that:

1. Further attempts are made on students of similar characteristics to investigate and develop the repertoire of motivating and influencing factors.
2. A quantitative study is designed and implemented using the factors identified.
3. Reading habit development modules could be designed and experimented upon using the themes identified.

To end, it would be apt to keep in mind Ilogho's (2011) quotation of Trelease (1989) that asserted:

"It is time to stop fooling ourselves. Teaching children how to read is not enough; we must teach them to want to read. We have produced a generation of school-time readers, the focus of the school objective should focus on raising lifetime readers."

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Patterns of Negotiation of Meaning Routine in Online Forum Discussion

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ABSTRACT

This study examines a text-based, asynchronous online forum discussion among English language teacher trainers who were involved in a two-week online professional development course. It investigates the participants' negotiation of meaning routine when they come across new content related item and describes the pattern of this negotiation of meaning routine. A textual analysis method, employing Smith's (2003) expansion of Varonis and Gass Model (1985) for negotiation of meaning, was utilised to analyse the discussion threads. The analysis revealed that the participants did engage in negotiation of meaning and all the four negotiation of meaning steps (trigger, indicator, response and reply to response) were evident. It was also revealed that content triggers, local indicator, elaboration in responses and task appropriate response were frequently used. As the application of CMD for teaching and learning is increasing, findings of this study could inform educators about the kind of strategies that could enrich online interaction.

Keywords: Computer Mediated Discussion (CMD), Online Forum Discussions (OLFD), Negotiation of Meaning (NOM)

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INTRODUCTION

The usage of technology in the classrooms has led to rapid changes in the way students communicate and the role they play in the process of communication. Information Communication Technology (ICT) in teaching and learning refers to the application of computer-mediated discussions (CMD),

which are highly employed for long-distance learning programmes. Such setting allows educators and learners to confer beyond physical boundaries and limitations of time (Liu & Burn, 2007; Kim, 2009; Millard, 2010). This unique attribute of CMD has directed educators and researchers' attention to analyse and describe the nature and value of online communication and strategize ways and methods to generate meaningful interactions (Saade & Huang, 2009; Hancock, 2012; Marra, Moore, & Klineczak, 2014).

Computer-mediated discussions (CMD) is an authentic communicative situation that requires the participants to apply linguistic strategies in the course of making meaning (Fernandez-Garcia & Martinez-Arbelaiz, 2013). The concept of negotiation of meaning is often studied in the light of second language acquisition, as according to Patterson and Trabeldo (2006), interaction along with negotiation of meaning are essential elements of language acquisition in SLA. More studies, however, are needed to provide descriptions of the patterns of interaction in the CMD amongst proficient ESL users. These findings could offer general linguistic features of the language, the nature of negotiation of meaning, knowledge construction and the strategies they employ, all of which could be emulated by second language learners. Hence, this necessitates the development of an empirically based study to be done to identify the features of the discourse generated during learner-learner communication in online discussions (Fernandez-Garsia &

Martinez-Arbelaiz, 2013). The learners of this study are proficient ESL users who are teacher trainers undergoing a professional development course.

Many studies on CMD found that the process of comprehension and learning transpires only when there are productive and meaningful social interactions among the participants, as propagated by the theory of social constructivism. In addition, these meaningful interactions could further contribute to the building up of strategies that encourage higher order thinking (Kern, Ware, & Warschauer, 2004; Uzuner, 2007; Woo & Reeves, 2007; Swee Kim, 2009). Based on these premises, this study aims to add to the pool of knowledge on online discourse by describing the pattern of negotiation of meaning (NOM) routine (Smith, 2003), in an online forum discussion (OLFD) that consists of TESL teacher trainers who are proficient users of the language. McLoughlin and Luca (2000) support this by stating that when learners explicate ideas to each other, regardless of the abilities of those engaged, a more explicit and organised understanding can result in the form of construction of knowledge, leading to cognitive change that is vital to the expansion of higher order thinking.

The research questions are:

1. To what extent do the online forum discussions (OLFD) trigger negotiation of meaning (NOM)?
2. What is the pattern of negotiation of meaning (NOM) amongst TESL teacher trainers in the OLFD?

3. What are the levels of thinking involved in the process of negotiation of meaning in the OLFD?

LITERATURE REVIEW

Computer-Mediated Discussion (CMD)

Computer-mediated discussion is found to be an expedient tool for language teaching and learning as well as for research. It was found that CMD draws more learner participation as it creates a less stressful environment for learning other than having quality language use amongst its participants (Smith, 2003; McLoughlin & Mynard, 2009). There are two types of computer-mediated discussions which are the synchronous and asynchronous CMD. The former generally refers to real-time, instantaneous, textual communication amongst people over a local-area or wide-area network (Smith, 2003). Asynchronous CMD refers to delayed, non-real time interaction. Both modes of CMD offer opportunities for cooperative learning and teaching process, which can be dialogic in nature (Saade & Huang, 2009; McLoughlin & Mynard, 2009). The discussion could also create an opportunity for participants to employ several indicators to signal non-understanding and give responses to request for clarification (Hardy & Moore, 2004).

According to Kim (2009), CMD requires the readiness of participants in putting forth their ideas or opinions or responding to other participants' posting. In doing so, the participants will be relying on

their prior knowledge, past experience and online competency that they possess. CMD provides a platform for the participants to be engaged in productive skill (writing) practice by employing linguistics strategies in order to function effectively in the online discussion (Nandi, Hamilton, Chang, & Balbo, 2012). Subsequently, the participants of asynchronous CMD could take time to plan their messages and they are also exposed to the construction of knowledge through negotiation of meaning in the online discussions (Lee, 2012).

Online Forum Discussion (OLFD)

Online forum discussion is a form of CMD implementation that offers an avenue to connect individuals with the same interests in a virtual environment. Most OLFDs are unstructured and serve as an outlet of ideas and thoughts, which have been used for educational purposes as a tool for promoting different modes of learning that can lead to enhanced learning outcomes (Saade & Huang, 2009; Montero, Watts, & Garcia-Carbonell, 2007). The communication that takes place in OLFD can facilitate students involvement in authentic conversations, where they engage in the discourse on task related topics in the process of learning (Sutherland, Watts, Garcia-Carbonel, Montero, & Eidsmo, 2003) and that OLFD provides a catalyst in facilitating critical thinking skills in learners when it is used effectively (Yang, 2008; Zhu, 2006). It is asserted that OLFD encourages more in depth thinking and offers ample time for the

participants to reflect on their comments or responses before posting them (McLoughlin & Mynard, 2009; Pena-Shaff & Nicholls, 2004).

McLoughlin and Mynard further claimed that taking part in an OLFD reduces the anxiety learners feel when they are involved in a face-to-face interaction. This could lead to active participation that enhances learning outcomes. Such online participation could help learners to identify and solve problems related to their work and hence making it an excellent vehicle for exchanging information to support professional development (Montero, Watts, & Garcia-Carbonell, 2005).

Negotiation of Meaning

In an online discourse, participants negotiate for meaning as they modify their speech linguistically to create comprehensible input, which is achieved by repeating a message, adjusting the syntax, changing the vocabulary or modifying its form and meaning (Patterson & Trabeldo, 2005; Akayoglu & Altun, 2009). Many studies on CMD have suggested that OLFD can stimulate negotiation for meaning amongst its participants. Lee (2012) states that in such online discussion, participants are involved in real-life communicative interactions and hence are exposed to construction of knowledge through the process of negotiation of meaning. In the context of teachers' development of content knowledge, negotiation of meaning allows them to learn through the processes of involvement, orientation and reification

that can transform their own practices as part of ongoing professional development (Keily, 2011).

Theoretically, constructivists posit that the process of constructing knowledge that learners undergo when they try to make sense of their experiences can assist in higher mental process, as well as learning of new concepts (Driscoll, 2000; Woo & Reeves, 2007; Taylor, 2007). This happens as the higher mental process grows through social interaction, whereby learners test their own knowledge against those of others through the process of negotiation of meaning and ideas. Learning could be enhanced when ideas, opinions, experiences and perceptions are discussed and negotiated with colleagues and peers. In the OLFD, course participants can compare their own understandings with others', negotiate meaning through suggestions and ideas given by others, and construct new ideas related to the topics discussed.

NOM comprises explicit indication of communicative difficulties that force participants away from the main line of discourse in order to resolve the problems (Varonis & Gass, 1985, cited in Rozina, 2005; Rozina, 2009). Meanwhile, Varonis and Gass proposed a model for NOM which involves the stages of *trigger*, which spurs the negotiation routines; *indicator*, which indicates a non-understanding; *response*, which responds to the *trigger* and/or *indicator*; and optionally *reaction* to *response*. Their model allows for multiple embedding of negotiation stages and they believe that the key to successfully aiding

acquisition is the dynamic interaction that takes place (Rozina, 2005, 2009).

Smith (2003) expanded this model by having descriptions for each of the negotiation stages. He listed four types of *triggers* which are *lexical*, *syntactic*, *discourse*, and *content*. He also suggested three types of indicators, namely global, local and inferential. The types of response that he listed are *minimal*, *repeat trigger plus lexical*, *rephrasal* and *elaboration*. Finally, four types of *reaction to response*, which are *minimal*, *metalinguistic talk*, *task-appropriate response* and *testing deductions*. He studied the pattern of negotiation of meaning amongst the participants who engaged in jigsaw and decision making tasks, involving students of intermediate level, representing five different countries and speaking four different languages. The task employed in the discussion centred on new lexical items and it was found that most of the negotiations were lexical *trigger* (Rozina, 2005).

In short, proper stimulus in the online interaction could indeed trigger NOM and hence construction of knowledge pertinent in the students' development. This potential of NOM is also an avenue for possible enhancement of learning quality, especially in the aspects of content and critical thinking development, which will definitely be beneficial to the education field. This study would give insights to educators and trainers about the kind of strategies that could catalyse and sustain a healthy academic oriented online interaction.

METHODS

The data consisted of a discussion thread from a task-based OLF. The 14 participants involved in the online forum discussion are teacher trainers participating in a Reading Fluency course and their continuous professional development (CPD) course trainer. These teacher trainers have had at least five years of experience teaching in teacher training institutes. They had a two-week face-to-face interaction before they continued with an online mode of interaction. The online discussion was based on an article read "Why reading fluency should be hot?" by Rasinski (2012), and a question posted by the course trainer; "What do you think: Where are we with reading fluency in our education system?" The Course participants needed to log into Canvas Instructure, which is a Learning Management System (LMS) used for the training. Two weeks were allocated for the discussion and within that period, all the course participants contributed to a total of 69 postings including 7 postings from the CPD course trainer. There were a total of 10,609 words in the discussion thread that was analysed.

A textual analysis method employing the Smith's (2003) expansion of Varonis and Gass's Model for negotiation of meaning (Figure 1) was utilised for analysing the 69 postings in the discussion thread. The postings were analysed for words, phrases and sentences that indicate the negotiation of meaning stages. The basic unit of analysis for this study comprised of phrases within

the interaction that took place in the form of a word, a phrase or a sentence that implies meaning to the entire discourse. For example, the appearance of the question, “What do you think?” (TrR1) in a post is identified as a trigger, while the phrase “...or is reading fluency about prosody - the intonation and rhythm patterns in a language?” (CP4R1) is identified as an indicator.

Subsequently, the thread was analysed for reflections of Bloom’s taxonomy to identify the levels of thinking occurring in the discussion. The analysis was done by

matching the participants’ responses to the description of the Bloom’s taxonomy levels. For example in CP1R1, the participant employed the application level when he responded “...I believe fluency in reading which could be achieved through speed, deep or wide reading, could enhance students’ confidence in reading. When his confidence grows, so does his interest in reading...this would improve his comprehension...” This response is an indicative that he is able to apply his knowledge to solve the problems of his students’ reading ability.

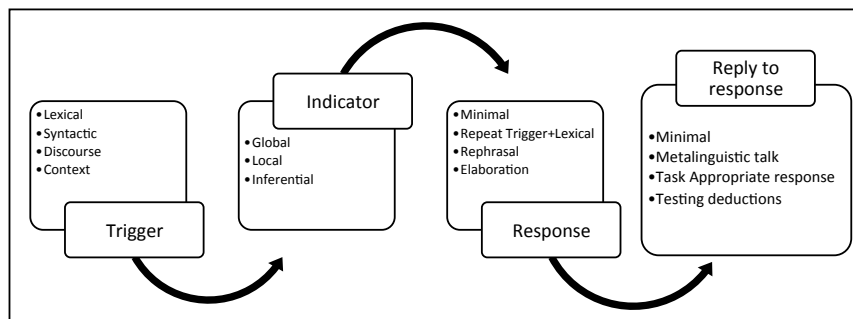


Figure 1. Smith’s (2003) Expansion of Varonis and Gass Model for Negotiation of Meaning

RESULTS AND DISCUSSIONS

In order to find the negotiation of meaning routine and arrive at the patterns, the discussion thread was carefully analysed. All the course participants (CPs) and their trainer contributed a total of 69 postings in the two weeks’ online discussions. Out of the total, there were 7 postings from the trainer that managed to generate 62 postings from the CPs. This is encouraging because it reflects student-centred discussion.

All the negotiation steps (trigger, indicator, response and reaction to response) were found in the discussion thread and more than 90% of the discussion reflected *trigger*, *response* and *reaction to response* (T-R-RR) negotiation routine. This negotiation routine is different compared to Varonis and Gass’s (1985) model and Smith’s (2003), as well as Rozina’s (2005) findings, where three negotiation routines were listed: 1) *trigger*, *indicator*, *response* and *reaction to*

response (T, I, R, RR); 2) *trigger, indicator and response (T, I, R)*, and 3) *trigger and indicator (T, I)*. In this particular study, the *indicator (I)* step was not frequently used in the discussion studied, hence manifesting the *T-R-RR* negotiation of meaning pattern.

The respondents in this study negotiated meaning in context, which is related to the assigned text - *Supportive fluency instruction: The key to reading success (Especially for students who struggle* - by Rasinski (2013). Therefore, the CPs purpose for negotiating meaning is to comprehend knowledge related to teaching pedagogy and not aimed at understanding specific lexical item or phrases found in the article. More *content triggers* (80.75%) are used by the CPs and 100% of the responses are in the form of *elaboration*. Examples of *content triggers* are as seen when CP4R1 states, "Please enlighten me on the role of prosody in reading fluency and are our teachers and children ready for prosody reading instruction..." and CP4R2 mentions, "... But do we have speed rate in our reading programme". On the other hand, *Elaboration in response* can be seen in an instance such as CP6R1's comprehensive explanation "... we need to teach our students to become fluent readers ...I would like to highlight the importance of reading instruction because ... the bridge to comprehension may never be built (Rasinski, 2013). When students do not pick up the connection intuitively... If Joseph as adult reader prefers reading aloud, I would like to suggest Assisted Reading Practice which is ... If the student commits a reading error, the helping reader

corrects the student error. The teacher is an important factor who needs to be well taught him/herself."

Table 1 illustrates the number of negotiation stage employed by the participants in the discussion thread. There are 59 *Triggers* altogether in the online discussion, 6 *Indicators*, 498 *Responses* and 58 *Reaction/Replies to Response*. This shows that the participants had no difficulties in conveying meaning in the form of ideas, opinion and suggestions in the OLFD.

Table 1
Negotiation stage and number of occurrences

Negotiation stage	No of occurrence
Trigger	59
Indicator	6
Response	498
Reaction/Reply to response	58

It can be perceived from Table 2 that not all the subcategories of negotiation stage are observed in the discussion thread analysed. Out of the 59 *Trigger* found, 84.75% are *Content Triggers* and 15.25% are *Discourse Triggers*. There are no *Lexical* and *Syntactic triggers* employed in the OLFD analysed. This could suggest that the participants, who are proficient users of the language, did not find the need to negotiate meaning in terms of lexical items, phrases or sentences, as they were able to understand them. Instead, they needed more clarification and elaboration on the content of the discussion.

When a problem is triggered, there would usually be an *Indicator (I)* that shows non-understanding. All the *Indicators* found in this study are *Local Indicators*, whereby a specific item is made explicit as the source of non-understanding, as exemplified by CP8's question, "What does *prosody* mean?" Here, CP8's enquiry is specific to his non-understanding of what *prosody* is. There are only 6 *Indicators* found in this study, in contrast to other studies (see for instance, Smith, 2003; Rozina, 2005) that focus on SLA, which found there were an immense number of *Indicators* used in the interaction. Thus, it can be said that the participants of this study have a better understanding of the topic discussed, which could possibly

be attributed to their high proficiency level of the language and as teacher trainers, they possess the content and pedagogical knowledge of the subject.

All the *Responses (100%)* observed in the OLFD are in the form of *Elaboration*. The participants provided more input in terms of opinion, elaboration and ideas, which are all well supported with readings and experiences that they have had in the teaching profession. Finally, the *Reactions / Reply to Response* were all in the form of *Task Appropriate Responses*, which show that the participants were able to respond to the *Triggers* and *Reponses* appropriately and effectively by referring to the task and reading material provided.

Table 2
Subcategories of each element of the negotiation stage

Negotiation	Subcategory of element	No of occurrence	Percentage of total occurrence
Trigger	Discourse	9	15.25%
	Content	50	84.75%
Indicator	Local	6	100%
Response	Elaboration	498	100%
Reaction/Reply to response	Task appropriate response	58	100%

It was also found that the NOM employed is at a level beyond the Bloom's Taxonomy level of knowledge and comprehension. The asynchronous OLFD provided the participants with time to reflect on their ideas before sharing them and also reduced the anxiety that course participants usually experience during face-to-face interaction. The interactions can be categorised as moving upwards from the level of

application to the extent of synthesis and evaluation of the Bloom's taxonomy.

In addition, it was also found that the respondents in this study did synthesize ideas by composing, inferring, modifying, predicting and combining thoughts in giving their responses as can be seen in a response given by (CP10R3):

"I agree with you (Tr). The students' learning environment must be

filled with materials that will help them learn, be it reading, speaking or even writing. Reading corner, charts, word card s...just name it, they are all very important..."

Another example that shows the synthesis level of thinking occurring in the discussion is the response from (CP6R3):

"Our teacher trainees need to be alerted on the fact that reading comprehension all comes down to meaning (Rasinski, 2013) and teaching reading fluency ultimately helps learners get better at deriving meaning from any text. As teacher trainers we need to help trainers to bridge comprehension and fluency and realise the importance of making it happen in the classroom".

At the evaluation level, the respondents were able to assess theories, compare ideas, evaluate outcomes and recommend solutions in the process of NOM. This can be seen in the response from (CP5R1):

"...I am not against with this article on reading fluency. This article is saying that if one is already trained as a fluent reader, text comprehension is attained together with accuracy, speed and prosody".

In another example, (CP7R4) stated:

"...Incompetent readers can become skilled readers and develop their

reading skills or fluency if they are provided with appropriate instruction about effective strategies and taught to monitor and check their comprehension while reading. In this regard, Al Mel (2000), has uncovered that some differences exists between successful and less successful readers in terms of their actual and reported reading strategies, their use of reading strategies, the strategy awareness, and their perception of the good reader. Consequently, helping students achieve functional literacy is one of the core tasks of the teachers and should be given the highest priority, particularly in rural schools where resources may be limited in the home. So I do very much agree, teaching reading strategies to the students is a necessity and crucial in the reading programme and it is an assurance to reading fluency".

The CPs in this study demonstrated the ability to do the analysis as they were able to relate to each other and to the overall structure and purpose of the discussion by comparing, contrasting, criticising, discriminating, questioning, and classifying ideas. Their high level of language proficiency could be a contributing factor to this ability. This can be seen clearly in a response from (CP2R4):

"...I disagree carrying out wide reading with disfluent readers. They

are already struggling to read: recognising words, decoding words, pronouncing and meanings of words. When the foundation itself is not strong, how could they read and discuss? Wide reading is relevant to fluent readers. They are already knowledgeable and they do not have to struggle to understand the text. The Ministry of Education has to overcome the issue of disfluent reading in our pupils. It is a wakeup call to all trainers and educators. We are the ones. Be proactive for the future generations.”

The extract above is an example that could suggest that the participants in the OLFD engaged higher order thinking. As proficient users of the language, the respondents could relate the articles read to other relevant sources of information as well as to their past experiences. Hence, that helped them to convey opinions and ideas effectively in the process of NOM. They negotiated meaning at a higher thinking level – application, analysis, synthesis and evaluation, as can be perceived from Bloom’s Taxonomy.

CONCLUSION

This analysis provides empirical evidence that CMD is a platform that could trigger and enrich the development of negotiation of meaning which allows higher order thinking to occur. The findings also suggest that OLFD in the context of CMD amongst

proficient users of the language encourages higher order thinking (HOT), especially at analysis, evaluation and synthesis level. Zhu (2006) asserts that various levels of cognitive engagement in an online discussion may influence varied individual learning and construction of knowledge. It is suggested that course trainers, as well as teachers, use tasks or materials that promote NOM at a higher level, which inculcate HOT. It would be significant to investigate and explore discussion threads involving proficient users of the language against critical thinking frameworks.

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APPENDIX 1

Categories and subcategories of the negotiation of meaning routine stages with description (Varonis & Gass, 1985; Smith, 2003)

Categories of negotiation of meaning stages	Description	Subcategories of negotiation of meaning stages	Description
Trigger	functions as the “catalyst” of negotiation routine which can be initiated by any aspect of the discourse	Lexical	cases where problematic item can be linked to a specific lexical item
		Syntactic	occurs when the problem lies in the structure or grammatical construction of the message
		Discourse	related to the general coherence of the discourse
		Content	instances where the entire content of the message is in the same way problematic
Indicator	signals that an utterance has triggered a non-understanding	Global	when the respondent does not indicate any specific item as the source of non-understanding such as the question “what?” or the statement “I don’t understand”.
		Local	when a specific item is made explicit as the source of non-understanding such as “What does monolithic mean?”.
		Inferential	occurs when a respondent tests out hypotheses and in doing so indicates non-comprehension such as when a respondent says, “Does that mean I was wrong?”
Response	any utterance by the respondent that replies to a <i>signal</i> or <i>indicator</i> of non-understanding	Minimal	provides little new input to the indicator of the negotiation routine such as simple reply “yes”.
		Repeat Trigger + Lexical	the learners’ attempt to clarify his or her intent meaning such as “monolithic, I mean massive or huge”.
		Rephrasal	when the respondent illustrates the nature of the problematic lexical item
		Elaboration	when more context on the previous discourse are provided

APPENDIX 1 (*continue*)

Reaction to Response	serves to signal that learners are ready to resume the main line of discourse	Minimal	normally takes the form of an explicit statement of understanding such as “OK”, “Good” or “I see”.
		Metalinguistic Talk	entails explicit comment on the cause of non-understanding such as “ I see, I thought the meaning was something else”
		Task Appropriate Response	utterances that are contextually relevant to the preceding discourse
		Testing Deduction	when a learner puts forth his or her best guess relevant to the context of discussion



Determinants of Financial Well-Being among Public Employees in Putrajaya, Malaysia

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ABSTRACT

People generally see finance as anything that can be associated with the economic situation of the family. Thus, managing finances among individuals may result in satisfaction or dissatisfaction towards their financial situation, which is called financial well-being. Previous research regarding financial well-being has largely focused on factors such as financial stress, financial knowledge and financial behaviour. However, influences by the locus of control and work environment on financial well-being were little explored. Thus, this research studied the factors affecting financial well-being among public employees in Putrajaya, Malaysia. This study is a quantitative study using a set of online structured questionnaire to obtain the necessary data. A total of 207 completed questionnaires, out of 316 responded questionnaires, were analysed using Statistical Package for Social Science (SPSS) version 21. The results indicated that financial stress, work environment, locus of control and financial behaviour were significantly associated with financial well-being. In addition, financial stress was the strongest factor affecting financial well-being followed by work environment. At the end, the outcome of this study can be used for a better understanding of employees' financial behaviour, which can be enhanced through financial education at the workplace.

Keywords: Financial behaviour, financial knowledge, financial stress, financial well-being, locus of control, work environment

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INTRODUCTION

According to Rath and Harter (2010), well-being consists of five essential elements. Financial well-being is among the five essential elements of well-being aside from community, physical, career and social. In

recent years, the review in the salary scheme of Malaysian public employees resulted in salary increase. In the same vein, there is an increase in the standard of living, as well as various commitments which could make employees struggle to survive and also experience a great stress financially. Hence, one's job productivity may be affected. This can be supported by Zaimah, Masud, Haron, Othman, Awang, and Sarmila's (2013) study, which found that employee's financial well-being and productivity have a significant association with each other.

Financial well-being level was measured by subjective measurement. Subjective measurement of financial well-being can be beneficial in comprehending individual and family financial situations that are able to provide responses to individuals and family of their present-day and henceforward financial situation. Researchers, financial educators, policy makers and practitioners have been interested on the impacts of financial well-being. This is because financial well-being has an impact on employees and their lives in general, particularly in terms of psychological, social, physical and emotional. Previous studies found that financial stress, financial behaviour and financial knowledge affect financial well-being.

Prior literature indicated that issues relating to employees' financial well-being are influenced by factors such as low level of financial literacy, poor financial management, financial stress (Delafronz & Paim, 2011; Sabri & Falahati, 2003), financial problem (Delafronz & Paim,

2013), and money attitude (Dowling, Corney & Hoiles, 2009). As a result, these situations lead to harmful impacts on their daily lives which lower their job productivity (Delafronz, Paim, Sabri, & Masud, 2010) and their health (Kim, Garman, & Sorhaindo, 2003; O'Neill, Sorhaindo, Prawitz, Kim, & Garman, 2006).

As financial matters aggravate from time to time, employees may be pushed to learn of this phenomenon of financial well-being, either through eroded purchasing power, income instability and decline of employment (Delafronz & Paim, 2011). Most of the public employees will have to proactively seek for financial education (Lusardi, 2008) and at the same time, tap into positive financial behaviour in order to achieve financial well-being (Lusardi & Mitchell, 2007). Based on the effects of financial issues, this research aims to determine the factors affecting financial well-being among public employees in Putrajaya, Malaysia.

LITERATURE REVIEW

Financial Well-Being

Van Praag et al. (2003) defined financial well-being as one of the personal subcomponents well-being which comprises of the environment, housing, job, health and leisure. Financial well-being is an extensive concept that can reflect in objectives and subjective measures, which can also be known as financial wellness. Nevertheless, financial well-being researchers have invariably conceptualised financial well-

being as a subjective appraisal (Gerrans, Spellman, & Campitelli, 2014). Joo (1998) added that financial satisfaction and financial wellness can be proxies of financial well-being. Parallel to that, Shim, Xiao, Barber, and Lyons (2009) and Van Praag et al. (2003) mentioned that financial well-being or financial satisfaction has been used interchangeably in the past research.

Joo (2008) stated that financial well-being is a perception of an individual's financial situation that is financially free from anxiety, healthy and happy. Based on Joo's (2008) Model of Financial Wellness, financial wellness consists of financial behaviour, financial satisfaction, financial or subjective perceptions such as financial attitude and financial knowledge, as well as the objective status like financial ratio and income.

Cox, Marwick and Reily (2009) conducted a study on financial well-being at workplace. It investigated the relationship between financial well-being and employees' job performance. Barclays report (2014) also stated that poor financial well-being could impact employees' productivity. In fact, they mentioned that in every ten person, at least one person would experience financial struggle and feel distracted. Furthermore, Employee Financial Well-being Report (Allison, 2015) mentioned that 87% of employees wanted financial education, which could help them to enhance their personal financial knowledge and alleviate their financial well-being.

Financial Stress

According to Davis and Mantler (2004), stress is a certain unpleasant emotion when an individual perceives something valuable has been lost or threatened, and this can be in the forms of material, social, symbolic, or even economic. In general, Kim and Garman (2003) summarised that financial stress has been conceptualised as an individual subjective perception of personal finances. Garman, Leech and Grable (1996) believed that a primary source of stress is personal financial problem. Hence, based on Garman et al.'s (1996), it is vital to understand what most people go through in their lives in effectively 'handling' all the stressors of modern life which occasionally exhibit poor financial behaviour.

Some researchers have investigated factors contributing to financial well-being. Taylor (2009) suggested that financial strain was divulged to be a good predictor of financial well-being. Taylor (2009) also highlighted concern over the inability to pay medical bills and feeling of depressed because of small or no amount of savings. Delafrooz and Paim (2011) found a similar finding when they identified financial stress as the most determinant for financial well-being. On top of that, equivalent to Delafrooz and Paim (2011), Sabri and Falahati (2003) found that financial stress has become the most determinant on financial well-being.

Even though with a different geographical context between Delafrooz and Paim (2011) and Sabri and Falahati

(2003), financial stress indicates a major role in affecting financial wellness and financial well-being, respectively. Aside from that, Joo (1998) stated that financial wellness is closely related to financial stress. Joo (1998) also added that the number of financially stressful events experienced by an individual also affects one's financial wellness. Therefore, financial stress has an association with financial well-being.

Work Environment

Work environment construct is a comprehensive aspect that consists of psychological, social and physical which revolve around working situation (Jain & Kaur, 2014). Chapins (1995) and Mehboob and Bhutto (2012) explained that the environment that people perform their work in as work environment. Similarly, Mike (2010) and Shikdar (2002) mentioned that the environment with an achievable outcome anticipated by the management is known as an effective workplace.

Buffet, Gervais, Liddle, and Eechelaert (2013) and Kompier (2005) stated that a positive work environment is correlated with employees' well-being or health. Even within the same environment, the different individual would feel some work environment aspects may be stressful (Sulsky & Smith, 2005) or perceived as demanding (Sears, Urizar, & Evans, 2000). Consequently, it may permissively impact employees' attitude such as burnout. Employees' negative attitude is also associated with the level of organisational productivity and employees' states of

emotion such as satisfaction (Leka & Houdmount, 2010). As an adult, we spend most of our time to do activities that are related to work (Harvey & Pentland, 2004). Keilhofner (2002) and Kielhofnar (2008) mentioned that as our experience engaging in activities that we performed is closely connected with our quality of life. This indicates that our work experience has a great influence on our overall quality of life. Therefore, in this study, it was proposed that work environment has an impact on one's well-being, which can affect their personal finances well-being as well.

Locus of Control

The term 'locus of control' was originally constructed by Julian Rotter in 1966. Since then, locus of control was among the most persistent personality variable that has been used in social science. Rotter (1966) defined locus of control as a general, relatively constant propensity perception towards the world, which involves general beliefs on the causes of rewards and punishments. Rotter utilised rewards and punishment concept that originated from Skinner's (1974) concept known as positive and negative reinforcement, respectively. Furthermore, Rotter (1966) also scrutinised ones to have diverse capabilities to take control of what happened. The term perceived locus of control is introduced to portray individuals' perception of their ability to control and to the level which they feel responsible for what is happening to them. Locus of control was found by Ganster and Fusilier (1989) as a centre component of well-being. In line

with that, locus of control has received much deliberation from diverse sub-disciplinary.

Furthermore, previous researchers such as Hira and Mugenda (1999), Onkivisit and Shaw (1987) and Prince (1993) also showed that individuals' self-concept or self-perception influences financial and non-financial preferences and behaviour. Additionally, there is also a study that constructed locus of control in a financial context besides those by Zakaria, Jaafar, and Marican (2012) and Sarah (2009). Zakaria et al. (2012) and Sumarwan and Hira (1993) revealed that locus of control has a significant influence on financial status. Apart from that, Zurlo (2009) and Danes, Rettig, and Bauer (1991) have also studied the effects of locus of control on financial well-being and financial status, respectively. In all, locus of control plays a significant role in personal finance context.

Financial Behavior

Xiao (2008) defined financial behaviour as any individual behaviour that is related to money management. According to Hilgert and Hogarth (2003), common financial behaviour includes credit, saving and cash management. Xiao (2008) further elaborated that this financial behaviour refers to desirable or positive behaviour, which is suggested by consumer economists as methods to improve financial well-being.

In a previous study, financial behaviour was found as one of the contributors of financial well-being. Past literatures have shown that financial behaviour contributes to predicting financial satisfaction (Shim

et al., 2009). The related literature also demonstrated that consumers who reported greater frequency of negative financial behaviour (e.g., late in paying bills) reported less perceived lower financial wellness (O'Neill et al., 2006). In fact, Xiao, Tang, and Shim (2009) and Joo (2008) declared financial behaviour as the main contributor to one's financial status satisfaction. In all, it indicates that good financial behaviour is positively associated with financial well-being (Shim et al., 2009; Xiao et al., 2009), while poor financial behaviour is negatively correlated to financial well-being (Kim et al., 2003). Not only that, Xiao et al. (2009) disclosed that financial behaviours such as credit management, saving and cash management are positively related to individuals' overall well-being.

Financial Knowledge

According to Bowen (2003), financial knowledge is described as a function of understanding financial terms and concepts in daily life. Joo and Grable (2004) have proven that financial knowledge has a significant effect on financial well-being. Delafrooz and Paim (2011) and Robb and Woodyard (2011) also have similar findings, whereby they disclosed that financial knowledge and financial well-being have an association with each other through the National Financial Capability Study managed by Financial Industry Regulatory Authority (FINRA). In addition, Falahati et al. (2012) and Sabri and Falahati (2003) are also interested in predicting financial well-being among college students and

employees, respectively. Even with different respondents and in different contexts, financial knowledge has been shown to have important role on one's financial well-being.

THEORETICAL FRAMEWORK

The current study utilised Family Resource Management Theory (Deacon & Firebaugh, 1988), which comprises of the three stages of input, throughput and output to understand how public employees perceived their financial well-being. The input stage consists of respondents' resource and demand, while the throughput stage involves managerial subsystem. Despite that, input can concur with throughput, whereas the output stage shows results from the resource and demand changes to examine financial well-being of employees. Pertinent to Deacon and Firebaugh's classifications, the dependent variable, which is a respondent's financial well-being, was included as an output, whereas independent variables (financial stress, work environment, financial knowledge and locus of control; financial behaviour) were listed as input and throughput, respectively.

CONCEPTUAL FRAMEWORK

Input or the first element of the model can be in the form of resources or demands (Deacon & Firebaugh, 1988). Demands are input entering the system, which motivates response that drives to stimulate action. Besides demands, Leichtentritt and Rettig (2000) mentioned that a resource is anything that can be used to fulfil goals or desired. As for this study, locus of control acts as

an example for resources, whereas work environment and financial stress act as examples for demands.

Former researchers like Hira and Mugenda (1999) and Onkivisit and Shaw (1987) have the same opinion towards locus of control, which has impacts on both financial and non-financial preferences and behaviour. In line with that, a study administered by Sarah (2009) involved the relationship between locus of control and financial behaviour. Nonetheless, not many studies have conducted those correlations in this context. For this reason, locus of control is proposed as the input variable in this study. Internal locus of control would lead to a better financial management, which then influences individuals' financial well-being.

Sumarwan and Hira's (1993) study revealed locus of control as significantly associated with financial well-being, whereby perceived locus of control was the second highest predictor of financial satisfaction. Results disclosed that individuals who possessed an internal locus of control as more satisfied with their situation. Hoffman et al. (2000) stated that internal locus of control reflects an individual belief regarding their behaviour, which will produce an expected outcome due to the sense of responsibility of what is happening.

Most importantly, Garman et al. (1996) believe that stress, which acts as the demand in the model, has an association with personal financial problems that will unveil poor financial behaviour. As for Delafrooz and Paim (2011a), they manifested that higher

level financial stress would significantly lower financial wellness. Respective to the locus of control, financial stress was also found to have an association with financial behaviour and financial well-being. Hence, locus of control and financial stress have correlations with financial behaviour and financial well-being.

Additionally, work environment that acts as demand in this study has been included in the organizational behaviour field. Stern (1970) classified work environment as a demand or a feature characteristic perceived by the participants. Therefore, this explains that individual's responses to activities associated with a particular personal need orientation such as adaptability and achievement. Moos and Billings (1991) indicate that a work environment perception is an important determinant of ones' work environment-related behaviour. The effects of work environment were commonly studied on job satisfaction (Lai et al., 2013) and job performance (Lim et al., 2012). Furthermore, Cooper and Cartwright (1994), and Kompier (2005) mentioned that there is a positive impact of work environment employees' well-being or health.

In Rath and Harter's (2010b) report regarding well-being, financial well-being is among the five essential elements of well-being. As Cooper and Cartwright (1994), and Kompier (2005) found that work environment has had a positive effect on well-being, thus work environment is suggested to have a positive effect on financial well-being. So far, no study divulges the association between work environment

and financial matter, particularly financial behaviour and financial well-being. As a result, work environment is proposed as an input variable in this study.

Locus of control acts as the resource in this study which relates with financial stress and work environment that represents demand under the input element. The interaction between resource and demand exerts an influence on the plan's implementation which is called throughput. A study by Wang, Bowling, and Eschleman (2010) found that locus of control produced stronger relationships with work-related criteria. Similarly, the study by Karimi and Alipour (2011) showed that locus of control was significantly related to job stress. Additionally, locus of control was found by Hayes (2006) to have an association with financial stress.

Joo and Grable (2004) have proven that financial knowledge has a significant effect on financial well-being. Robb and Woodyard (2011) also have a similar findings, whereby they disclosed that financial knowledge and financial well-being has an association with each other through the National Financial Capability Study managed by Financial Industry Regulatory Authority (FINRA). In addition, Falahati et al. (2012) and Sabri and Falahati (2003) were also interested in predicting financial well-being among college students and employees, respectively. Even with different respondents and contexts, financial knowledge showed to have an important role on one's financial well-being. Therefore, the interaction between resource and demand

formulates a behaviour plan as an adaptation or coping behaviour towards the perceived crisis or stress situation which is called throughput.

Financial behaviour or throughput acts as adaptation behaviour. It also has the decision-making process to achieve an outcome, which is known as financial well-being. According to the formulated plan, financial behaviour is executed based on the interaction between resources and demands in order to adapt accordingly to the perceived stress or crisis. Adaptation behaviour and decision-making process are performed to achieve financial well-being as an output. The output is the core focus of the resource management model that reflects the desired goals.

In conclusion, financial stress, work environment and locus of control are the inputs in this study. All these inputs being processed in the throughput via financial behaviour to achieve an outcome or goal (output) called financial well-being.

METHODS

This study employed the approach of quantitative analytic. The quantitative data produced by the techniques established from the quantitative method (Neuman, 2007). A multi-staged random sampling technique was used to select the sample in the Federal Territory of Putrajaya. The first stage of the cluster random sampling technique is as follows: (i) ascertaining and determining the total of public employees in Putrajaya, and (ii) deciding the desired number of ministries in Putrajaya. In the second stage,

random selection of 125 public employees from selected ministries in the Ministry of Human Resource, Ministry of Domestic Trade, Co-Operatives and Consumerism, Ministry of Education and Ministry of Youth and Sport, respectively (subtotal of 500 employees). An officer was appointed by the human resource department to be in-charge of distributing the questionnaires to the respondents. Then, the respondents were directed to a Web-based survey to answer the questionnaire.

The purpose of using Internet-based survey (Web-based survey) in this study is that data can be organised and collected in an effective way. In line with the increasingly recent widespread use of the Internet to carry out social surveys, social researchers also are among the ones who take full advantage of it. In this regard, recent works by Viscusi, Huber, and Bell (2008), and Bech, Kjaer, and Lauridsen (2011) used the web-based surveys techniques in their studies for the reason that the Internet-based research method is more cost-effective in terms of money and time (Bryman, 2012).

According to Cobanoglu, Warde, and Moreo (2001), Web survey has a wider embellishment variety in term of appearance such as colour, response style, formatting and so on. McCabe (2004) stated that both The Web and paper-based questionnaire findings are similar. Later in 2006, Denscombe confirmed McCabe's study which found that the administration modes made little significant different towards the findings.

The population of this study comprised of employees who are working in the public

sector administrative. Due to the desirability to study individuals' well-being, this study emphasised on the public employees' financial well-being. Since financial behaviour may differ across individuals, there was a need to investigate the financial behaviour of public employees. The public sector has the third biggest Initial Public Offering (IPO) in the world due to the Urban Transformation Centres (UTCs) and Rural Transformation Centres (RTC), which affects government innovativeness and responsiveness. Hence, public employees are said to be more affected by the impacts of government evolutions as compared to employees of the private sector.

Besides that, public employees are essential human resources to the government, particularly the nation, to ensure that domestic and global challenges meet the public or society (rakyat) demands to be competent as a world-class service. Public employees are also involved both directly (primary) and indirectly (secondary) in the growth activities of the Malaysian economy and national development. Based on the OECD (2011) standards, Malaysia possesses the highest total population of public employees in the world. Apropos to that, public employees are required to be more responsible for their general well-being, particularly in finances. Therefore, to meet the intention of the researcher to survey those respondents, public employees were considered appropriate for this study.

The sample size was determined using the formula by Dillman (2007) (Equation 3.1), whereby it takes into consideration

sampling error, target population size and variation responses, and the desired sample size was employed in the current study. A 50/50 split precision level was used in this study, whereby it was assumed that the population was totally segregated in their responses. It consists of 50% believe that population answers favourably and another 50% vice versa. Also, 95% confidence level and $\pm 5\%$ sampling error from the sample population is the most desirable approximation to be attained in this study.

$$N_s = \frac{(N_p)(p)(1-p)}{(N_p - 1)(B/C)^2 + (p)(1-p)}$$

Equation 3.1. Formula for Estimating Desired Sample Size

Source. Dillman, 2007

Where:

N_s = completed sample size needed (notation often used is n)

N_p = size of population (notation often used is N)

p = proportion expected to answer a certain way (50% or 0.5)

B = acceptable level of sampling error (0.05 = $\pm 5\%$; 0.03 = $\pm 3\%$)

C = Z statistic associate with confidence interval (1.645 = 90% confidence level; 1.960 = 95% confidence interval; 2.576 = 99% confidence interval)

In this study, a 50/50 split in the population that comprised of 81,862 registered public employees in Putrajaya (Human Resource

Management Information System (HRMIS), 2013), a sample size of 382 was required to reach 95% confidence that the sample estimation is within $\pm 5\%$ of the true population value. Therefore, the formula application is shown as in Equation 3.2 below:

$$N_s = \frac{(81,862)(0.5)(1 - 0.5)}{(81,862 - 1)(0.05 / 1.96)^2 + (0.5)(1 - 0.5)}$$

= **382 samples required**

Equation 3.2. Application of Formula by Dillman (2007) in the Study

A total of 500 employees were selected as the respondents. Out of the 500 questionnaires, 316 were responded to by the respondents. However, out of 316 only 203 respondents have successfully completed the questionnaires. Therefore, the total return rate of this study was 52.7%, which is considered as good (Babbie, 2003).

INSTRUMENT AND MEASUREMENT

Financial Well-Being

Financial well-being in this study is defined as one's satisfaction towards their financial situation. Financial well-being was measured by using an instrument developed by Garman and Jariah in 2006, based on the Malaysian context which was originally from Prawitz et al. (2006) known as InCharge Financial Distress/Financial Well-Being (IFDFW) Scale consist of 12 items. These measurement items were responded on a 10-point scale. The Cronbach alpha for IFDFW in the original study was 0.96. In

particular, Jariah (2007) acknowledged this instrument's validity in a Malaysian context with a coefficient alpha of 0.93.

Financial Stress

Financial stress in this study is defined as the self-perception about one's financial stress. Financial stress was measured by an adaptation of seven items of Aldana and Liljenquist (1998). This measurement was established by Aldana and Liljenquist to evaluate those who might have faced financial stress. Apart from the evaluation from the financial professional, this measurement was developed through literature and also control groups, as well as counselling. The initial Cronbach's alpha was 0.79, as stated by Aldana and Liljenquist (1998). In the current study, Cronbach alpha for financial stress was 0.86.

Work Environment

The work environment is classified as a set in place that has significant negative and positive influences on employee's engagement, morale and productivity (Chandrasekar, 2011). That is to say, the respondents consider their financial well-being as an outcome of their workplace environment that may affect various aspects such as commitment, self-esteem, and efficiency. The measurement of Faisal (2010) was used to measure this construct with 14 items. This scale consists of three-dimensional to assess rewards and promotions, facility and safety, as well as interrelationship (Faisal, 2010). Rewards

and promotions have three items, while facility and safety have four items, and interrelationship has seven items. The scale was adapted to accordingly reflect the local work context. Cronbach alpha for this construct indicated the value of 0.81 (Faisal, 2010). In this study, the Cronbach alpha of work environment was 0.91.

Locus of Control

Ng, Sorensen, and Eby (2006) defined locus of control as the extent to which people believe they are in control of their destiny. In other words, respondents reflect their financial well-being as the outcome of their actions or massively affected by the situation naturally, influences from others or because of the chance determinants. Locus of control, measured by eight items from Sumarwan and Hira (1993), was adapted from Rotter's Locus of Control (Rotter's I-E Scale). Sumarwan and Hira (1993) altered it to suit the financial context such as 'When I make plans, I am almost certain that I can make them work' and 'Many times I feel that I have little influence over the things that happen to me'. These statements of locus of control were used to identify the locus of control's appraisal via respondents' agreement or disagreement with the statements. Sumarwan and Hira (1993) found that the Cronbach alpha acquired for this scale was 0.75. As for this study, the Cronbach alpha was 0.63. According to Nunnally and Bernstein (1994), data with value that is at least bigger than 0.5 of Cronbach alpha is acceptable in practical application.

Financial Behaviour

Financial behaviour reflects the habits of how individual manage their finance. There are 32 items which were adapted from Hilgert and Hogarth (2003), Hogarth and Anguelov (2004), Kapoor, Dlabay, and Hughes (2001), O'Neill (2002), Xiao, Sorhaindo, and Garman (2004). Each item was rated on a five-point scale ranging from '1 = never' to '5 = very often', which comprised of cash management, credit management, financial planning, risk management, as well as investment and savings. The internal consistency reliability ties were between 0.81 and 0.92. In this study, the Cronbach alpha for financial behaviour was 0.94.

Financial Knowledge

Financial knowledge of the respondents was evaluated through the correct answers of 34 questions established by Sabri, Masud and Paim (2006), according to the Malaysian context that focuses on general knowledge, credit card, investment and saving, debt and loan, which are represented in the form of True or False scale. The Cronbach alpha for financial knowledge was 0.80.

DATA ANALYSIS

Statistical Package for Social Science (SPSS) version 21 was used to analyse the data. Descriptive and multiple regression analyses were conducted in this study. Descriptive analysis was conducted to provide socio-economic characteristics of the respondents. In order to determine factors that contribute to the financial well-

being of employees, multiple regression analysis was used. Parallel with the concern over the variance size in this study, enter method was utilised to fit the purpose (Pallant, 2013). Exploratory Data Analysis (EDA) designated all assumptions for the multiple regression analysis (i.e., normality, linearity, independence, multicollinearity, outliers and homoscedasticity).

RESULTS AND DISCUSSIONS

Characteristics of the Respondents

Respondents' characteristics show that 53.2% of them are female. Higher percentage of the respondents (39.4%) was found to age between 33-39 years old and most of the respondents were married (85.2%). In term of level of education, slightly more than three quarter (77.8%) possessed a tertiary education level. Meanwhile, half of the respondents (50.2%) earned more than RM3500 as their monthly income which was reflected in the highest percentage scoring in the asset value more than the outstanding debt, at 58.1%.

Similar to human life-cycle, financial status too has several stages. In the early stage of earning, i.e. at 20s to 30s years old, post-college era or right after graduation, people undergo a process of learning in adapting personal finance such as budgeting and cash-flow, while paying for their education loan at the same time. As they enter the age of 30s and 40s, they encounter greater financial commitments which demand them to apply for several loans such as personal and housing loans. As

they reached 40s and 50s, the 'empty nest' will happen, which lessens the financial dependency of their children because they have fully grown up and started to explore the world independently. Thus, they start to build up their assets instead of debts. As for those in their 50s, they are preparing to settle down through a retirement planning. On the contrary, respondents' income adequacy is only enough for basic needs, at 39.4%. All this information is summarised in Table 1.

Table 1
Respondents' Characteristics

Demographic Characteristics	Frequency	Percentage (%)
Gender		
Female	108	53.2
Male	95	46.8
Age (years old)		
Less than 32	68	33.5
33 - 39	80	39.4
More than 40	55	27.1
Marital Status		
Single	27	13.3
Married	173	85.2
Others	3	1.5
Education Level		
Secondary	45	22.2
Tertiary	158	77.8
Income (RM)		
Less than 1500	17	8.4
1500 - 3500	84	41.4
More than 3500	102	50.2
Financial Status		
Asset value less than outstanding debt	40	19.7
Asset value equal to outstanding debt	45	22.2
Asset value more than outstanding debt	118	58.1

Pearson Correlation Analysis

Pearson Correlation analysis was performed first in order to fulfil the assumptions of multiple regressions beforehand. Table 2 shows the correlations between locus of control, work environment, financial stress, financial knowledge and financial behaviour towards financial well-being.

The findings show a significant correlation between financial stress and financial well-being ($r = -.628^{**}$, $p = .000$), indicating that the lower the financial stress of an individual, the higher the level of financial well-being. Apopos to Falahati et al.'s (2012) study, they found that employees' financial stress has a significant negative impact on their perceived financial well-being. The result is in line with the previous studies by Delafrooz and Paim (2013) and Joo and Grable (2004). Moreover, this is also consistent with Delafrooz et al. (2010) who exclaimed that financial stress is among the essential factor in influencing financial well-being.

Besides that, there is a significant relationship between financial behaviour and financial well-being ($r = .430^{**}$, $p = .000$). Higher level of financial well-being is affected by good practices in one's financial management. The finding is consistent with past studies by Delafrooz and Paim (2011) and Zaimah (2011). These studies stated that financial behaviour as the prominent determinant of financial well-being. Xiao et al. (2009) mentioned that individuals with better financial behaviour would experience a higher financial well-being.

Furthermore, locus of control was found to be correlated with financial well-being as well ($r = .264^{**}$, $p = .000$). Studies by Zurlo (2009) and Sumarwan and Hira (1993) support the finding of this study, which found that locus of control is significantly associated with financial well-being. In fact, they indicated that locus of control is one of the financial well-being predictor.

For future consideration, work environment and financial well-being remarkably exert influence on each other ($r = .301^{**}$, $p = .000$). Despite work environment variable that is normally incorporated in the organisational behaviour field, researchers such as Buffet et al. (2013) and Kompier (2005) discovered a positive work environment impact on individual's well-being. Hence, the results of this study show that work environment characteristics are perceived by individuals as associated with financial well-being.

On the contrary, there is no significant relationship between financial knowledge and financial well-being ($r = .015$, $p = .831$). Surprisingly, this result contradicted with that in the previous studies which displayed financial knowledge and financial well-being positively correlated with each other (Joo & Grable, 2004; Robb & Woodyard, 2011). Perhaps, even with financial knowledge, employees feel that it does not necessarily contribute to their financial well-being. All the information regarding the significant relationship and their strength is summarised in Table 2 below.

Table 2
Pearson Correlation Analysis

Variables	Financial Well-Being	
	<i>p</i>	<i>r</i>
Financial Stress	.000	-.628**
Financial Knowledge	.831	.015
Financial Behaviour	.000	.430**
Locus of Control	.000	.264**
Work Environment	.000	.301**

Note: ** $p \leq .01$

Multiple Regression Analysis

Based on the Pearson Correlations results, all the variables would be included in the multiple regression analysis to determine the factors that contributed towards financial well-being except financial knowledge due to the insignificant relationship with financial well-being.

As shown in Table 3, the multiple coefficient ($R = .701$) is a Pearson Correlation Coefficient between the independent variables (locus of control, financial behaviour, work environment and financial stress) and the actual score of the dependent variable (financial well-being). In this situation, there are positive and negative relationships between the independent variables and dependent variable. The multiple correlation square ($R^2 = .504$) stands for the variance degree explained by the independent variables. The adjusted results symbolise 49% variation of financial well-being accounted for all the independent variables (locus of control, financial behaviour, work environment and financial stress). The ANOVA test investigates the

degree to which of the independent variables and dependent variable relationships is parallel. On that account, results show that there is a significant relationship between both independent variables and dependent variable (financial well-being) with $F = 50.101$, $p < .01$. Financial behaviour ($\beta = .285$, $p < .01$) and work environment ($\beta = .144$, $p < .01$) have a positive relationship with financial well-being, whereas financial stress has a negative relationship with financial well-being ($\beta = -.527$, $p < .01$).

Table 3
Multiple Regression Analysis for financial well-being

Variables	Beta	Sig.
Financial Stress	-.527	.000
Financial Behaviour	.285	.000
Locus of Control	.029	.589
Work Environment	.144	.006

Note: $R^2 = .504$; Adjusted $R^2 = .494$; $F = 50.101$

Previously, work environment has been associated with organisational behaviour context. Therefore, this study highlights the research gap which implemented work environment in the personal financial context. Based on the result, a positive working environment was found to have an effect on individuals' financial well-being.

CONCLUSION

This study was conducted to determine the factors affecting the financial well-being of public employees in Putrajaya, Malaysia. The population for this study was 203

of public employees who were chosen through the multi-stage sampling technique. The factors that had been explored were financial knowledge, financial stress, work environment, locus of control and financial behaviour. The study formed significant associations between financial stress, locus of control, work environment and financial behaviour on financial well-being. Financial stress, work environment and financial behaviour were the factors that contribute to the employees' level of financial well-being. It can be concluded that lower financial stress, positive working environment and good financial behaviour will enhance employee's financial well-being.

RECOMMENDATIONS

For consideration of future consequence, the results indicated that there is a significant relationship between work environment and financial well-being, and there is also no significant relationship with financial well-being. There is little evidence to show how locus of control is linked with financial well-being and there is none for work environment. Besides, this study employed a self-administered cross-sectional survey among public employees in the Federal Territory of Putrajaya only. Thus, there is a need to expand the research framework to more states and federal territory or private sector to investigate whether the current findings can generalise to different working groups and industrial climates.

IMPLICATIONS

The findings of this study could restore several implications to the research outcome of financial well-being. Personal finance researchers could incorporate the related personal financial domain (i.e., locus of control and financial management) into their inventories of personal finance studies. Since perception of a person can influence his/her information processing, individuals should get used to taking part in more thinking while managing their finance. The personal financial domain related, which focuses on the locus of control and financial management, has to be magnified in personal finance studies. In fact, self-control could be perceived as an essential trait that is capable of describing individual differences (Goldberg, 1993). In a way, this could serve as an educational basis in general. To be competent individuals that possess rational management perspective and satisfaction maximisation consideration, manageable self-control and financial behaviour should be enhanced. Hence, individuals should reflect carefully on their financial planning and goals to achieve satisfaction.

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Bodies Tell Stories: Freudian Hysteria in Fay Weldon's *The Life and Loves of a She-Devil*

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ABSTRACT

Fay Weldon's *The Life and Loves of a She-Devil* deals with the nature of the hysteric psychological state women in abusive relationships or situations may suffer from and how they may react in either passively relenting to these conditions or taking control of their lives to achieve change. Thus, the question is raised as to whether the hysteric condition may be used as a means to an end. Women's Freudian hysterical symptoms are often physically manifested by anorexia nervosa, loss of speech (muteness), disturbed sleep, and alienation, among other maladies which may be subsumed under the category of symptoms of Freudian hysteria. Such symptoms, according to Freud, appear as the consequences of sexual violations a subject may have encountered, resulting in the manifestation of psychological disturbances characteristic of hysteria. This paper aims to investigate Fay Weldon's *The Life and Loves of a She-Devil* from Freud's theoretical perspectives on hysteria in order to indicate the influences of hysteria and its symptoms and reactions, focusing on the actions taken by the heroine of the novel under discussion to actualise herself.

Keywords: Fay Weldon, Freud, hysteria, subjectivity, *The Life and Loves of a She-Devil*

INTRODUCTION

Fay Weldon's oeuvre is pregnant with references to psychological disturbances, among which are the novels of the *She-Devil* and *Praxis*, which are prominent perhaps because of her being a student of psychology and suffering from such disturbances herself in some periods of her life. Leading a lonely life after she got married and had her first

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baby caused Weldon many troubles, which made her life difficult and led her to divorce that made her life hellish and beset with psychological tension. While Weldon's career was being established, psychological concepts and references became a common discourse employed by her contemporaries. Her career and oeuvre "twine interestingly with psychology" (Blymiller, 2007, p. 16) because she studied psychology at St. Andrews and went through Freudian psychoanalysis.

Hysterical symptoms reflected in Weldon's fiction find their roots in her own person. She suffered from eating disorders, which were addressed as bingeing in her first novel, *The Fat Woman's Joke* (1967), which clearly reflects such hysterical symptoms. Weldon's matrimonial life is somehow intricate for the numerous (three) marriages she had since her earlier one in the early 1950s till her last one in 1994. Her first marriage was not successful, leaving her with her son Nicholas. Her hard life used to be considered, by her, as the source of her writings and ideas. She crawled under poverty, hard work, and missing protection. During the 1960s, Weldon started experiencing psychological problems and disturbances that reached the level of depression due to the difficult life she had, and this is what can be traced in her fiction (Weldon, 2003, p. 61).

The question of eating disorders, anorexia nervosa and bulimia (Freudian indicated symptoms) are again confirmed in her *The Life and Loves of a She-Devil* (1983). Barrecca confirms that Weldon's

"fiction and nonfiction alike are filled with images of transgression, subversion, heresy, and hysteria" (1994, p. 4). Women have endured a lot of suffering, and it may be concluded in this regard that "the intellectual system under patriarchy deliberately neglected and buried the female intellectuality and consciousness, and the only means to regain such intellectuality is to change the way of thinking itself" (Hassan & Talif, 2014, p. 69) by following new modes in order to actualise the self and construct identity. Women, for their being subjected to violence, servitude of males and controlled in patriarchal societies, would look for means to gain their voice, liberate themselves and assert their identities as human beings with voices and desires and equivalent to the males. Thus, for her being "the embodiment of psychologically tormented women" Ruth "will attack all kinds of patriarchal institutions" (Caliskan, 2016, p. 451).

Weldon proved to be dedicated to women and their issues since her first novel *The Fat Woman's Joke* (1967). She has been preoccupied with subjects related to "women their condition and their lot" (1979, p. 15), which is why she is described by Hill as "an expert chronicler of the minutiae of women's lives, good at putting their case and pleading their cause" (1979, p. 16). Thus, women's psychological issues are well represented in her fiction, among which is hysteria. These elements of hysterical representations attached to female characters in Weldon's oeuvre are attributed through the many afflictions they

experience and women's attempts to thwart these afflictions through abjection. Krouse (1978) contends that Weldon's oeuvre explores women's lives on many levels, i.e. from childhood to motherhood. She notes that "her major subject is the experience of women: sexual initiation, marriage, infidelity, divorce, contraception, abortion, motherhood, housework and thwarted career", all of which receive Weldon's attention and concern (p. 5). Weldon, in most of her fiction, portrays women delusively depending on men, which leads them to be hidden in the shade of the men they depend on. Some characters fall victim to the misconception that life without a man is impossible. Conversely, these characters, according to Weldon's representations, symbolically denote that such conceptions are only self-destructive.

Weldon's representations of psychological disorders and their physical manifestations may be attributed to her own experiences. Having "suffered from an eating disorder herself [a hysterical symptom], she addresses bingeing in *The Fat Woman's Joke* (1967), thus capturing a previously hidden life and openly questioning ideology—in this case, thinness as privileged" (Blymiller, 2007, p. 19). Thus, she reflects what she herself went through in some of her novels.

Exploring the psychological conflict of the characters highlights the suffering of women in Weldon's oeuvre. This conflict, which results in many psychological disturbances including hysteria, is portrayed in her early fiction and started specifically with *The Fat Woman's Joke*

(1967), which explores hysterical symptoms of her characters. The hidden hysteric representation of certain symptoms continues with Weldon's novels including her next novels *Praxis* (1974), *The Life and Loves of a She-Devil (She-Devil)* (1983), *The Cloning of Joana May* (1989) and *Affliction* (1994). *She-Devil* has not been explored from the Freudian perspective of hysteria, which is why this merits exploration as the subject of this paper.

FREUD'S VIEW OF HYSTERIA

Symptoms of hysteria, as Freud theorised, are brought about by "psychical traumas" and consequently, "any experience which calls up distressing effects such as those of fright, anxiety, shame or physical pain may operate as a trauma of this kind" (Breuer & Freud, 1957, p. 6). According to Freud,

[...] the causal relation between the determining psychical trauma and the hysterical phenomenon is not of a kind implying that the trauma merely acts like an agent provocateur in releasing the symptom, which thereafter leads an independent existence. We must presume rather that the psychical trauma or more precisely the memory of the trauma acts like a foreign body which long after its entry must continue to be regarded as an agent that is still at work; and we find the evidence for this in a highly remarkable phenomenon which at the same time lends an

important practical interest to our findings. (1957, p. 6)

Freud, in *Studies on Hysteria* (1957), claims that hysteria is a consequence of sexual trauma and demonstrated that through the many cases he encountered, wherein hysterical symptoms were provoked consequential to sexual experiences, molestation, or incest, subsequently resulting in repression of desires.

Freud's theory relates the emergence of reminiscences (memories) about some forms of sexual harassment with mental trauma, or as he said, "hysterics suffer mainly from reminiscences" (1957, p. 7). These experiences are repressed, but appear later in the guise of hysterical symptoms. According to Freud, these symptoms appear in response to certain triggers that seemingly unleash hysteria. This form of repression is concerned with sexual matters, as Freud confirmed through the cases he treated.

Fright hysteria, according to Freud, has some hidden connections with the sexual factor. He contends that "[a]longside sexual hysteria we must at this point recall hysteria due to the fright – traumatic hysteria proper – which constitutes one of the best known and recognized forms of hysteria" (1957, p. 247). Freud highlights fright hysteria because this element is pivotal in pushing women to be hysteric especially in certain patriarchal societies. Women's being in frightening situations because of expected rape, molestation and/or physical violence lead them to develop hysteric symptoms. Such kinds of symptoms are manifested in

anaesthesia, neuralgia, vomiting, paralyses, anorexia, bulimia, hallucinations, alienation, loss of speech, fear, disturbed sleep and many others.

Explaining its origin and how it evolves, Freud avers that hysteria starts with the overwhelming of the ego. The rising tension at the primary experience of pleasure is great to an extent that the ego does not resist it and forms no psychical symptom but is obliged to allow a manifestation of discharge, frequently an excessive repression of excitation (Freud & Gay, 1989, p. 96).

DISCUSSION: FREUDIAN HYSTERIA IN *SHE-DEVIL*

The Life and Loves of a She-Devil (*She-Devil*) centres around the character of Ruth, the heroine of the novel who suffers from Freudian theorised hysteria. Ruth, the narrator of the story, left her house while she was still a teenager because of the unwelcomed intrusion of her step-father. Her mother ran away with her lover, leaving Ruth to live in a hostel run by nuns. Ruth happens to be working under Agnus (her future father in-law). She impresses upon Brenda, Angus' wife, that she was invited to live with them in their house. Ruth's predicament is worsened with her first experience of sexual intercourse when she was raped by Bobbo. As she lives in Angus' care while their son Bobbo is studying away from home, Ruth finds refuge in Bobbo's room, as suggested by Brenda. When Bobbo comes for a visit, he sneaks into Ruth's room in order to satisfy his sexual desires with the innocent Ruth. This first experience

of sexual intercourse, followed by other recurrent ones, puts her in an unenviable situation and causes her grave psychological disturbance. This leads to their subsequent marriage, as urged by Angus and Brenda, through which Ruth's traumatised body begins reacting through the symptoms that emanate from her.

Weldon's Ruth goes through submission, rebellion, degeneration, promiscuity, transformation and awakening, and in the end, she achieves her rebirth (Chen, 2014, p. 240). All these stages of development were accompanied by hysterical symptoms that led her through the aforementioned developmental stages. At the very beginning of the story, Ruth's persona is described in a grotesque manner, as an unfit woman in her society, which worsened her situation. She describes herself as follows:

I'm a six feet two inches tall. Which is fine for a man but not for a woman. I am dark as Mary Fisher is fair, and have one of those jutting jaws that tall, dark women often have, and eyes sunk rather far back into my face, and a hooked nose. My shoulders are broad and boney and my hips broad and fleshy, and my looks do not agree. I was unlucky, you might think, in the great lottery that is woman's life. (Weldon, 1985, p. 5)

Ruth's appearance is the focus of much of the abuse inflicted upon her. This abuse has its roots in her childhood when she heard

negative comments from her mother about the way she looked. These words are stored in her mind as trauma, which emanates from her later in a Freudian process of hysterical conversion. She confirms this in her statement, "my mother was ashamed of me. I could see it in her eyes" (Weldon, 1985, p. 8). Ruth's mother once said, "little ugly duckling [...] almost weeping, smoothing my wiry hair" (Weldon, 1985, p. 8). She is not even loved by her mother because "ugly and discordant things revolted her" (Weldon, 1985, p. 8). Thus, Ruth's suffering is not recent in the context of the narrative, but it originates from childhood suffering that she could not control. These feelings correspond with the Freudian perspective that considers hysterical symptoms as "physical traumas" and "any experience which calls up distressing effects such as those of fright, anxiety, shame, or physical pain" (Breuer & Freud, 1957, p. 26). These symptoms of shame, fright, anxiety and physical pain are represented in Ruth's body, especially after the appearance of Mary Fisher, her husband's mistress.

Bobbo, Ruth's careless husband, feels himself pushed in this marriage, and being a womaniser, he declares that they should have an open marriage so he can choose his mistresses and spend time away from their home. He says "we'll have an open marriage [...] that we must both live our lives to the full and always be honest with each other. Marriage must surround our lives, not circumvent them. We must see it as a starting point, not a finishing line" (Weldon, 1985, pp. 34-35).

In this way, the writer paves the way for the appearance of Mary Fisher, a “forty-three [old] and accustomed to love”, who never fails to have “a man around to love her” (Weldon, 1985, p. 1), who happens this time to be Bobbo. Mary Fisher becomes a source of torture for Ruth, being her antithesis, stealing her husband and leaving her in abject suffering. Bobbo never cares for his wife, basically because of the way she looks compared to his mistress, Mary, which is a further factor in the deterioration of Ruth’s psychological state. One of the hysterical symptoms Ruth suffers is the lack of sleep, particularly when her husband is near. She declares, “I don’t sleep much on the nights he is with me: I get out of bed, quietly, and go into his study and look through Mary Fisher’s life” (Weldon, 1985, p. 10). The hysterical situation inhabits her life by then to the extent that she could not even sleep because of her husband’s behaviour of negligence and his making Mary Fisher his priority, while leaving his wife in a dark corner.

Bobbo’s prioritisation of Mary over Ruth leads the latter into a state of disharmony not only with herself but also with her family and children. This is clearly evident when she starts crying and weeping while Bobbo’s parents are invited to their house. Fits of crying and desperation are by then common symptoms apparent in Ruth’s character and behaviour.

EATING DISORDERS (ANOREXIA AND BULIMIA)

Considering the eating disorders anorexia and bulimia as major hysterical symptoms based on Freud’s claims, Ruth can thus be easily identified as a hysterical figure. She suffers from excessive eating habits which clearly express her unsettled and disturbed psyche. Whenever she experiences new distress, she resorts to eating, and this explains her huge, grotesque body. Some psychiatrists now reject eating disorders as hysteric symptoms, but according to Freud, they are the true symptoms of hysteria because these symptoms reflect how the subject is troubled from within. Also, Grosz, a Freud critic, confirms that “there are distinct waves of particular forms of hysteria (some even call themselves fashions)” and “the most ‘popular’ forms of hysteria today are eating disorders, anorexia nervosa and bulimia in particular” (1994, p. 40). Grosz’s claims correspond closely with Freud’s, which in turn, confirm Ruth’s hysterical situation. When Bobbo, Ruth and Marry Fisher were all invited together, Bobbo drove Mary to her house, dropping off his wife at a distance from their house so that she was forced to walk home in the rain rather than being driven home. Ruth’s subsequent reaction to this is captured in the following passage:

Went home and thought about it,
lying awake at night, and of course

Bobbo did not come home, and in the morning, Ruth shouted at the children, and then told herself it was not fair to take her distress out on them, and got herself under control, and ate four toasted muffins with apricot jam when the house was quiet and she was alone. (Weldon, 1985, p. 37) (Emphasis added)

In such situations, she translates her hysteria into particular acts and behaviour that are expressive of her traumatised inner self through shouting at her children and excessive eating habits.

As discussed above, anorexia is a major hysterical symptom identified by Freud. Such symptoms do not spontaneously appear and are, for the most part, the psychological impetus for the subject's anorexia. In Ruth's case, she suffers from bulimia (bingeing), which is one of the hysterical symptoms which she could not control. She would carry a butter nut can with her as if it was Coleridgian opium, used to escape from any pressures she might encounter. Ruth suffers from anorexia in a unique manner, which does not involve decreased food intake. Her anorexia manifests itself in the form of plastic surgery she undergoes to make her body conform to the image she has created in her mind. Anorexia is abstaining from eating, whether intentionally or not, which results in the subject having an emaciated body. This targeted skinny body is achieved by Ruth through a more demanding metaphorically anorexic need for having her body butchered through many

surgeries. Although this is obviously self-destructive, Ruth perceives it as rebirth in the pursuit of achieving some of her goals.

The process of self-destruction is more direct since it is positioned in loathing the physical body and then has much in common with anorexia. In Caskey's definition of anorexia, what is important is "the literal-mindedness of anorexia to take 'the body' as a synonym for 'the self', particularly as it is reflected to the anorexic by the perceived wishes of other" (cited in Suleiman, 1986, p. 184). Anorexia, therefore, is a re-shaping cultivation of the body, and based on Caskey, it is not necessarily achieved through food diet. Thus, Ruth's anorexia can otherwise be considered so as manifesting itself through her elective plastic surgery in as far as it carries the same aim. It is then representative of the impulse to "escape the body entirely as a way of escaping this funnel of alien desires" (Suleiman, 1986, p. 184). One might question the relationship between hysteria and body construction through the plastic surgery Ruth has had. The whole process of rehabilitating the body is a method no less significant than the methods employed by hysteric women, especially as may be gathered from the French scene referred to in the early chapters of the novel. Women have been known to sometimes exhibit hysteria resulting in paralysis, convulsions and breathing troubles, which are the culmination of aspects of protest. The victimisation of her own body, Ruth has endured through many surgeries, reveals her protest and dissatisfaction with the way she lives and at the same time, shows

her obsession, as Dowling claims, with the inadequacies of her body, which is a neurosis carefully nurtured by men (1998, p. 74). However, this victimisation seems to be constructive for Ruth in managing to achieve her aims, as is discussed below.

HYSTERIA AND THE SOCIETY

The ghost of Mary Fisher is haunting her and setting her in a haphazard state. This is seen when she declares, “sometimes in the night I scream so loud I wake up the neighbours” (Weldon, 1985, p. 56), and in that during many of her bad times, she “wept and wailed and clung to her neighbours” (Weldon, 1985, p. 69). As Bobbo gets more attached to Mary Fisher, he decides that Ruth should take responsibility for their house, while he would move to Mary’s house. Their problems persist because of Bobbo’s disloyalty and indulgence of Mary’s life. Bobbo can no longer tolerate Ruth as his wife and begins to find pretexts to stay away from home. After going through many degrading moments, Ruth is addressed by Bobbo as follows:

You are a third-rate person. You are a bad mother, a worse wife, and dreadful cook. In fact, I don’t think you are a woman at all. I think that what you are is a she-devil. (Weldon, 1985, p. 47)

At this shocking moment, which plunges her into real hysteria, Ruth’s life has started to take a new turn. She thinks she can now do what she wants as far as there is no shame,

no guilt or drearily striving to be good. She said, “[A]nd I can take what I want. I am a she-devil” (Weldon, 1985, p. 48).

In consequence to her conversation with her husband and her new determination to change herself, Ruth sends her two children away from the house and sets it on fire. She takes some of her husband’s important papers and goes to fetch her children. This act of burning the house is a reaction against Bobbo’s mischievousness. His maltreatment, bad words and behaviour activated Ruth’s hysterical reactions. She then takes her children and leaves them with their father at Mary’s house and goes to lead her own life. Within the process of establishing her new life, Ruth goes through many stages of self-development and construction of her identity, aiming to destroy her rival Mary and take back her husband, but as she says, “on my own terms” (Weldon, 1985, p. 85).

Ruth’s hysteria is positive in certain aspects, which leads this discussion to the case of Anna O, one of Breuer’s, and later Freud’s, patients. Anna was suffering from hysteria but undergoing psychotherapy. She managed to become a successful figure with a high level of education. Her hysteria led her to construct her identity and become a subjective person in male-dominated culture. In much the same manner as Anna’s, Ruth assumed many roles and different names in order to exist. She started an employment agency for women and exacted revenge upon her husband by incriminating him for embezzlement for which he was sent to jail to serve an eight-year sentence through

entreating on judge Bishop and convincing him. Her new situation sets Mary Fisher in a state of hysteria, suffering from the absence of her lover. Weldon sets Mary and Lady Bishop, a character appearing later (discussed below), in hysteria to magnify the suffering of women and their hysterical symptoms. Mary, just the same as in Ruth's early suffering, enters a circle of torture. She "lies awake and alone at night, and weeps for lack of Bobbo" (Weldon, 1985, p. 155). Her hysterical symptoms become more prevalent as "she goes to her room and weeps" (Weldon, 1985, p. 229).

Mary's predicament is underscored by Weldon as she offers another aspect of hysteria in addition to the one represented by Ruth. She is portrayed as living in a high tower, wishing that she did not. "She doesn't want to live anywhere. In fact [...] she wants to be dead [...] she is] suicidal" (Weldon, 1985, p. 243). Her body obviously emanates the hysterical symptoms as she becomes thinner and begins to age. Her situation is worsened when she falls ill, leading to her death in the end. Weldon succinctly portrays Mary Fisher as:

Tired, tired. With success comes failure. Her body has noted her earlier despair, seized its opportunity returned to disorder, to misrule. The steady flowering pattern has lost its head, spun into disorder. (Weldon, 1985, p. 245)

After leading Mary to this state and her subsequent death, Ruth encounters Lady Bishop, the judge's wife. Ruth's intervention

in the judge's house is intended by Weldon to contextualise the hysteric situation of Lady Bishop. Because of the torture she receives from her husband, Lady Bishop obviously manifests visible bodily hysterical symptoms. Her husband tries to keep her as a properly functioning female, subjecting her to extreme sexual practices, which according to Freud, are responsible for triggering later hysterical symptoms:

[A]s long as he nipped her nipples with his teeth so that she cried out, her breasts would not disappear. As long as he could tug and twist her pubic hair, it would continue to grow. It was for her own good [...] He] was vigorous and sexually active, and Lady Bishop, as a wife, was at the mercy of the demands of her husband's profession. (Weldon, 1985, p. 164)

The pressures she endured set Lady Bishop in a state of suffering which could never be concealed. Consequential to all that she went through, "Lady Bishop would be too bruised and bleeding to come down to breakfast but would at least have the next three weeks to recover" (p. 165). She would sit "alone at night" and the memories of "bondage and whips" which she had not yet recovered from would set her in a state of psychological disturbance (Weldon, 1985, p. 168).

CONCLUSION

She-Devil offers a panorama of hysteria and hysterical symptoms which women often

suffer. Although the main focus of the novel and this paper is Ruth and her many roles, it was also important in the above discussion to touch on the situations of other characters suffering similarly to Ruth and how the effects of this suffering were manifested in the resulting action taken by the characters in dealing with such abuse.

An important variation on Freud's talking cure used as a cathartic technique employed in treating his patients may be seen in the action Ruth took in taking control of her life. Through this technique, the subject gets rid of whatever burdens her and cleanses the psyche of hysterical symptoms. Ruth reacted against the appropriation of her body and negligence she received from her husband through manifesting what she repressed through her body rather than through expressing this through speech. She managed to overcome her hysteria by assuming many roles and speaking through actions and behaviour as her words were not considered.

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A Randomised Controlled Trial to Examine the Effectiveness of Group Cognitive Behavioural Therapy for the Treatment of Unipolar Depression in Malaysia

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ABSTRACT

Malaysia has been experiencing a dearth in mental health resources. Group Cognitive Behavioural Therapy (GCBT) has been an established form of treatment for unipolar depression. The objectives of the current study were to examine the effectiveness of using GCBT for the treatment of depression in Malaysia. A total of 174 participants suffering from unipolar depression were recruited and randomly allocated to one of GCBT+Treatment as Usual (TAU), Relaxation training+TAU, or TAU only treatment groups. The participants were between 18-60 years of age. The participants in the GCBT+TAU group received eight Group CBT sessions of over a span of two months. The participants receiving Relaxation+TAU treatment received eight relaxation training sessions over a span of two months. The participants in the TAU only treatment group received treatment as usual from their psychiatrists. The BDI-M, ATQ-M, ATQP-M and DAS-M were administered

at pre-treatment, mid-treatment (week 4) and post-treatment. Repeated Measures MANOVA showed a significant interaction effect between treatment group and time for BDI-M, ATQ-M, ATQP-M and DAS-M. Results showed that GCBT+TAU was

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able to significantly reduce depressive symptoms, negative cognitions and beliefs. Moderate effect sizes for the BDI-M scores, as well as significantly reliable and clinical change, were also found. The current study was limited by geographical boundaries, where only hospitals in and around the greater Klang Valley area were sampled. Results from the current study suggest that GCBT is effective in reducing the symptoms of depression in a Malaysian setting.

Keywords: GCBT, RCT, depression, Malaysia, treatment, relaxation

INTRODUCTION

Depression is classified by the *Diagnostic and Statistical Manual of Mental Disorders* (4th ed., text rev.; DSM-IV-TR; American Psychiatric Association, 2000) as a mood disorder where one experiences periods of excessive sadness or significant loss in pleasure that lasts for two weeks or more. Unipolar depression is one of the most commonly diagnosed mood disorders in the world today, where up to 350 million individuals suffer from the disorder (World Health Organisation 2013). Malaysia is not spared from this problem (Mukhtar & Oei, 2011b), with the number of individuals suffering from depression continuing to increase. In the National Health and Morbidity Survey (NHMS) (2011) conducted by the Institute of Public Health (IPH), it was reported that that close to 2.3 million Malaysians are at risk of suffering from depression in their lifetimes. Among other, Kader and colleagues (2014) found

that in the state of Selangor, Malaysia, prevalence rates of depression were as high as 10.3%. If it is left unchecked, individuals suffering from prolonged depression may turn to suicide as a way to free themselves from the suffering (Malaysian Psychiatric Association, 2013). Thus, it is vital for depression to be seriously addressed as it brings severe consequences (Sinniah, Maniam, Oei, & Subramaniam, 2014).

To date, a variety of treatment methods have been made available in the management and treatment of unipolar depression. For example, pharmacotherapy treatments (e.g., Sadock, Sadock, & Ruiz, 2009) and psychotherapy (e.g., Kavanagh, Littlefield, Dooley, & O'Donovan, 2007) are some of the more widely studied and implemented treatment methods. Of the various forms of psychotherapy, Cognitive Behaviour Therapy remains one of the most widely studied (Beck, 1995) and widely implemented form of individual (Dobson, 1989) as well as group therapy (Dwyer, Olsen & Oei 2013; Oei, McAlinden, & Crwuys, 2014) for unipolar depression. The effectiveness of individual CBT has also been translated to a group setting (Bieling, McCabe, & Antony, 2013). Similar to individual CBT, Group CBT is effective in the treatment of depression (Oei & Dingle, 2008).

It is important to highlight the fact that the majority of these studies have been conducted on Western populations and cultures. Markus and Kitayama (1991) suggested that differences amongst cultures elicit a myriad of different constructs such as

one's perception of self, cognitions, emotions and their behaviours. They suggested that in Western cultures, individuals employ an independent construal, where they are individuals who interact with other individuals, maintaining a focus on themselves (Markus & Kitayama, 1991).

Alternatively, the authors postulated an interdependent construal that is often employed by Asian populations. In this regard, individuals view themselves as one part of a greater mechanism, such as the family or societal unit (Markus & Kitayama, 1991). Given these psychosocial differences, it is easy to see how one's cognitions would differ as a result, when considering cognitive constructs of the varying cultures (Markus & Kitayama, 2003).

Malaysia is a country rich with diverse cultures made up of Malay, Chinese, Indian ethnicities and a plethora of other indigenous and immigrant populations (Deva, 2004). Thus, it is vital that any treatment for depression be examined amongst a local populace to ensure that it can be an effective treatment form for use amongst a local populace.

Treatment of Depression in Malaysia

Mukhtar and Oei (2011b) conducted a wide-scale review of available treatment methods for unipolar depression in Malaysia. Their review looked at a total of 18 published articles of studies and they reported that many of the locally produced studies were fragmented and often did not utilise effective study methods such as randomised controlled trials (RCTs). Instead, single

case studies were often used. Their findings raised the need for effective research to be conducted to verify the efficacy of therapeutic methods locally.

Similar to its Western counterparts, pharmacotherapy is one of the most widely used treatments for unipolar depression in Malaysia (Mukhtar & Oei, 2011b). The Malaysian Ministry of Health further supports its use by endorsing it as one of the key treatments for unipolar depression (*Clinical Practice Guidelines*, 2007). For example, Jaafar and colleagues (2007), as well as Azhar and colleagues (2007), also examined the effectiveness of pharmacotherapy interventions in the management of depression.

In Malaysia, the use of CBT as a frontline treatment for depression is slowly becoming more common. However, there is a dearth of studies that examined the effectiveness of CBT directly (Mukhtar & Oei, 2011b). In one study, Azhar and colleagues (2007) examined a total of 96 patients who were administered three medications commonly used in treating depression in conjunction with CBT. Their study showed that all groups showed significant reductions in depressive symptoms over time regardless of medication type. The authors suggested that perhaps the use of CBT had helped patients to deal with the core difficulties, in which working in tandem with pharmacotherapy, resulted in significant reductions in depressive symptoms. Consequently, treatment gains were maintained over a 6-month period (Azhar et al., 2007). Results from their

study showed that the combination effect of pharmacotherapy and psychotherapy was not only effective in managing the symptoms of depression, but also allowed for better relapse prevention of depressive symptoms.

The other study reported by Mukhtar and Oei (2011b) looked at the application of Group based CBT for the treatment of depression (Mukhtar & Oei, 2006). They found that CBT applied in a group setting was able to elicit significant improvements to depressive symptoms, which were significantly greater when compared to treatment as usual controls. Taken together, these studies would suggest that CBT plays an integral role in the treatment of depression in Malaysia.

Whilst pharmacotherapy and psychological treatments remain at the forefront of the management of mental health disorders, relaxation training has also been looked at as a viable alternative. To the extent of the author's knowledge, only one study has been done locally to examine the effects of relaxation on depression group (Isa, Moy, Razack, Zainuddin, & Zainal, 2013). In particular, the study by Isa and colleagues (2013) looked at a total of 78 patients suffering from prostate cancer who were suffering from depression, anxiety and stress using the Depression, Anxiety and Stress Scale (DASS-21). Progressive muscle relaxation was used as an intervention and results from their study showed that whilst there were significant reductions in patients' anxiety and stress, no significant improvements were found for

depression. However, it was interesting to note that depression scores did show general downward trend, suggesting that perhaps relaxation could offer some benefits (Isa et al., 2013).

Cognitive Behaviour Therapy

Beck (1994) postulated that the management of unipolar depression using CBT lies in changing cognitions. CBT theorises that our cognitions determine our moods and behaviours (Hope, Burns, Hayes, Herbert, & Warner, 2007). Thus, in the treatment of depression, therapy elicit significant reductions in negative automatic thoughts and dysfunctional beliefs to alleviate the symptoms of depression (Beck, 1995).

Dobson (1989) conducted a meta-analysis of 28 studies that looked at the use of CBT in managing depression. Their findings showed that individuals in CBT experienced a greater degree of change in depressive symptoms, compared to those in no-treatment control, pharmacotherapy or other psychotherapeutic treatments. This finding is supported by a meta-analysis done by Oei and Dingle (2008), who found that CBT administered within a group setting is an effective treatment for depression. They found that the treatment gains from Group CBT were significantly better than the no-treatment controls. In this regard, Oei and Dingle (2008) found that Group CBT used in conjunction with medication resulted in significant reductions in depression over medication alone.

However, a meta-analysis done by Roshanaei-Mohaddam and colleagues

(2011) suggested that CBT did not offer greater improvements over that of pharmacotherapy. They looked at a total of 21 studies on depression which compared pharmacotherapy interventions with CBT, and found only a small overall effect size of 0.05, which they suggested as offering no advantages to either treatment type (Roshanaei-Moghaddam et al., 2011). Given the contrasting results observed, it would be imperative to ensure that the application of CBT as a treatment for unipolar depression amongst a local population is properly examined to determine its effectiveness.

Group CBT in Malaysia

Mental health in Malaysia is still in its infancy and suffers from a substantial dearth in resources. Given the fact that the number of individuals suffering from depression is expected to increase (*National Health and Morbidity Survey*, 2011), it is vital that access to effective healthcare be available. Group CBT represents a solution to the limited resources available.

At this juncture, GCBT has only been researched in Malaysia once. As mentioned above, Mukhtar and colleagues (2011) studied 113 depressed Malay patients. They were randomly allocated an experimental group receiving GCBT with treatment as usual (TAU), but only group as a control. The participants in the GCBT+TAU group were subjected to a series of eight manual GCBT sessions, whilst those in the TAU group received usual treatment. Assessments on the participants depressive symptoms and cognitive changes were done at the onset

of treatment, midpoint, and at the end of the intervention. Results showed that both depressive symptoms and cognitions in the GCBT+TAU reduced faster compared to the TAU only treatment groups.

Cohesion and its Effect on Treatment Effectiveness

Group psychotherapy remains a unique adaptation of more traditional forms of individual psychotherapy in that the group brings with it additional elements to the therapeutic process. Yalom (1995) describes cohesion as a key component of group psychotherapy, where the connections between members are a central part of the therapeutic process.

In a review conducted by Burlingame, Fuhrman and Johnson (2001), group cohesion was found to be positively correlated with treatment outcome, where individuals who felt a stronger sense of belonging to one's group were more likely to experience better treatment outcomes, and vice versa. They examined 24 studies which looked at group cohesion and treatment outcomes, and found similar support for cohesion in both inpatient and outpatient treatments. Similarly, Burlingame and colleagues (2011) found that groups utilising cognitive behavioural therapy had fair correlations between cohesion and treatment outcomes, suggesting that cohesion does in fact play a role in group CBT. The authors also found that encouraging cohesion amongst members played a significant incremental role to the treatment outcomes that was superior to the studies which

did not actively encourage cohesion. The analysis by Burlingame and colleagues (2011) also showed that individuals who had reported increased levels of cohesion also experienced better symptom reduction.

Taken together, the studies lend strong support for the effectiveness of cohesion in augmenting therapeutic outcomes. However, contrary findings were observed in the study by Lorentzen, Sexton and Høglend (2004). They examined a total of 12 individuals with undefined affective disorders and were subjected to treatment intervention that de-emphasised the focus on therapist roles but encouraged relationships between group members. Results from the study suggested that intensity of cohesion did not correlate with treatment outcomes, where the contributions of cohesion were found to be insubstantial. However, they did find that higher cohesion rates were related to lower symptom manifestation.

It is interesting to note the contrary findings from cohesion studies, which suggest the need to properly examine the effects of cohesion, particularly amongst a local populace to determine its influence on treatment outcomes. Thus far, no studies have examined the effects of cohesion amongst Malaysians. Given the differences in culture when comparing across Asian, collectivistic cultures with Western, individualistic cultures (Markus & Kitayama, 2003), it is possible that cohesion could play a more substantial role in determining treatment effectiveness within a group therapeutic setting.

Objectives

The objectives in the current study are to examine the effectiveness of the GCBT+TAU treatment for unipolar depression and examine the cognitive changes that occur. This was done by examining across three treatment groups, namely the GCBT and Treatment as usual (GCBT+TAU) group, the Relaxation and Treatment as usual group (Relaxation+TAU) and finally the Treatment as usual only group (TAU Group).

In more specific, it was hypothesised that the GCBT+TAU treatment group would elicit greater and quicker reductions, as well as experience greater treatment effect for depressive symptoms over time compared to the Relaxation+TAU and TAU only treatment group. Next, it was hypothesised that the GCBT+TAU treatment group would experience the greatest amount of reliable and significantly clinical change. Finally, it was hypothesised that the GCBT+TAU treatment group would experience significant decreases in negative automatic thoughts and dysfunctional beliefs compared to no significant changes in the control groups.

The current study also examined the effects of cohesion. The current study aimed to offer some initial insights into cohesion by examining the changes that occurred during the course of GCBT interventions. The findings from the current study would be the first to examine these factors within a clinical setting in Malaysia.

In this regard, the current study expands on the currently available literature by utilising the Relaxation+TAU group as a

placebo control group. The use of a placebo group would allow us to examine if the effects of cohesion amongst group members directly contributed towards treatment outcome.

Taken together, the current study aims to provide a more expansive take on the application of Group Cognitive Behavioural Therapy within a Malaysian context. Whilst past studies have used GCBT, the current study looks to expand on the available findings by broadening the selection parameters for participants to be more representative of the Malaysian populace.

METHODS

Sample Size Calculation

An a priori analysis was conducted to determine the sample size required to obtain enough power to minimise the chances of a Type II error. The G*Power programme for the calculation of power (Mayr, Erdfelder, Buchner, & Franz, 2007) was used. A small effect size of 0.25 was selected as per Mukhtar and colleague's (2007) study of group CBT amongst Malaysians of Malay ethnicity, which found effect sizes amongst the treatment groups ranging from 0.09 to 0.93. A power level of 0.95 was selected. The current analysis showed that a total sample size of 159 was required to ensure that enough power was available to limit the chances of Type II error. For the purpose of the current assessment, an estimated 210 participants were selected to account for any potential losses through dropouts and fatigue.

Participants

A total of 210 participants were recruited for this study. A final number of 174 participants were selected for the study after dropouts in the preliminary stages and exclusions. Of this, 69.6% of them were female. The mean age was 39 ($SD= 11.51$), and ranged between 20 – 60 years. A total of 48.5% of the participants are Malays, followed by Chinese (35.1%), Indian (11.7%) and other indigenous ethnicities (3.5%). This composition of the participants was reflective of the Malaysian populace as a whole, which comprises of 50.1% Malays, Chinese (22.6%) and Indians (6.7%), whilst the remaining population was made up of various indigenous and non-citizens. Of the number, 1.2% did not indicate their ethnicities. Amongst the participants, 37.4% received primary school education, 43.9% received at least secondary school education, and 14.6% of the participants received at least a college level education or higher, whilst 4.1% did not respond to this item.

The inclusion criteria for the current study were that the participants must have been diagnosed with major depressive disorder in the past two weeks by a psychiatrist, are between the ages of 18 to 60 years, currently receiving pharmacotherapy treatment, able to understand Bahasa Malaysia and have no co-morbid diagnosis of major psychiatric (e.g., schizophrenia, bipolar disorder) or medical disorders (e.g., cancer, HIV).

Referrals for the current study were made by the psychiatrists from various

hospitals. The participants referred were existing patients of the hospital and have been receiving pharmacological treatment for unipolar depression. Diagnoses made were based primarily on clinical interviews from the psychiatrists based on the DSM-IV-TR (DSM-IV-TR, 2000). Medications used included Remeron, Seroquel, Stilnox, Luvox, Lorazepam, Clonazepam, Escitalopram, and Fluvoxamine. The referred patients were then screened again for depression with the Mini International Neuropsychiatric Interview (Mukhtar et al., 2012).

Measures

Beck Depression Inventory-Malay (Mukhtar & Oei, 2008). The Beck Depression Inventory-Malay (BDI-M) contains 20 items in Bahasa Malaysia (BM) (the national language of Malaysia), which was translated from the original Beck Depression Inventory (Beck, Ward, Mendelson, Mock, & Erbaugh, 1961). Respondents rated the frequency of the symptoms experienced in the past two weeks. The BDI-M has good internal reliability (Cronbach's $\alpha = 0.91$), good concurrent ($r = 0.61$) and good discriminant validity (Mukhtar & Oei, 2008). The BDI-M was scored on a 4-point rating scale on the severity of depressive symptoms experienced in the past week, where higher scores are indicative of more depressive symptoms. An example of the items on the list is "*Saya rasa bersalah sepanjang masa*" (i.e., I feel guilty all the time). The BDI-M has a score range between 0 and 60, with the scores of 12 or higher depicting the

possibility of depression. The BDI-Malay has good internal reliability (Cronbach's $\alpha = 0.91$), good concurrent validity ($r = 0.61$) as well as good discriminant validity (Mukhtar & Oei, 2008).

Automatic Thought Questionnaire-Malay (Oei & Mukhtar, 2008). The Automatic Thought Questionnaire-Malay (ATQ-M) contains 17 items in Bahasa Malaysia, which were translated from the original ATQ (Dobson & Breiter, 1983). The ATQ-M uses a 5-point rating scale, where higher scores indicate more frequent negative automatic thoughts. The ATQ-M was found to have a good internal consistency (Cronbach's $\alpha = .91$) and a moderate concurrent validity with depressive symptoms ($r = 0.52$) (Oei & Mukhtar, 2008). An example of items on the list is "*Saya tak boleh siapkan apa pun*" (i.e., I can't even finish anything). The ATQ-M has a score range between 17 and 85. The ATQ-Malay was found to have good internal consistency (Cronbach's $\alpha = .91$) and moderate concurrent validity with depressive symptoms ($r = 0.52$) (Oei & Mukhtar, 2008).

Dysfunctional Attitude Scale-Malay (Mukhtar and Oei, 2011). The Dysfunctional Attitude Scale-Malay (DAS-M) is a 19-item measured in BM based on the original 40-item DAS (Weissman & Beck, 1978). The DAS-M was designed to measure predisposing beliefs. The participants were asked to rate a series of statements based on a 7-point rating scale, where higher scores are indicatives of

a higher frequency of negative beliefs and vice versa. The DAS-M was found to have a good internal consistency with Cronbach's alpha coefficient ranging between 0.79 and 0.86. An example of the items in the list is "*Saya masih boleh bergembira walaupun terlepas banyak perkara baik dalam hidup ini*" (i.e., I can still be happy even though I've missed out a lot in life). The DAS-M has a score range between 19 and 133. The DAS-Malay was found to have a good internal consistency with the Cronbach's alpha coefficient between 0.79 and 0.86 (Mukhtar & Oei, 2011).

Visual Analogue Scale (Proxy for Cohesion) (Hornsey, Olsen, Barlow, & Oei, 2012). A single-item visual analogue scale was utilised as a proxy in the measurement for cohesion. The participants were asked to rate how close they felt with fellow participants in their intervention group. The scale was found to have good convergent validity with other multi-item measures of cohesion (e.g., Therapeutic Factors Inventory: Cohesiveness subscale). The scale also showed a good convergent validity with the BDI, where higher sense of cohesion was negatively correlated with depression scores.

Procedures

A total of 210 participants were recruited and screened by the researchers, with a final total of 174 participants being selected

after taking into account the inclusion and exclusion criteria, as well as the dropouts that occurred at the first session.

The participants were recruited from government hospitals in the Klang Valley region of the state of Selangor, and were currently undergoing pharmacological treatment for unipolar depression (e.g., Major Depressive disorder, Dysthymia). The participants were randomly allocated into 3 groups via random number generator to one of either the GCBT+TAU ($n=58$), the Relaxation+TAU ($n=51$) or TAU only treatment group ($n=62$) by the researcher. Both the participants and clinical psychologists running the groups were blinded to the nature of the study. At the end of the study, the participants in the Relaxation+TAU and TAU only treatment group were given the option to undergo GCBT+TAU. All the participants continued with their medication throughout the study.

For the GCBT+TAU treatment group, 58 participants were allocated to seven different treatment groups, with eight to ten participants in each group. Each group would undergo eight GCBT sessions weekly over a span of two months, following an adapted BM version of the Group CBT manual (Mukhtar & Oei, 2011a) for approximately three hours per session. All the sessions were conducted by a doctoral level clinical psychologist (i.e., the second author), who was trained in Australia with more than 10 years of experience in managing depression.

The Relaxation+TAU treatment group consisted of seven different treatment groups, with between eight and ten participants in each treatment group. Each group would undergo eight weekly relaxation training sessions over a span of two months. Each session was run based on a relaxation manual (Mukhtar, Khaiyom, & Low, 2013) for approximately two hours per session. All the sessions were conducted by a master level clinical psychologist who was trained in relaxation training for individuals suffering from depression.

The participants in the TAU group received pharmacotherapy treatment from their psychiatrist or primary care physicians during the course of the study. They were either given the assessment packet consisting of measures at the psychiatric clinic of their respective hospitals, or mailed to them. The participants who had agreed to take part in the study were given the option of either handing in the research packets to the researchers at the psychiatric clinics, or mailing the completed packets back to the researchers via stamped and addressed envelopes prepared for them.

GCBT Manual. The GCBT manual used in the current study was developed and translated by (Mukhtar & Oei, 2011a). The manual was published in BM and described eight treatment sessions of three hours each, with detailed descriptions of each session's task and activities. Homework was also given at the end of each session corresponding to the content of each

session and was assessed at the start of the next session. The first two sessions offered a general introduction into CBT and behavioural activities. Sessions three and four emphasised on the cognitive aspect of CBT, where the participants were socialised to automatic thoughts, intermediate and core beliefs. Sessions five and six introduced them to the CBT techniques such as the Socratic Questions which help dispute negative thoughts and beliefs. Finally in sessions seven and eight, the participants were encouraged to expand and enhance their social networks to encourage relapse prevention.

Relaxation Manual. The relaxation manual is a compilation of seven techniques that encompasses both physical and mental relaxation techniques (Mukhtar et al., 2013). The relaxation training consisted of eight treatment sessions of two hours each, with a detailed description of each session's task. Homework was also given at the end of each session, and this was typically to practice techniques learned in the corresponding session. The first session offered a general introduction into relaxation and its benefits. In each subsequent session, one technique was presented and practiced together in each session. The first four sessions focussed on behavioural relaxation techniques such as deep breathing exercises and progressive muscle relaxation techniques. In the final four sessions, the relaxation techniques were focussed on the cognitive aspects of relaxation such as guided imagery exercises.

In this study, all the assessments were conducted before the onset of the study (pre-score), at week four (mid-score) and at the end of the study (i.e. week 8; post-score).

Ethical Approval

Ethical clearance was obtained via Universiti Putra Malaysia's (UPM) Ethical Review Committee, the Malaysian Ministry of Health and the National Medical Research Register prior to the commencement of the current study. Written consent was obtained from all the participants and their rights as participants were also highlighted.

Statistical Analyses

SPSS version 22.0 was used to analyse the data. Demographic data and assumption testing was conducted. Intent-to-treat approach was used, where the mean scores from the participant's last available assessment were carried forward to the remaining assessment time-points. The current study was a mixed design 3X3 Repeated measures multivariate analysis of variance (Repeated Measures MANOVA), with the treatment conditions and three assessment points acting as the independent variables. Dependent variables for the current study were comprised of the BDI-M, ATQ-M, and the DAS-M.

The Relaxation+TAU group was conducted to both examine the effects of relaxation training on depression and act as a placebo control for the effects of cohesion. In the current study, both the GCBT+TAU and Relaxation+TAU treatment groups spent similar amounts of time with the researchers, acting as a placebo for the effects of regular interaction with researchers. The TAU only treatment group acted as the no treatment control, where the participants did not receive any direct contact with the researchers other than during the collection of data from the various assessment points. All the participants received regular care from their usual health care providers (i.e., the psychiatrists).

Assumption Testing. Preliminary analysis showed that the number of missing items was not significant (<5%) and did not appear to be occurring in any significant patterns. Means substitution was utilised to replace missing data. Skewness and Kurtosis analysis showed that departures from normality were minimal.

RESULTS

Demographic information

Demographic information across each treatment group is depicted in Table 1 below.

Table 1
Descriptive statistics of each treatment group

		GCBT+TAU	Relaxation+TAU	TAU Only
Age		38.72 (11.04)	40.62 (12.19)	38.10 (11.46)
Gender (%)	Male	32.8	23.5	30.6
	Female	65.5	74.5	69.4
	Unreported	1.7	2	0
Ethnicity (%)	Malay	67.2	31.4	45.2
	Chinese	17.2	51	38.7
	Indian	12.1	9.8	12.9
	Others	1.7	5.9	3.2
	Unreported	1.8	1.9	0
Education (%)	High School	43.1	27.5	40.3
	Undergraduate	50	39.2	41.9
	Postgraduate	3.4	27.5	14.5
	Unreported	3.5	5.8	3.3

Note: Figures depict means and standard deviations in the parenthesis unless otherwise specified

Overall Analysis

MANOVA results showed that there was a significant TimeXGroup interaction effect [$F(12, 326)=8.63, p<.001, \eta^2_{\text{Partial}}=0.24$], suggesting that the dependent variables in the current analysis experienced a significant change in groups over time. Significant main effects were also found for both groups [$F(6, 332)=3.47, p=.002, \eta^2_{\text{Partial}}=0.06$] as well as for time [$F(6, 668)=12.40, p<0.001, \eta^2_{\text{Partial}}=.10$].

Meanwhile, the one way ANOVA analysis showed no significant differences across the three experimental groups at pre-treatment for BDI-M scores [$F(2, 168)=.353, p=.70$], ATQ-M scores [$F(2, 168)=1.16, p=.32$], and DAS-M [$F(2, 168)=.03, p=.97$]. This would suggest that all the three groups did not differ in terms of severity of depression at pre-treatment.

Mean Differences across Groups

Beck's Depression Inventory-Malay (BDI-M). The preliminary analysis showed that Mauchly's test was significant, indicating that the assumption of sphericity has been violated. Thus, Greenhouse-Geiser corrections were used in the current analysis. Repeated measures ANOVA was conducted on the BDI-M, and the results showed that the BDI-M experienced significant main effect changes over time [$F(1.38, 232.41)=29.28, p<.001, \eta^2_{\text{Partial}}=0.15$] and group [$F(2, 168)=9.19, p<.001, \eta^2_{\text{Partial}}=0.10$]. Analysis for BDI-M showed a significant Time and Group (TimeXGroup) interaction effect [$F(2.77, 232.41)=11.01, p<.001, \eta^2_{\text{Partial}}=0.12$] (see Figure 1), suggesting that the BDI-M scores would change between the groups over time.

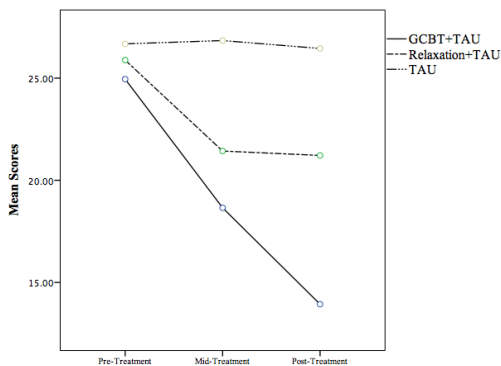


Figure 1. Mean scores of BDI-M

Meanwhile, post hoc analyses showed that the GCBT+TAU treatment group experienced significant reductions between pre-treatment ($M=24.95$) and mid-treatment ($M=18.65$) ($p<.001$), as well as the post-treatment ($M=13.93$) ($p<.001$). Results also showed that the mid-treatment scores were significantly higher than the post-treatment ($p<.001$), resulting in significant reductions.

Post hoc analyses also showed that the Relaxation+TAU treatment group experienced significant reductions between the pre-treatment ($M=25.88$) and mid-treatment ($M=21.43$) ($p=.001$), as well as between the mid-treatment and post-treatment ($M=21.22$) ($p=.05$). Finally, analysis of the TAU only treatment group showed that it experienced no significant changes in depressive symptoms over time.

The preliminary analysis showed that Mauchly's test was significant, indicating that the assumption of sphericity had been violated. Thus, Greenhouse-Geiser corrections were used in the current analysis. Repeated measures ANOVA was conducted and the results showed that the ATQ-M

experienced significant main effect changes over Time [$F(1.73, 291.04)=28.86$, $p<.001$, $\eta^2_{\text{Partial}}=.15$] and Group [$F(2, 168)=6.53$, $p=.002$, $\eta^2_{\text{Partial}}=.07$]. Analysis for the ATQ-M scores showed a significant TimeXGroup interaction effect [$F(3.47, 291.04)=31.52$, $p<.001$, $\eta^2_{\text{Partial}}=.27$] (see Figure 2). This suggests that the ATQ-M scores would change between groups over time.

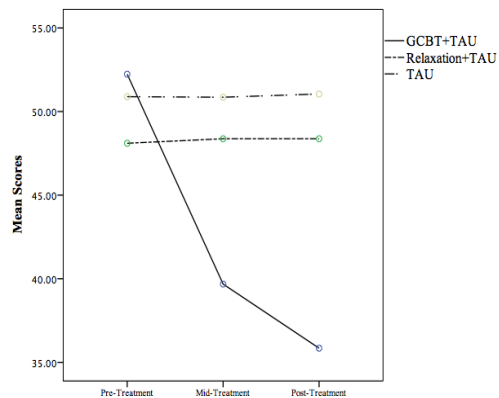


Figure 2. Mean scores of ATQ-M

Automatic Thought Questionnaire-Malay (ATQ-M). The post-hoc analyses showed that the GCBT+TAU treatment group experienced significant reductions in negative automatic thoughts between the pre-treatment ($M=52.23$) and mid-treatment ($M=39.68$) ($p<.001$), and post-treatment ($M=35.85$) ($p<.001$). The analyses also showed significant reductions in negative automatic thoughts between the mid-treatment and post-treatment ($p=.001$).

Further analyses showed that in both the Relaxation+TAU and TAU only treatment groups, no significant changes in the negative automatic thoughts had occurred.

Dysfunctional Attitude Scales-Malay (DAS-M). The preliminary analysis showed that Mauchly's test was significant, indicating that the assumption of sphericity had been violated. Thus, Greenhouse-Geiser corrections were used in the current analysis. Repeated measures ANOVA was conducted and the results showed that the DAS-M experienced no significant main effect changes over Time [$F(1.89, 317.02)=4.61$, $p=.012$, $\eta^2_{\text{Partial}}=.03$] but significant main effect change between the groups [$F(2, 168)=4.24$, $p=.02$, $\eta^2_{\text{Partial}}=.05$]. Similarly, the analysis for the DAS-M also showed a significant TimeXGroup interaction effect [$F(3.77, 317.02)=5.10$, $p=.001$, $\eta^2_{\text{Partial}}=.06$] (see Figure 3). This finding suggests that the DAS-M scores would change between the groups over time.

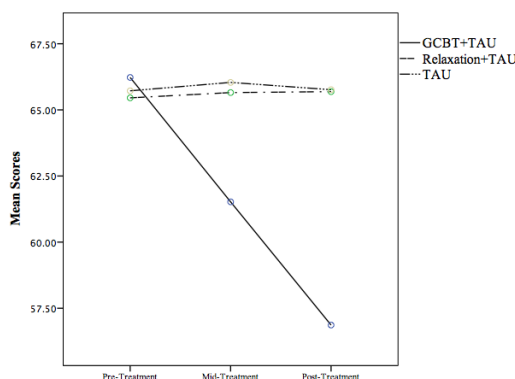


Figure 3. Mean scores of DAS-M

The post-hoc analyses showed that the GCBT+TAU treatment group experienced significant decreases in the frequency of negative beliefs between the pre-treatment ($M=66.23$) and post-treatment ($M=56.87$)

($p<.001$). The analysis also showed significant decreases in the frequency of negative beliefs between the mid-treatment ($M=61.52$) and post-treatment ($p=.02$). The post-hoc analyses further showed that no significant changes in coping behaviour in both the Relaxation+TAU and TAU only treatment groups.

Cohesion. The preliminary analysis showed that Mauchly's test was significant, indicating that the assumption of sphericity had been violated. Thus, Greenhouse-Geiser corrections were used in the current analysis. Repeated measures ANOVA was conducted and the results showed that as assessed by the single item, visual analogue scale experienced significant main effect changes over time [$F(5.63, 225.150)=8.43$, $p<.001$, $\eta^2_{\text{Partial}}=.17$] but no significant main effect was observed across the groups [$F(1, 40)=.042$, $p=.89$, $\eta^2_{\text{Partial}}=.001$]. No significant interaction effect was observed between TimeXGroup [$F(5.63, 1.04)=.50$, $p=.80$, $\eta^2_{\text{Partial}}=.012$], suggesting that cohesion scores would change between the groups over time.

The post-hoc analyses showed that cohesion increased significantly over time. In specific, cohesion significantly increased between Week 1 and Week 3 ($p=.002$), Week 4 ($p=.001$), Week 5 ($p<.001$), Week 6 ($p<.001$), Week 7 ($p<.001$), as well as Week 7 ($p<.001$). Further analyses showed that there were significant increases in the perceived cohesion between Week 2 and Week 3 ($p=.009$), Week 4 ($p=.002$), Week 5 ($p=.003$), Week 6 ($p<.001$), Week 7 ($p=.001$)

and Week 8 ($p=.003$). Similarly, the analysis also showed significant increases in cohesion between Week 3 and Week 7 ($p=.042$) (see Table 2).

Effect Sizes for the Treatment Groups

Partial eta squared effect sizes were obtained to determine the treatment effect observed across the three groups (refer to Table 1). Results from the analysis showed that the participants in the GCBT+TAU group experienced moderate treatment effect from the pre-treatment to post-treatment ($\eta^2_{\text{Partial}}=.58$). Meanwhile, the participants in the Relaxation+TAU ($\eta^2_{\text{Partial}}=.23$) and TAU ($\eta^2_{\text{Partial}}=.06$) only group experienced a small treatment effect. Thus, this suggests that GCBT+TAU treatment was able to elicit significantly greater reduction in depressive symptoms compared to the Relaxation+TAU Treatment and TAU only treatment groups.

Significant Reliable Change and Clinically Significant Change of BDI-M

Significant reliable change was determined in this current study. It is defined as the reliably statistical change that occurs regardless of normal functioning. Clinically significant change was also determined in the current study, which is defined as a return to normal functioning when comparing the clinical population and that of the general population (Jacobson & Truax, 1991). The GCBT+TAU group results from the pre-treatment to post-treatment showed that 77.59% (45/58) of the participants experienced significant reliable change,

whilst 58.52% (34/58) of them experienced clinically significant change (See Table 3). On the other hand, the participants in the Relaxation+TAU group experienced 37.25% (19/51) clinically significant change, whilst 1.96% (1/51) of the participants underwent clinically significant change (see Table 3). However, the participants in TAU only group did not experience any significantly reliable or clinically significant change from the pre-treatment to post-treatment (see Table 3).

Further post-hoc analyses also showed that at pre-treatment, there was no significant difference observed between the three treatment groups of GCBT+TAU, Relaxation+TAU and TAU only treatment group (see Figure 1). Once again at the

Table 2
Means and standard deviations for cohesion in GCBT and relaxation treatment groups

		GCBT	Relaxation
Week 1	Mean	2.20	2.00
	Std Deviation	0.19	0.83
Week 2	Mean	3.18	2.50
	Std Deviation	0.19	0.84
Week 3	Mean	3.48	4.00
	Std Deviation	0.18	0.79
Week 4	Mean	3.83	4.50
	Std Deviation	0.17	0.78
Week 5	Mean	4.43	4.00
	Std Deviation	0.17	0.74
Week 6	Mean	4.85	4.50
	Std Deviation	0.15	0.69
Week 7	Mean	4.80	4.50
	Std Deviation	0.15	0.68
Week 8	Mean	4.65	4.50
	Std Deviation	0.13	0.57

mid-treatment, there was no significant difference in the BDI-M scores between GCBT+TAU and Relaxation+TAU. However, the GCBT+TAU treatment group experienced a greater significant reduction in depressive scores as compared to that experienced in the TAU only treatment group ($p<.001$). By the post-treatment, the GCBT+TAU treatment group was observed to have significantly lower depression scores than those in the Relaxation+TAU treatment group ($p=.003$), as well as those in the TAU only treatment groups ($p<.001$), whilst those in the Relaxation+TAU treatment group

recorded significantly lower BDI scores than those in the TAU only treatment group ($p=.05$).

These results indicate that the GCBT+TAU treatment group elicits faster reductions in depressive symptoms between the pre-treatment to mid-treatment and post-treatment compared to the TAU only treatment group, whilst the GCBT+TAU treatment elicits faster reductions than the Relaxation+TAU treatment group between the pre-treatment and post-treatment only (see Table 1 & Figure 1).

Table 3

Percentages of significantly reliable and clinical change for each group

	Total Participants	Reliable Change (n, %)	Clinically Significant Change (n, %)
GCBT+TAU	58	45 (77.59%)	34 (58.52%)
Relaxation+TAU	51	19 (37.25%)	1 (1.96%)
TAU Only	64	Nil	Nil

Note: GCBT – Group CBT; TAU – Treatment as Usual

DISCUSSION

The current study was conducted with the aim to determine the effectiveness of GCBT+TAU in reducing the symptoms of depression as compared to the Relaxation+TAU treatment and TAU only treatment groups. The current study also evaluated any significant reliable change and clinically significant change to depression scores. The cognitive changes that occurred during the treatment of unipolar depression were also examined. Finally, this study also looked at providing

insights into the contributions of cohesion to treatment outcomes.

The results from the current study support the first and second hypotheses which stated that participants in the GCBT+TAU treatment group would experience significant reductions in depressive symptoms between the pre-treatment, to mid-treatment, and finally to post-treatment, as well as greater reliable and clinically significant change over time, as compared to the other treatment groups. In addition, the results from the current

study show that depressive symptoms in the GCBT+TAU treatment group experienced significantly greater and quicker reductions in depressive symptoms over time compared to both Relaxation+TAU treatment group and TAU only treatment groups. This was evident by the greater effect sizes observed in the GCBT+TAU group and the reliable and clinically significant change. Whilst the Relaxation+TAU treatment group also experienced significant reductions in depression symptoms up to mid-treatment, it elicited a smaller effect size, as well as reliable and clinically significant change. Finally, the TAU only treatment group did not experience any significant change in depressive symptoms. These findings bring with it important implications in the treatment of depression in Malaysia, suggesting that perhaps the use of CBT in conjunction with pharmacotherapy treatments would bring about significant improvements in the shortest amount of time.

The current study supports the results by Azhar and colleagues (2007), as well as that by Mukhtar and colleagues (2006), which revealed that CBT was able to elicit significant reductions in depression symptoms when used in conjunction with pharmacotherapy. The results obtained in the current study showed similar patterns of reductions in depression symptoms, as exhibited by the study of Mukhtar and colleagues (2006). In their study, the participants were found to have experienced greater and quicker reductions in depressive

symptoms over time compared to those in the treatment as usual control group. It was interesting to note however that the final mean BDI-M scores of their study at post-treatment ($m=6.33$) were substantially lower than that of the current study ($m=12.40$). Similarly, the study by Mukhtar and colleagues (2006) also showed greater reliable and clinically significant change than the current study. More importantly, the current study has extended their findings by sampling from the wide range of ethnicities here in Malaysia. Doing so allowed generalisation of GCBT effectiveness in treating depression to be extended to the Malaysian populace.

In terms of the changes in depressive symptoms, there were similar trends in both the current study and the study by Isa and colleagues (2013). Whilst there was a significant reduction in depression scores for both studies, this ultimately did not result in clinically significant reductions between pre-treatment and post-treatment for those in the Relaxation+TAU treatment groups. This result suggests that Relaxation training does not function as an effective treatment for depression. Instead, it is possible that relaxation training may serve as an effective technique to be incorporated as a skill or technique within established treatments. It may also be useful for individuals who struggle with CBT, such as individuals who have difficulty with insight. Given that relaxation training focuses primarily on physiological and behavioural interventions, this could prove to be an effective adjunct

for some individuals to supplement existing treatments that they may already be receiving.

Results also support the third and final hypotheses that the GCBT+TAU treatment group would experience significant reductions in negative automatic thoughts and beliefs between the pre-treatment to mid-treatment and finally to post-treatment. The findings obtained in the current study also showed that there were no significant changes to negative automatic thoughts and dysfunctional beliefs in the Relaxation+TAU and TAU only treatment groups.

Findings from the current study support studies done in the past such as that done by Kwon and Oei (2003), which revealed that the participants undergoing GCBT experienced significant reductions to negative automatic thoughts and dysfunctional beliefs when applied to a group of 35 participants suffering from depression. In addition, the results from the current study also support the findings by Mukhtar and colleagues (2011) which indicated that there were similar patterns in the reductions of negative automatic thoughts and dysfunctional beliefs, where significant reductions of ATQ-M and DAS-M scores occurred between the pre-treatment to mid-treatment and finally to the post-treatment were observed. Moreover, the results also show that the rate of change in negative automatic cognitions appears to match that of the findings by Mukhtar and colleagues (2011). This would lend support to the notion that GCBT is an effective

method of reducing negative automatic thoughts beliefs amongst a local populace.

The findings from the current study also suggest that the cognitive theories suggested by Beck (1995) may be applicable to Malaysians, provided that similar patterns of reductions in negative automatic thoughts and dysfunctional beliefs were observed. The cognitive model of depression suggests that the interaction of negative life events with dysfunctional beliefs elicits a higher frequency of negative automatic thoughts, which then results in an individual suffering from depression. These findings suggest paths for future research, whereby the aim would be to test the model of Beck's Cognitive model of depression to determine its validity amongst a local population.

For example, the item "*Tak ada siapa memahami saya?*" ("No one understands me") in the ATQ-M yielded some substantial decreases in the frequency of endorsements from the pre-treatment to post-treatment. Given the collectivistic nature of Malaysians (Markus & Kitayama, 2003), this change suggests that changing perceptions on their sense of belonging will elicit possibly reduced depression symptoms. Thus, it is vital to ensure the validity and generalizability of the cognitive model to properly understand the underlying mechanisms at work, given the results found in the current study.

In comparing the GCBT+TAU and Relaxation+TAU treatment, some interesting parallels appeared and these might offer some insights into the plateauing of BDI-M

scores observed in the Relaxation+TAU group. Scores for the BDI-M suggested that both the GCBT+TAU and Relaxation+TAU groups experienced significant reductions from the pre-treatment to mid-treatment. In the initial sessions of GCBT, the main focus was on behavioural change. The participants were introduced techniques that focus on day-to-day changes such as encouraging exercises, which is similar to that experienced in the Relaxation+TAU group which focussed on the behavioural and physical aspects of relaxation (e.g., progressive muscle relaxation). However, as the sessions progressed to the 4th session (i.e., mid-treatment), more cognitive strategies were implemented. This was observed in the cognitive changes observed in the GCBT+TAU groups, but not in the Relaxation+TAU or TAU only treatment groups. Hence, it is possible that the plateauing of improvements in BDI-M observed was because in the Relaxation+TAU group, cognitive strategies were not offered, limiting the potential recovery of depressive symptoms to that of behavioural and physiological ones only.

The results from this study lend support to the notion that GCBT could be used in conjunction with treatment as usual to supplement the treatment of unipolar depression. Given that the Malaysian Ministry of Health (*Clinical Practice Guidelines: Management of Major Depressive Disorder*, 2007) acknowledges the use of CBT in the management of moderate to severe depression, it is possible for GCBT to bolster the substantial deficit

of mental health resources. Thus, this will allow clients greater access to a well-established and evidence based treatments for depression.

An interesting result which mirrored that of Mukhtar and colleagues (2006) was that the participants in the TAU group did not experience any significant change to depression symptoms. This finding is contrary to that of the previous studies that showed significant improvements to depressive symptoms given pharmacotherapy (Jaafar et al., 2007).

One possible reason for this is the nature of participant selection. In the current study, the participants were obtained via referrals from the psychiatrists after being diagnosed with depression. It is possible that these participants have had their depressive symptoms already stabilised with pharmacotherapy, thus no further changes would occur. Following this line of reasoning, it would be possible then that additional interventions in the forms of GCBT and Relaxation treatment would elicit substantial improvements to depression. This postulation is supported by the study by Azhar and colleagues (2007), which suggested that CBT would be an effective adjunct for pharmacotherapy resistant depression patients.

The results from the current analysis showed that there were general upward trends in group cohesiveness over time. However, there were no significant differences between the levels of cohesiveness in the GCBT+TAU and Relaxation+TAU groups. Given that there were significant

differences in the depression scores between the GCBT+TAU and Relaxation+TAU groups, this suggests that cohesion does not play a significant role in the treatment outcome as there were no significant differences in the cohesion scores. Hence, a further study is required to fully examine the relationship between cohesion and progression of treatment outcomes.

The current study adds to the existing body of literature on depression treatment in Malaysia. The randomised design and a priori determination of power allowed for good generalisability of the results obtained. In this regard, the rating scales utilised were of sound psychometric properties, where all measures had been translated and validated for use amongst a local populace.

Another strength of the current study is that it sampled a wide range of ethnicities (e.g., Malay, Chinese, Indians and other various minority ethnicities) which reflects the population ratio in Malaysia. For this reason, the current study also employed a randomised controlled trial which would answer the need for more empirical research for the treatment of unipolar depression in Malaysia (Mukhtar & Oei, 2011b). Another strength in the current study is the use of translated and validated measures for use in Malaysia. The use of a manual GCBT program and Relaxation Training programme was another strength, as it allowed for structured and easily replicable sessions.

The use of a group modality for the current study also represents a strength. Given that the Asian cultures are by and

large collectivistic (Markus & Kitayama, 2003), group based approach would possibly offer significant benefits to treatment outcomes. Anecdotal observations from the current study showed that a strong sense of camaraderie was built among the participants who experienced group based interventions (i.e., the GCBT+TAU and Relaxation+TAU treatment groups). The participants were observed to discuss the techniques shared to them, and then spontaneously offered their own views and experiences in regards to those techniques, suggesting possible enhancement to the treatment effect. It is interesting to note that the Asian notion of 'face saving' (Markus & Kitayama, 2003) did not appear to be a significant barrier to group camaraderie. Rather than face saving being hindrance, observations from the current study further suggested that the participants were able to focus on the common goal of trying to overcome their difficulties together.

Whilst the results suggest the significant positive treatment effects of the GCBT treatment group over the other two control groups, caution should be taken when considering its implications. One limitation of the current study lies in the fact that no formal tracking of medication taken by the participants was done. This was due to the fact that many participants were unable to provide a detailed record of their medication intake. Consequently, the participants' medical records were not always easily available to the researchers. Referrals made were at times restricted to patients' current demographics and contact

information. In other words, the researchers could not access up-to-date information regarding the medications being taken by the participants. Moreover, informal enquiries to participants were inconclusive as many of them were unable to recall the names of their medication, or even track medication adherence during the course of the study. In addition, the current study also did not examine if the participants had received any forms of alternative treatment methods such as traditional cures through local *bomoh* or *sinseh* (traditional shamans who engage in healing based on cultural beliefs) or religious approaches (Haque, 2008). It is possible that applications to such treatment methods may have elicited changes to depressive symptoms as part of cultural healings.

On the contrary, one limitation of this study is that it is possible that the non-change observed in the TAU treatment group could possibly be due to non-adherence to pharmacological interventions. Whilst results in this study showed no significant difference in depressive symptoms across the groups, further research would benefit from controlling this variable to determine its effect on treatment effectiveness.

However, the current study was limited by geographical constraints. In particular, the current study obtained its sample pool from within the country's capital of Kuala Lumpur, and its surrounding satellite towns. As such, it is necessary that the study be expanded to include individuals from rural areas, as well as from less established city centres. Moreover, the current study only

utilised self-report measures to assess the severity of depressive symptoms and cognitions being experienced. Self-report measures are prone to experimenter bias, where the participants respond in accordance to how they believe they should be performing.

This limitation brings with it some possible new directions for future studies. Standardising the administration of treatments (i.e., having the same clinical psychologist administer all treatments) will help to minimise variability in the study. Future research could focus more on the process of change that occurs during GCBT, where a better understanding will definitely allow for more effective treatment. Finally, an examination of different facets that are pertinent to an Asian culture, that will mediate the effects observed in the current study, is hoped to provide further insights such as religiosity which plays a substantial role in many Asian cultures (Markus & Kitayama, 2003). In response to possibility of experimenter bias, future research could employ structured clinical interviews to confirm existing diagnosis.

In addition, the current study also did not examine the long-term effects of GCBT treatment on depression. Whilst the results from the current study showed the significant reductions of depressive symptoms as well as that of negative cognitions and dysfunctional beliefs, what was not examined was the long-term effects as a result from the treatment. Effective treatments would ideally not only bring with it clinically significant change, but also long-term maintenance of reduced

depressive symptoms. Further studies on the effectiveness of GCBT in the treatment of depression in Malaysia would also benefit from the examination of the long-term effects in depressive symptoms, as well as cognitions and beliefs.

Overall, the current study lends to the wealth of existing knowledge on the applicability of GCBT as an effective conjunctive to psychiatric treatment for depression. The current study was the first of its kind to compare the effectiveness of GCBT+TAU with Relaxation+TAU, showing that whilst both resulted in the reduction of depression symptoms, the change rate for GCBT+TAU is superior to that of Relaxation TAU. Finally, the results from the current study also have extended the current wealth of literature on GCBT by providing an early glimpse into the effects of GCBT on positive automatic thoughts.

CONCLUSION

In conclusion, the study lends support to the notion for the use of Group CBT amongst a local Malaysian populace as an effective treatment method for unipolar depression which could potentially maximise the existing limited mental health resources.

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APPENDIX*School level factors and their description (Creemers & Kyriakides, 2008)*

Components	Mode of Delivery	Duration
Day One		
1. Introduction and ground rules	Psychoeducation, class exercises	3 hours
2. Three components of emotion and behaviours for change		
3. Homework/group work allocation		
4. Behavioural activation		
5. ‘Spring Cleaning’		
6. 4 stages of change		
7. Depression – Types and variations		
8. 3 components of emotions		
9. You and your situation/other people		
10. Pharmacotherapy		
Day Two		
1. Behavioural: Achievement and Entertainment	Psychoeducation, class exercises, role play, homework, group discussion	3 hours
2. Behavioural: Self-help		
3. Homework/group work allocation		
4. Relaxation		
5. Behavioural: Doing it		
6. Pleasant activity list		
Day Three		
1. Cognitive I	Psychoeducation, class exercises, role play, homework, group discussion	3 hours
2. Cognitive I		
3. Homework/group work allocation		
4. Thoughts		
5. Connection between schemas and automatic thoughts		
Day Four		
1. Cognitive II: Analysis	Psychoeducation, class exercises, role play, homework, group discussion	3 hours
2. Cognitive II: Magic wand		
3. Homework/group work allocation		
4. Cognitive restructuring		
5. Challenging negative automatic thoughts		
6. Creating mantras		
Day Five		
1. Cognitive III	Psychoeducation, class exercises, role play, homework, group discussion	3 hours
2. Cognitive techniques		
3. Homework/group work allocation		
4. Five tests to prove false beliefs		
5. Changing bad memories		
6. Process of change: Yes I can!		

APPENDIX (*continue*)

Day Six			
1.	Cognitive IV		
2.	Cognitive techniques	Psychoeducation, class	
3.	Homework/group work allocation	exercises, role play,	3 hours
4.	Downward arrow technique	homework, group	
5.	Logical Analysis	discussion	
Day Seven			
1.	Building support systems		
2.	Interpersonal connections	Psychoeducation, class	
3.	Homework/group work allocation	exercises, role play,	3 hours
4.	Problem solving	homework, group	
5.	Past, present and future: Power of the mind	discussion	
6.	Cost/benefit analysis		
Day Eight			
1.	Revision and relapse prevention		
2.	Planning for the future	Psychoeducation,	3 hours
3.	Homework/group work allocation	class exercises, role	
4.	Revisiting strategy and saying goodbye to depression	play,group discussion	



Social Transformation and the Change of Community Capacity of Post-Tsunami Aceh, Indonesia

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ABSTRACT

The matter of community is of growing importance and intensively promoted in the development field through strengthening the concept of capacity. This paper aims to examine the dynamics of social transformation and their meanings for community capacity in Aceh province. The author points out the three phases of major social transformation, namely, the collapse of the social structure of local community under the centralist regime in the late 70s, following the isolation and high-tension period during the armed conflicts, and the post tsunami Aceh autonomy. The author argues that during these periods, community capacity has gradually declined in political-economic and socio-cultural terms. The post-reconstruction processes have raised awareness of living together in the community, providing a basis for institutionalising local governance, even though the capacity still remains weak due to the absence of local institutions and collective mechanisms due to three decades of changes concerning in national-local power relations and the consequent erosion of the social cohesion. In this paper, the author empirically discusses why and how the community has lost its collective mechanisms, especially during the recent social transformation, and how capacity has declined, focusing on *gampong* as the fundamental socio-spatial organisation at the local level, based on his fieldworks in the districts of Pidie, Aceh Besar and Banda Aceh.

Keywords: Social transformation, community changes, development capacity, post-tsunami Aceh

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INTRODUCTION

As the United Nations and other related organisations have noted that the matter of community is of growing importance and intensively promoted in the development

field, particularly in strengthening and empowering capacity. There is no single definition of what a community is. A community relates to both geographical and sociological perspectives. It is commonly defined as a collection of inhabitants living together in a particular geographical area with a common interest, sharing an emotional connection (McMillan & Chavis, 1986; Dhamotharan, 2009; Vincent-II, 2009; Phillips & Pittman, 2009; Ife, 2002). This study employed the concept of community as an entity and as a social group (Tanaka, 2012), which refers to the aspect of locality and social structure as an important element of capacity. The concept of community capacity is often interchangeably used with community development. Many studies refer to the ability to identify and mobilise the needs for the community life through the collective action process (Goodman et al., 1998; Laverack, 2001; Chaskin, 2001).

As a community is dynamic, any particular interventions or events that potentially occur anytime – be they politics, economics, and environments – have consequences for community life. The more preparedness a community has, the more resilient it is to cope with and redevelop after any crisis. Often, access to and control over resources (social, political, and economical) are determinant factors of generating vulnerability, that is, the social condition of community (Wisner, Blaikie, Cannon, & Davis, 1994). Furthermore, understanding community capacity is often interconnected

with the concept of social change that is in turn closely related to the vulnerability – the inability to withstand adverse impacts to which exposed to the society. Thus, it is necessary to understand interrelationships between capacity, vulnerability and development for community changes from the grassroots perspective. For example, experiences of repeated events are accumulated as a subculture in the local knowledge and institutions, enhancing community capacity. For the long term, meanwhile, social changes undermine community cohesiveness, often causing vulnerability to crisis events. Therefore, the dynamic processes of community changes have two aspects: tension and adaptation.

Indeed, Aceh Province in Indonesia, which was the most severely damaged by the 2004 Indian Ocean tsunami, has suffered from enduring and massive social transformation for more than three decades; while more recently, there is new climate for political, economic and social development. This paper points out the three phases of major social transformation. The most significant process began in the late 1970s through massive political involvement under the centralist regime. The unification of the village governance system heralded the collapse of community, or *gampong*, in Aceh. Furthermore, the situation became unstable and communities marginalised and isolated due to the approximately thirty-year internal armed conflict between the Freedom Aceh Movement (GAM:

Gerakan Aceh Merdeka)¹ and the Central Government of Indonesia. Social and economic infrastructures were extremely poor during the time. The final phase is the 2004 devastating Indian Ocean tsunami and the decentralisation and reformation of local autonomy that followed. The province suffered the greatest loss of life and economic activities among the 14 affected countries (Cosgrave, 2007). This event has not only attracted huge global attention to respond and come to help but also had a deep influence on opening the door to peace (Gailard, Clave, & Kelman, 2008).

This study focuses first on the dynamics social transformations and their meanings for community capacity, and then argues that during these periods, community capacity has gradually declined in the political-economic and socio-cultural terms. Also, the massive and progressive post-tsunami intervention causes challenges for enhancing community capacity due to the absence of local institutions and collective mechanisms for development initiatives. The paper attempts to discuss why and how the community has lost its collective mechanism, especially during the recent social transformation and related to the

current development progress, focusing *gampong* as a fundamental Acehnese socio-spatial organisation at the local level.

The study employs qualitative and quantitative approaches to examine the dynamics of community changes. Data were obtained from the author's fieldwork in Pidie, Aceh Besar and Banda Aceh, Aceh Province through observation, interviews, group discussions, questionnaire survey and study of documents. In 2010, the author conducted a survey on the role of community in the reconstruction process of post disaster reached 200 community leaders. This survey used questionnaire that was designed in collaboration with Nagoya University, Japan, Gajah Mada University and Indonesian Institute of Sciences, Indonesia. Furthermore, the author intensively interviewed community leaders and conducted group discussions with community members to gain in-depth information related to the dynamics of community change and functions. In order to enrich the information, a household survey was also conducted in 2014, in collaboration with Nagoya University, Japan, with 355 households. In addition, the author also validated the data through documentation studies from previous research and reports and descriptively employed the gathered data in analysis process.

FRAMEWORK FOR THE COMMUNITY CAPACITY AND SOCIAL TRANSFORMATION

Social and geographical spaces are two key points to understand a community.

¹In 1976, there was a declaration in Pidie district stated the independent of Aceh region from the Republic of Indonesia by Hasan di Tiro, a former leader of the Freedom Aceh Movement (*Gerakan Aceh Merdeka –GAM*). The Central Government of Indonesia called this movement as a separatist and declared the Aceh region as unsafe area by sending a large number of troops to fight against the group.

First of all, it is necessary to elaborate these points, particularly in relation to community capacity. Hypothetically, the community that has strong cohesiveness is more capable and adaptable to certain crisis situations. Community cohesiveness cannot instantly be formed, and often a long and complex process is required involving how to utilise any potential resources within the spaces to improve the quality of life. As a process, it concerns with the ways to obtain and enhance the capability of inhabitants, leaders, organisations and

societies, which is in turn related to the outcome of the transformation. In this term, transformation is defined as a dynamics process of a fundamental change in society that encompasses alteration a wide range political, economic, social institutions and cultures. However, “if something does not lead to change that is generated, guided and sustained by those whom it is meant to benefit, then it cannot be said to have enhanced capacity, even if it has served a valid development purpose” (UNDP, 2009, p. 6).

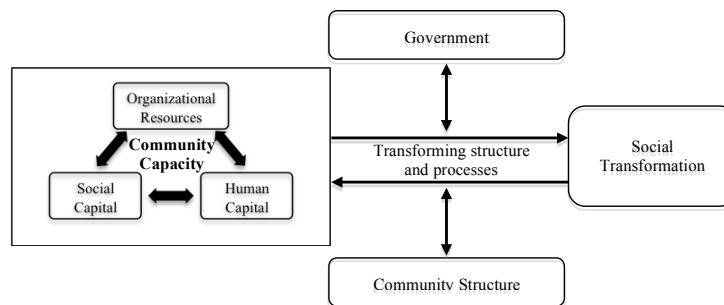


Figure 1. Community capacity and social transformation framework

The notion of community capacity is interconnected, and often overlaps with the concept of community competence, participation and empowerment. Chaskin (2001) in sum highlights the following factors to define community capacity: existence of resources, network of relationships, leadership, and supports for participation. In order to understand the relationships between community capacity and social dynamics, this study employs the definition of community capacity

as “the interaction of human capital, organizational resources, and social capital existing within a given community that can be leveraged to solve collective problems and improve or maintain well-being of a given community” (Chaskin, 2001, p. 295). In all situations, the dynamic process of changing community and capacity is interconnected, and constructed through the transformation of the government and community structures (Figure 1). The community, as an organisation,

intermediates between its members and other related organisations. The sense of existence on the one hand depends on how the organisation provides a proper and suitable environment for their members to be involved and participate in any activities. On the other hand, the capability to build and manage the relationships with wider society (organisations) is also necessary, particularly in relation to institutional capacity, to make partnerships and networking arrangements. The role of leadership is also of growing importance to provide direction for the collective goals. Thus, related to this kind of community connectedness, the power of community can be seen within the individual and collective structures to address community needs through solidarity and participation.

TRANSFORMING STRUCTURE AND PROCESSES OF THE ACEHNESE COMMUNITY

Social structure of the Acehnese community

As a multicultural society, the social systems and structures in Indonesia are diverse at the local level. For a long time, strong social systems have been institutionalised in their very local contexts, embedded in cultural traditions, which are unique to each local society. Many studies have pointed out the characteristics of the local community in Aceh as having a multilayered institutional structure, which is composed of *mukim* at the sub-regional level and *gampong* at the local level. *Mukim* is a specific customary community institution that

consists of an alliance of several *gampongs*. *Mukim* is an intermediating socio-spatial organisation between the regional, local and neighbourhood in particular, related to access to and control over natural and/or social resources in the local territory. The governance structure of *mukim* has been transformed with the changing political constellation both at the regional and the national levels²: in short, during the Sultanate of Aceh, the old order era (1945-1979), the new order era (1979-1999) and post-reformation era (1999-current).

Gampong, as hierarchically the lowest unit of the structure, is a central organisation for community governance. Syarif (2005) defines *gampong* as the smallest entity of *adat* territory composed of several *jurong* (small alleys), *tumpok* (colony settlements) and *ujong* (boundaries). The territory is usually distinguished by topographic features such as rivers, fields, groves, hills or mountains (Afadlal, Cahyono, Gayatri, Dewi, & Satriani, 2008). *Gampong*, as a social organisation, has two features: as an administrative body and as a social entity. For a long time, *gampong* has been a local administrative and autonomous organisation, which has sovereignty for the social and natural resources within its territory through customary law (Syarif,

²See Moris (1985), Jaya & Dick (2001), Malley (2003), Ryaas Rasyid (2003), and Schmit (2008) about the historical and the dynamics process of decentralization policy in Indonesia in particular related to regional and national relations, structure and power.

2005). As a social entity, *gampong* is thought of as a communalist and kinship-based society, where the members are strongly connected to each other (social ties, solidarity and cohesiveness) (Schroter, 2010). As a kinship-based society, *gampong* is not only seen as a place where people are born but also as an original place of ancestors, cultural values and adhered-to traditions, the underlying powers of *gampong* (Mahdi, 2009).

Conceptually, the social body of *gampong* originally comprises a self-governing system, into which *adat* (customary law) and *syaria* (Islamic law) are embedded as a foundation of community life. The power structure of *gampong* is based on the balance of three domains of community life, each playing different roles and performing leadership collectively. Leadership is concretely performed by *keuchik* as a statutorily-selected leader (administrative), *tuha peut* dealing with *adat*, and *imeum* related to *syaria* function. The mosque/meunasah is central to community governance and the delivery of public services, with two faces: as a building and as an institution. As a building, mosque/meunasah is a place for praying, gathering and holding community events. It is also a metaphor of community life, showing the symbolic feature of existence, solidarity and the value of togetherness. Therefore, the institutional function of the mosque/meunasah is administrative, cultural and/or spiritual.

Regarding local resources and territorial management of them, the role of local community organisation³ is vital for the operational and the administrative, as well as providing guidelines and mechanisms to govern community life. The conditions for this kind of local community organisation depend on the availability of resources within the territory and the need for them. For example, for farming activities, the roles of *keujreun blang* are important, *peutua seuneubok* for plantations, *peutua uteuen* for forest management, *pawang laot* for sea and fishery management, and *peutua krueng* for river management, respectively. As the resources are usually distributed in a wider area, including neighbouring communities' territories, these local institutions also play a bridging and networking role. Such relations and mechanisms are mainly under the control of *mukim* at the sub-regional level.

³On the customary structure of community governance of *gampong* also consists several operational institutions in particular related to social and natural resources management as well as networking, neighbourhood and inter-community organisations, such as *keujreun blang* (water management and farming institution), *peutua seuneubok* (plantation institution), *peutua uteuen* (forestry institution), *peutua krueng* (river management institution), *pawang laot* (sea and fishery institution), and *haria peukan* (local market institution). According to the provincial regulation called the Qanun No5/2003, the establishment of these social institutions depends on the needs and resources available within community.

Outlining the Transformation in Three Phases

The Collapse of the Social Structure and Foundation of the Local Community.

The political climate of Indonesia has significantly contributed to the changes of socio-political systems and social life of *gampong*. In the late 1970s, there was a massive political pressure for the unification of local administrative systems throughout Indonesia. The central government under the Soeharto regime enacted Law No.5/1979⁴ on village governance. This policy led to the structural adjustment of community governance into the specialized administrative body that was called *desa/kelurahan*. The unification process to a greater extent neglected and diminished aspects of the locality and social system of *gampong* in Aceh (Syarif, 2005; Gayatri, 2009; Mahmuddin, Kolopaking, Kinseng, Saharuddin, & Wasistiono, 2014).

A self-governing community system had institutionally been transformed into a local-state governance system. The *mukim* system had been removed from the governance structure and only “performed” as symbolic *adat* leadership (McCarthy, 2006). This implied that *mukim* was not

necessarily significant for community governance. The collective power structure of *gampong* had also been changed into the single centralised leadership of *kepala desa* (head of village). Moreover, any related local social institutions had been removed and transformed into newly established formal social organizations. The role of *tuha peut* was turned from customary into governmental, called LMD (*Lembaga Musyawarah Desa* – village assembly) and LKMD (*Lembaga Ketahanan Masyarakat Desa* – village community resilience council). Under this structure, *kepala desa* gained more powers than the village council bodies (McCarthy, 2006). A similar change was faced by *imeum*, in that there was a separation between statutory, customary and religious matters, changing *gampong* as community entity to a local branch of the government.

The modernisation of the village governance system under this regime had severe impacts on the reduced operations of social organisations related to collective resource managements, with some taken over by the formal governmental organisations. For instance, the matter of agriculture, which was previously performed by *keujreun blang*, was assigned to P3A (*Perkumpulan Petani Pengguna Air* – the Farmer’s Water User Association). Quite a few traditional organisations gradually disappeared from the local community. Furthermore, most traditional community events and festivals gradually declined with the disappearance of local institutions. Instead, new types of community organizations were established

⁴The basic idea of the law was to introduce the substantive of the local autonomy, namely decentralisation, de-concentration and delegation of power; however, in the implementation, over controlled of the central government has led to the more centralisation of political structure and power (see Jaya & Dick, 2001).

under the control of the governmental authorities. The role of *mukim* for inter-community networking was also taken over by the government branches. The people in the community rarely took the initiative to manage local resources. Therefore, the *gampong* had increasingly become a local specialized administrative organization, losing comprehensive or all-embracing functions regarding space and society.

Under the regime, the central government extended domination through direct control of the regional and local development initiatives, covering wider areas of planning, intervention and delivery of development projects. The result of this centralist policy has triggered weakened local development capacity (Schmit, 2008). The local government became powerless and represented more an arm of the central government for implementing policies. The political atmosphere instead created new local elites to rule and control local resource utilisation as governmental agents (Afadlal, Cahyono, Gayatri, Dewi, & Satriani, 2008; Mahmuddin, Kolopaking, Kinseng, Saharuddin, & Wasistiono, 2014). This included local technocrats, bureaucrats, military, and businessmen, as well as *ulama* (the scholar of the religious elite), which were developed to carry out directed centralist development policies and counteract the powers in the society (Jaya & Dick, 2001; Miller, 2004).

The Period of Miserable Times and High Tensions: Isolation, Marginalisation and Underdevelopment. In the second

phase, the three-decade armed internal conflict between *GAM-Gerakan Aceh Merdeka* (Freedom Aceh Movement) and the central government was significant for the community changes in Aceh. The conflict culminated in the period 1989-2004 through the implementation of the military operation zone⁵ (1990-1998) and martial law (2003-2004). The period witnessed a great deal of violence and displacement. Due to security reasons, the central government sent and exploited the military force to combat the separatists, and sometimes people could even be unexpectedly targeted as rebels. People lived under the shadow of violence. During the operation, many people were kidnapped, tortured and even killed. Living in fearful situations, most people, especially men, moved out of the community to stay safe from being targeted as rebels by both conflicting parties.

In fact, the role of military forces was not only to combat the separatists but

⁵Due to high tension caused by armed conflict in Aceh, the Central Government of Indonesia deployed a large number of troops and declared a military operation area which also known as DOM (*Daerah Operasi Militer* – Military Operation Area) from early 1990 until late 1998 against the separatists movement of GAM. During the period, large-scale human rights abuses occurred, involved arbitrary executions, kidnapping, torture and disappearances, and the torching of villages. A report by *Forum Peduli HAM* (Human Rights Care Forum) in 1999 estimated at least 1,321 cases of people killed, 1,958 cases of people disappeared, 3,430 cases of torture, 128 cases of rape and 597 cases of torching.

also to take over community governance and activity. The function of *gampong* collapsed in administrative and social terms, increasingly becoming powerless. *Gampong* faced a dilemmatic situation and were intensively spied on by both parties. Often, a *gampong* was physically sacrificed, destroyed and sometimes burnt because it was suspected as supporting one side. Many properties and infrastructure were severely damaged and then abandoned by the authorities. The situation made the region underdeveloped, bridled, marginalised and isolated (McCulloch, 2005). The military forces indirectly took over *gampong* by building military barracks, which were often located at the centre of community space, called *meunasah*.

During the period, the local leadership lost its dignity and became merely a symbol. To be a community leader, such as *kepala desa*, was extremely dangerous. It was necessary for the *kepala desa* to have the ability to establish his/her position as a partner of the government and military, as well as GAM simultaneously, keeping the appearance as a community unit (Syarif, 2005). Therefore, it was rare to find people who were willing to be leaders at that time, being subject to intimidation (Thorburn, 2008). The informal leaders, such as *imeum*, faced similar conditions and even worse. The community activities, including *pengajian* (a holy *Quran* recital), that involved many people always became targets of the armed operation. Sometimes, the leaders were killed by 'unknown persons' during or after delivering the recitation. At that time, the

role of *imeum* was only to conduct prayers at *meunasah*. Thus, any particular community event and activity related to socio-cultural and spiritual matters was restricted and diminished significantly.

In many ways, the unstable and high-tension condition also contributed to the weakening community participation and social relations. Community power increasingly became poor and passive. All gatherings were monitored and restricted. Many people were scared to meet and to discuss anything related to their situations and lives. In many cases, the military facilitated meetings and forced people to attend, suspecting absentees to be dissidents. Even at the meetings, however, most of the participants hesitated to speak out and give their ideas.

Political efforts to ease tensions were made between conflicting groups. As some issues concerning security and local governance were taken as the fundamental topics, it became necessary for the central government to reform the local governance system through the special privilege law for Aceh in 1999 and the special autonomy law of Aceh in 2011. Also, the government revoked the status of the red zone⁶ and

⁶The military operation in Aceh was also known as *Operasi Jaring Merah* (Operation Red Net), whereas the region was marked with a red line as restricted and isolated area. In 2004 the status was suspended and came to an end, followed by downgrading to a civil emergency, but the military operation still continued.

decreased the number of troops in the region. However, those efforts were not significant and often unable to establish peace.

Mega-disaster: Between Misery, Miracle and Optimism. At the end of 2004, the devastating Indian Ocean tsunami occurred and destroyed human lives, properties, infrastructure and livelihoods, sweeping away wide areas of the coastal regions in Aceh Province. The tsunami had tremendous impacts: approximately 170,000 people lost, more than 500,000 people displaced, and total damage estimated at US\$4.45 billion. The World Bank report in 2008 noted that the economic condition of the province, which had slumped because of the conflict, became more severe because of the tidal wave. The report also said that at least more than 100,000 small businesses had collapsed, and that 60,000 farmers temporarily stopped farming.

Large-scale international responses suddenly arrived in and opened up the region. More than 500 organisations were involved in the relief and recovery efforts. As a result, the recovery process was relatively fast and extensive, covering wide areas of intervention. Within two years, for example, about 50% of the infrastructure needs such as housing, roads, schools, health centres, markets and other facilities had been reconstructed. In the beginning, there was no coordination of the interventions due to the absence of a response mechanism and lack of capacity of the governments. Later, the Rehabilitation and Reconstruction

Board, called BRR (*Badan Rehabilitasi dan Rekonstruksi*), was established as a coordinating as well as executing agency.

The tsunami led the region toward regional and international cooperation and relations to ease the internal armed conflict in Aceh (Gailard, Clave, & Kelman, 2008). Both sides of the conflict eased tension in the name of humanity. The Helsinki Accord was made in August 2005 as a foundation for achieving peace. The significant achievement of the agreement was changing the socio-political atmosphere by Law No.11/2006 on the governance of Aceh. It is a foundation and platform for restructuring the socio-political systems of the province. In 2006, a local election was successfully carried out and the local government was succeeded by the local party. From that point, the new era of the local regime was established, which engendered hope for the revitalisation of the Acehnese society.

Gampong was redefined in terms of the spatial and cultural concept, not only as a local administrative branch but also as a socio-cultural system. The construction of *gampong* governance is led by *keuchik*, that is, selected through the electoral process, wherein power is shared equally between *imeum meunasah* and *tuha peut*. However, in the process, there has been some confusion among the leaders about how to perform because of the lack of knowledge and experience. Therefore, in implementation, the role of *keuchik* is still dominant in perhaps all the related community activities. Realising such a situation, the governmental and non-governmental organisations have

intensively supported capacity building for community governance. Aceh Adat Council (*Majelis Adat Aceh*), Aceh Customary Community Network (JKMA – *Jaringan Komunitas Adat Aceh*), Green Aceh Institute and Prodeelat are some examples of the local organisations that intensively involved in reinforcement, advocacy and capacity building of *mukim* and *gampong* during and after the post-tsunami reconstruction period.

CHANGING THE COMMUNITY AND CAPACITY

The Acehnese society has seen drastic changes in community structure and capacity

during the three-decade socio-political processes. These changes are interrelated not only in administrative restructuring and social dynamics but also in changing relationships between the government and the community (Figure 2). In particular, the established traditional community-based institutions have been transformed into modernised local organisations, often imposed by the central government during the centralist regime. In this sense, *gampong* is no more than a local unit specialised in administrative function.

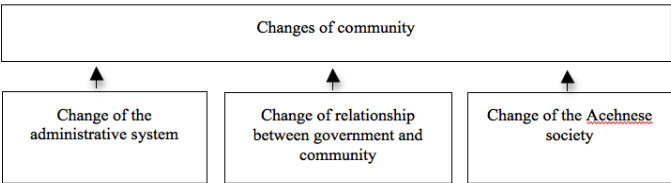


Figure 2. Changes in the community

The level of community wellbeing and capacity was gradually reduced in these periods. In the first phase, *gampong* as a unit of *adat* and *syaria* had institutionally been formalised as an administrative body under the centralisation of the Soeharto regime in the late 1970s. *Gampong* governance was politically imposed to adjust to the new system, changing the term of *gampong* to *desa/keurahan*. At the sub-regional level, some associations such as *mukim* and other

functional organisations were dismissed and removed from the community.

Based on the interviews and group discussions, many community leaders declared that they had lost their social roles and knowledge to a high degree vis-à-vis access to and control of local resources. The role of the newly established organisations was precisely defined by the authority as to pursue and implement any propaganda and policies of the highest government levels.

Table 1
Changing overall capacity of the community

	1 st phase (late 1970s)	2 nd phase (1990s)	3 rd phase (2004 and after)
Community	Adjustment from traditional to modernised community organisation	Declined mutual trust	Melting mutual distrust
Government	Centralised political structure	Deconstructed community organisation	Reconstructed community organisation
Inter-relationship of government and community	Establishment of local administration	Centralised political structure with military power rule	Peace agreement and withdrawal of military
	Less intervention	Enduring violent conflicts	Decentralised autonomy
	Dependence of local community	Specialized in administrative relation	Revived grassroots leadership with local governance institutions
	Declined grassroots leadership and local governance	No connection with grassroots mechanisms	Re-opened Acehese society
Acehnese society	Diminished socio-cultural coherence of the Acehese	Closed Acehese society	

Source: Primary data compiled by the author from the data finding

By degrees, they disassociated themselves from the traditional and customary systems and social activities, and were forced to adjust to the newly-established arrangement:

“For a long time, community activities gradually disappeared, everything being controlled by the highest authorities, community leaders such as tuha peut were practically diminished and replaced by LKMD and LMD ... and by the time we adjusted to the new system where such traditional system no longer existed ...over time the new generation was no longer aware how the customary governance is practiced, as you would think, nowadays there are many young people successfully being leaders, however, many of them are not aware and understand how to govern

and also lack of attitudes how to deal with community functions and needs.” (Tuha peut, male, 60 years old, Pidie).

“There were many things that changed in the governance system, the leadership style and access and control of gampong resources. Everything was under control of the authorities, and we as local people and leaders had no power to speak out against the highest structure. Everything was appointed and regulated.” (Keuchik, male, 50 years old, Aceh Besar).

A study of the dynamics of village institutions in Aceh (Afadlal, Cahyono, Gayatri, Dewi, & Satriani, 2008) shows the process of degrading gampong capacity.

Gampong lost its social powers, being represented just as a local administrative agent, to gain approval for development projects and policies from the community people. The study also stated that the state-dominated control not only eliminated the *gampong* autonomy, but also gradually generated passive attitudes. In term of leadership, *keuchik* (*kepala desa* –village head) was only a single formal leader and played a significant and dominant role as a government agent. The relationship between the community members and *gampong* gradually changed to be more formal. Further, the new structure increasingly loosened social relations in the former tight-knit community. At the same time, community activities tended to be built-in into the governmental programmes.

The situation became more severe under the military regime during the conflict period. The region was not only isolated but also socio-economically marginalised. The conflict brought high tensions and pressures to the communities. Just like the physical and human destructions mentioned above, poverty rates grew significantly because of the impacts of the conflict. According to the interviews and the survey of 200 community leaders in Aceh in 2010, majority of *gampong* (over four-fifths of the sample) experienced direct impacts from the conflict, which claimed more than half the people in the worst case.

“What we can say is, during the conflict, we could not do anything, everyone hesitated and worried to go to the fields or plantations, in many cases

people disappeared when going to the fields, and never came back ... lack of income, oppression, poverty, widows and orphans were common everywhere ... that was a gloomy period for us.” (*Keuchik*, male, 53 years old, Aceh Besar).

“The conflict was very depressing for our living ... everything was awful, people gathering was prohibited, there were many spies even among the inhabitants ... sometimes people were suddenly called by the military with no reason or explanation, interrogated ... and even some disappeared after that ... social life was poor, increasing mutual distrust ... everything should follow the military orders ... we had no roles and functions at all, only to follow the commands of what they said.” (*Tuha peut*, male, 60 years old, Pidie).

Through the centralist political development, the central government enlarged its powers and controlled almost all domains of development activities, with some placed under the direct control of the military operation. The characteristic of *gampong* as simply an administrative agency was strengthened to follow the directions of the military rule within the hierarchical structure. As mentioned above, the power of community leadership was extremely low. Community leaders mentally and physically received intense pressure from both conflicting parties. All the community

movements were systemically watched and controlled by the military forces. Under this kind of circumstance, many people tended to think selfishly due to security and safety reasons. As a result, the mutual trust among community members, community cohesiveness and social networks increasingly weakened. Thus, the weakened social institutions, poor leadership and lack of social interactions in turn weakened community capacity itself during this period.

The third phase of the changes is the post-tsunami era, in which the decentralisation regime started. The large number of rapid global humanitarian actions was the beginning of the re-opening the region from isolation. The post-tsunami interventions, especially following the peace agreement, provided a new climate and triggered the development progress in the province. The programmes of decentralised autonomy began through the reinforcement and restructuring of local capacity. Reorganising community governance from the grassroots level progressed through redefining *gampong* (Mahdi, 2009) not only as a local state agent but also having extended access to and control over their own affairs autonomously. In the new structure, there is a growing consideration that the power of community is necessary to generate and enhance locality-based capacity.

At the organisational level, the political situations of stability and security after

the peace agreement have guaranteed the reinforcement of restructuring community-based organisations and the community governance system, though the transformation process is fluid and challenging. Some studies have illustrated the condition of lose of capacity (Afadlal, Cahyono, Gayatri, Dewi, & Satriani, 2008; Thorburn, 2008; MSR, 2010; Mahmuddin, Kolopaking, Kinseng, Saharuddin, & Wasistiono, 2014) of the Acehnese *gampong* under the centralised political structure, the internal armed conflict and the mega earthquake and tsunami. To sum up, the studies argue that reinforcement of institutional arrangements and leadership are critical for *gampong* re-development. According to the interviews with community leaders, almost all of them perceive that the most urgent issue to be faced is organisational and personal adjustment from the former authoritarian regime that has been institutionalised into the current systems for a long time. The traditional system of self-governing community is reintroduced, combining with the modernisation of state governance. This means that it is necessary to re-establish and reinforce sub-regional social organisations such as *mukim*, *panglima laot*, *keujreun blang*, *peuteu seuneubok* and so on into the government structure based on community needs for usage and management of resources. However, a considerable number of community leaders are claiming a lack of awareness and understanding about the new

system. Most of the informants mentioned lack of knowledge and experience, some generation gap – stagnant information transfer from generation to generation – as well as lack of organisational capacity.

“There are many things that should be considered after the peace [agreement], especially reestablishment of gampong, mukim and other local institutions, however, in practice there is some confusion. I think that many of us lack understanding and knowledge about the local system ... we have become accustomed to the old system and practice ... therefore, capacity building of local governance is very helpful to increase awareness and knowledge in accordance with local needs.” (Keuchik, male, 48 years old, Banda Aceh).

“With the new regulation, the local system has been reestablished through gampong, tuha peut, mukim ... which is in accordance with the Acehnese local culture ... however, in the implementation, there are a lot of things to be addressed, such as understanding of how to execute ... of course there is nothing wrong in the old system, but some adjustments are necessary.” (Tuha Peut, male, 55 years old, Aceh Besar).

In response to these situations, along with the reconstruction activities, the government and aid agencies have conducted some programmes for capacity building through

training and mentoring throughout the province, focusing on organisational developments, community leadership and social capital. According to the interviews, perhaps almost all of the community leaders claimed that the capacity building programme is increasingly significant, especially for community participation and involvement in *gampong* development planning and collective works. Also, the role of an appointed facilitator, who has worked closely with the community, is important. However, in many ways, the participation is still showing instability and weak, especially after the programme finishes. According to the questionnaire survey conducted in 2014 targeting 355 households, almost half of respondents stated that the community-related organisations, especially small groups, are the most important organisations for the reconstruction process (Table 2). In the group, local people were expected to act collectively, gaining assistance from supporting bodies. However, the respondents’ satisfaction with community

Table 2
The most important organisation for community reconstruction

Organisation	Percentage (N:355)
Small group	33.0
Governments	15.2
Private network (family, relatives)	13.2
Community organizations	9.6
Mosque/Meunasah	5.9
Cooperative	0.3
NGOs/United Nations	0.3
Others/No answer	22.3

Table 3
Satisfaction with community activity and participation

Satisfaction	Percentage (N:355)
Very satisfied	6.8
Satisfied	47.6
Not so satisfied	39.7
Not at all	5.9

Source: Primary data from the questionnaire survey about community settings and functions on the post-tsunami reconstruction of land-use-type primary production in Banda Aceh and Aceh Besar, January 2014

activity and participation is not high (Table 3), showing a gradual decline from the beginning. It is implied that there are some serious problems to be addressed, especially in relation to awareness, need and attachment to the community.

A report of *gampong* ten years after the tsunami by ACARP LOGICA (Thorburn & Rochelle, 2014) shows similar situations; that is, the capacity of community institutions involving participatory and/or training programmes has progressively been enhanced. However, many cases are reported in which the capacity is gradually falling off after the completed reconstruction activities. Closure of financial and technical supports from the local and national governments makes it difficult for the community to maintain the activities. The study shows some successful cases in which maintenance of the activities is to a large degree dependent upon the roles of local leaders such as *keuchik* and *tuha peut* and

their mutual collaboration, as well as their networking sometimes extending outside of the community.

In terms of physical and economic developments, indeed, the post-tsunami intervention shows progressive significance; however, in terms of social capacity development, there still remain many challenges that are related to the scale of aid influx and the ways of outside aid. Certainly the interventions by donors, governments and NGOs were so large that the reconstruction work could rapidly and progressively be done (Telford, Cosgrave, & Houghton, 2006), some places being even better than before the tsunami. However, there are some critics, in particular, of the intervention process. For example, Telford (2012) argues that the relatively powerful and wealthy intervention by aid agencies in many cases neglected and even undermined the capacity that the local community had originally held, and that local people often felt exploited rather than reinforced. Thus, this kind of ignorance of the local capacity led to people's passive and materialistic attitudes to a large extent, which might in turn cause difficulties for the community to overcome possible problems related to their future. In this way, the community leaders argue that many people tend to be stubbornly unwilling to participate in their own community activities. Indeed, it is increasingly important for them to gain the direct personal benefits from participating in the activities. The more the benefits, the more people would come.

Table 4

Perception of community leaders on the level of community change in comparison to before the tsunami

	Level of change (percentage) (N:200)		
	High	Average	Low
Social activity	36.5	42.5	21.0
Mutual trust	44.5	45.0	10.5
Social change	34.0	41.5	24.5

Source: Primary data from questionnaire survey about the role of community in the reconstruction process of post-earthquake/tsunami 2004 in Banda Aceh and Aceh Besar in 2010

In comparison to the situation of ten years before the tsunami, Table 4 shows the level of community changes again according to the questionnaire survey with 200 community leaders in 2010, as mentioned above. Approximately one-third of leaders said that social activity such as *gotong royong*, *pengajian*, community events and so on had increased, while approximately 42.5% claimed no change, and approximately one-fifth answered that it was less active. To some degree, social activity was gradually revitalised in line with the improvement of the socio-political and economic structures of the region. Regardless of an improvement in social activity, in particular focusing on *gotong royong*, the frequency of participation was still relatively small. More than a half of the respondents stated once every two months, followed by approximately 32% claiming once a month, only 4.5% indicating once every two weeks and 3% once a week. Related to the participation rate, the majority claimed that the rate is relatively high and almost half of the community members

participate, while approximately 10% stated only a few people participated.

The decentralised administration and the reconstruction of gampong further show a positive impact on the interrelationship between the government and the community, and also improving social relations and connectivity among the community members. Clearly identifying the community organisations in the local government structures is increasingly significant for restoring the trust relationship between the governments. Restoring community leadership could possibly make passive attitudes of community people more active. For this, the charisma based on the ability of leaders to make networks is significant to a large degree in rebuilding the trust that was lost during the past decades. In terms of social relations and connectivity among the members, the survey also showed a positive result of reviving community trust. For example, approximately 44.5% of the respondents perceived that harmony and mutual trust had been increasing comparing to the pre-tsunami periods, while

about 45% claimed there was little change. Nevertheless, about 10.5% of respondents claimed that mutual distrust still existed.

In terms of the overall changes in the Acehnese society, approximately one-third of the respondents claimed that the society had changed significantly, while about 41.5% of respondents indicated little change, and approximately one-fourth perceived no change. The survey also indicated that the most significant change occurred in the most severely affected communities, where almost half of the respondents felt significant changes in the Acehnese society. Perhaps this is because these communities experienced a drastic change in their social structure through population turnover, where instead of the lost population many newcomers rushed in after the tsunami. This means that in such places the history of *gampong* community has just begun, or is changing its established characteristics to something like a mixed society whether or not it is still in the original place or has been relocated.

CONCLUSION AND REMARKS

Massive socio-economic and political interventions by the governmental and non-governmental organisations are significant for changing community capacity in the post-tsunami Aceh. The lack of political participation, in the sense of local people collectively participating in the political process of the community and in which the local community actively participated in the formal administrative structures of the nation state, from the Soeharto

regime onward, has led to ignorance of the community in the local political arena, erosion of the community organization and other social institutions, breakdown of communication between generations within the community, the demise of local knowledge management, and the failure of community governance. All these have diminished community capacity for a long time. The post-tsunami regime has opened up the re-establishment of the community structures through capacity building programmes, redefining *gampong*. However, the process of restructuring *gampong* as a socio-spatial unit of local community is still challenging. For developing the community capacity of the Acehnese *gampong* today, at least, four issues should be discussed: first, restructuring means not only reorganisation of *gampong* but also renovation of knowledge, understanding and skill about the *gampong* governance. The adaptability of *gampong* to the new community governance system is relatively challenging because of the former authoritarian system and practices that have been embodied and institutionalised into the local state system. The current tasks of *gampong* governance are not only limited to administration and development but also expected to cover the extent of *adat* and *syaria*.

Second, in this sense, for *gampong* governance it is important to rearrange the relationships with the sub-regional organizations and to readjust power and authority. At the sub-regional level, *mukim* is currently intermediating between *gampong*

and *kecamatan*. *Mukim* is *de jure* entitled to similar functions as *kecamatan*, conducting government affairs, implementation of development activities, community development, and reinforcement of *syaria* law, though these functions are *de facto* exercised still by *kecamatan* and the role of *mukim* is limited rather to *adat* and *syaria*. Lack of inter-organisational coherency is probably due to absence of social mechanisms that have been evaporated and transferred into the formal administrative institutions. In practice, only the formal channel is alive for problem solving even at the community level. Further, *gampong* has statutorily extended their power and authority to meet the requirements as an administrative body as well as a socio-political authority. *Gampong* has to incorporate statutory, customary and Islamic laws in its governance. Thus, it is necessary to provide a certain mechanism to deal with complex issues of social life, including not only the administrative but also the common practice that is embedded in the local culture.

Third, thus, it is evident that leadership is an important determinant factor for community rebuilding. There is a common sense that *keuchik* as the head of a village is entitled to the power to govern, balancing between the social and the political. A range of political transformation has changed the status of *keuchik* from a comprehensive power elite to a more formal administrative agent. The power of influence of *keuchik* is accordingly declining, especially in decision-making on community needs.

Meanwhile, the level of people's trust in local governments, which increasingly dominate the realm of community, has gradually if not drastically improved after the tsunami. For practices of development and resource allocation to secure legitimacy among the people of the community, it is necessary above all for *keuchik* to regain his/her power of influence not only in the administrative but also in the cultural dimensions. Then, a partnership between the community and the government could be constructed, strengthening *gampong* governance based on the roles of local leaders to balance power and authority.

Lastly, the recovery processes emphasise the necessity of small group activities to mobilise, utilise and maintain social and physical resources as the means to encourage and reinforce social cohesion and capital that eroded during the conflict period. Community involvement is one of the determinant factors for the efficient and sustainable recovery process. In fact, for a long time, the Acehnese society has in many ways been excluded from a variety of development activities. Further, the absence of community involvement and participation during the post-tsunami reconstruction process poses some critical problems to the community. Indeed, there was lack of consideration about the importance of a community at the beginning of intervention as part of the sustainable physical and economic achievements. Later on, there were efforts to establish small groups within the community as an empowerment activity such as *kelompok tani/nelayan* (farmer/

fishermen group), *kelompok pengajian* (Quran recital group), *kelompok arisan* (social gathering group), *kelompok wanita* (women group), *posyandu* (maternal and child health care), *kelompok pemuda* (youth group) and so on. However, in many cases, the initiatives for group building were not necessarily growing from the grassroots but promoted from the top down, especially from the authorities, in particular for the community to access economic and financial resources. Whether the collective work of such small groups is successful or not often depends on the leader's personal connections to outside social resources. This kind of dependency and individualism poses complex issues to the sustainability of group activities. On some level, the need for group building is high; however, the sense of collectiveness is relatively low among the members. Therefore, it is necessary to continue observing how such small groups are institutionalised into the politics and embedded into the culture of the Acehnese community.

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Authorial Identity and Linguistic Features of Native English and Thai Writers in Research Articles

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ABSTRACT

The correct use of linguistic features of authorial identity has been found to be a problem for novice writers and non-native writers when writing research articles. This research aims to find out the linguistic elements that the native English and Thai writers use to express their stance in their research articles (RAs), and to describe how the native English and Thai writers express their stance in their RAs based on their socio-cultural background. The results, based on the frequency analysis of 30 RAs, showed that the native English writers in Applied Linguistics (AL) field used slightly more hedges and epistemic stance words, while the Thai writers employed slightly more attitude markers, as well as attitudinal stance words. In term of boosters, the native English writers were found to use twice more boosters than the Thai writers. Another remarkable difference found is in the use of self-mentions; the pronouns I-we were used eight times more by the native English writers than the Thai writers. The contextual analysis further showed that the native English writers were overt when promoting their authorial involvement through the use of stance markers, while the Thai writers' use of stance markers was intended to achieve rhetorical functions that fade degrees of authority. Implications of the findings for the instruction of academic writing are proposed.

Keywords: Authorial identity, linguistic features, research articles, native English writers, Thai writers

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INTRODUCTION

English is the medium language of international scholarship and research (Flowerdew, 1999). Many scholars have come to accept authorial identity as a key feature of interaction due to its pivotal role in negotiating the relationship between

writers' arguments and their discourse communities, preparing the way for writers to construct their authorial identity (Hyland, 2001). Authorial identity refers to how authors present their works to readers in their disciplines, expressing their points of view or self-representation and showing their presence, which can be revealed through an expression of stance (Hyland, 2005b, 2012; Lin, 2013). Many previous researchers (e.g., Hunston, 1994; Hyland, 2005b; Ivanic, 1998; Kuhi & Behnam, 2011; Kuhi, Tofigh & Babaie, 2013; Rahimivand & Kuhi, 2014) state that academic writing is not a complete absence of authorial identity, so an awareness of the strategic use of authorial identity is vital to journal article writers. Suryani, Aizan and Noor Hashima (2015) also found that the authors of highly-cited research articles were more assertive in presenting their research work. In fact, the intrusion of authorial identity to limit claim, increase plausibility and develop personal credibility are significant in achieving acceptance for academic arguments (Hyland, 2005a).

Problem Statement

Academics across the globe whose first language (L1) is not English but striving to build international recognition increasingly submit their research for publication in English-medium journals (Huang, 2010; Hyland, 2016). Flowerdew (2001) interviewed international journal editors who said that the lack of authorial identity; an absence of voice, or an authority in showing that authors are part of their

discourse community, was considered a major problem among East Asian writers, also found among Thai writers who seemed to defer to authority in their writing or be conscious that they do not say anything openly. Hyland (2002b) and Lin (2013) have consistently found that L1 writers usually have a better control of asserting themselves with appropriate amount of force, while L2 writers, especially East Asians, have been found to be unclear when it comes to displaying their identities in research articles (RAs), thereby being less forceful in challenging the ideas of others or presenting alternative views. The main goal in RAs is to deliver the content in a very articulate manner (Hooi & Munir, 2014). For this reason, Azlina Murad Sani (2016) suggested that adapting East Asians writing conventions might result in English papers that do not cater to international expectations. The analysis of academic writing in Thai, with a focus on nominalisation carried out by Prasithrathsin (2014), reveals that the content of Thai academic articles exhibits detachment, which refers to the absence of identity expression, and objectivity which refers to facts presented without distortion by personal feeling, bias, or interpretations. Likewise, Charoenroop (2014) found that in the classroom context, Thais are less likely to start conversational exchanges to express their feeling and disagreement enthusiastically, whereas native English speakers actively interact and state their feeling and disagreement. Thais typically place high values on deference and respect of authority. Charoenroop (2014) claims

that these differences are caused by their different culture-oriented backgrounds, i.e. the collectivism versus the individualism, which influences their linguistic behaviours. Jogthong (2001) also believes that “due to Thai culture, the writers feel inconvenient to assert claims of their own work. Thai people are very careful not to promote self in public. The success and the importance of their work should be left for other people to acknowledge and decide. It is possible that this cultural aspect results in the avoidance of claiming the centrality of research topic” (p. 51).

Studies on authorial identity between native English and non-native English writers have shown some variations in the use of linguistic manifestation of authorial identity, such as between the native English and Chinese writers (Lin, 2013), native English and Japanese (McCrostie, 2008), native English and Spanish writers (Pérez-Llantada, 2007), native English and Iranian writers (Kuhi, et al., 2013), native English and French, Dutch, Swedish writers (Petch-Tyson, 1998). However, very few cross-cultural studies have been conducted to examine the use of linguistic realisation of authorial identity by Thai and native English writers in RAs in Applied Linguistics (AL). The present research therefore aims to find out the linguistic features that the native English and Thai writers employ to express their stance in their RAs, and to describe how the native English compared to the Thai writers express their stance in their RAs based on their socio-cultural background. The next section will discuss the reciprocal

relationship between authorial identity and linguistic features.

Models or approaches to authorial identity

The leading theoretical concepts of Halliday's (1994) Systemic Functional Linguistics (SFL) model and social constructionist view, especially Ivanic's (1998) view, indicate that we use language to realise, build and negotiate social relations, whereby academic writers do not just offer an idea or reality but negotiate a credible self-representation in their work by expressing collegiality towards readers. The interpersonal features aptly become the source of identity exploration by many other works which try to elaborate the ways in which interpersonal meanings are expressed through the resources of linguistic features like *evaluation* and *stance* (Hunston & Thomson, 1999); *appraisal* (Martin & White, 2005), and *metadiscourse* (Hyland, 2005a, 2005b). Hyland's (2005a, 2005b) studies indicate that writers create authority, integrity and credibility by means of stance markers. Stance can be seen as “an attitudinal dimension and includes features which refer to the ways writers present themselves and convey their judgments, opinions, and commitments. It is the ways that writers intrude to stamp their personal authority onto their arguments or step back and disguise their involvement” (Hyland, 2005b, p. 176). In addition, Pho (2013) states that the two most recurrently used terms to represent authorial *stance* are *evaluation* and *stance*. Other terms that have also been

used in studies of authorial stance include *voice, persona, metadiscourse, appraisal, writer identity, authorial voice* or *authorial presence*. Hyland's model of metadiscourse, which reveals authorial identity (2002b; 2005a; 2005b), has been chosen over others by some researchers (e.g., Kuhi et al., 2013; Lin, 2013; Mohammad, Zeinab & Naserib, 2014; Ramhimivand & Kuhi, 2014). According to Hyland's model, academic interaction mainly involves two

key resources: stance (writer-oriented function) and engagement (reader-oriented function), as illustrated in Figure 1 below. Since audience or reader engagement is beyond the scope of the current study, we confined our study to four elements, namely Hedges (e.g., possible), Boosters (e.g., clearly), Attitude Markers (e.g., interestingly), and Self-mention (e.g., I, we) of stance which are related to writer-oriented features.

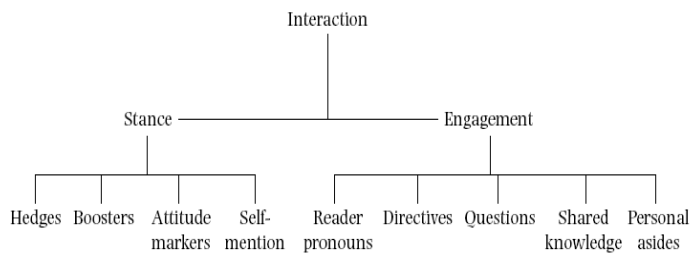


Figure 1. Key resources of academic interaction
Source: Hyland (2005b, p. 177)

Most of the previous studies on authorial identity in academic discourse have centred on only one feature of authorial stance. For example, Hyland (2002a, 2002b) examined the frequency and role of the first person pronouns I, we, me and us, and (Hyland, 1998a) the determiners of my and our, or hedges. Self-mentions such as I and we were chosen mainly by previous studies (e.g., Hyland, 1998b, 2001, 2002a, 2002b; Ivanic & Camps, 2001; McCrostie, 2008; Mohammad, Zeinab & Naserib, 2014; Petch-Tyson, 1998). On the other hand, Hyland and Tse's studies (2005a, 2005b) analysed authorial stance through the

'evaluative *that*-construction' in abstracts from various disciplines. Stotesbury (2003a) also examined authorial stance through the use of evaluative words, and Stotesbury (2003b) the use of personal pronouns in abstracts of RAs from several broad areas. Nonetheless, a few researchers investigated the broader sense of authorial stance (e.g., Lin 2013; Pho, 2008, 2013; Rahimivand & Kuhi, 2014). Multiplicity of authorial stance therefore merits closer attention. Recently, Pho (2013), similar to Hyland's metadiscourse features (Hyland, 2005a), realises stance as *writer-oriented features* of interaction. Therefore, she

proposes the model of linguistic features that reveal authorial stance by analysing them quantitatively and qualitatively in RA genre. However, there have been limited number of studies found which adopted Pho's (2013) model of the analysis of linguistic realisations of authorial stance. This present study combines both models, Hyland's (2005a) and Pho's (2013) word-level linguistic manifestation of authorial stance, namely, attitudinal stance words and epistemic stance words (relating to probability and usuality), in the hope to gain more insight into the phenomenon of the authorial identity construction.

METHODS

Identity issues in academic writing have long been studied by means of text analysis (Hyland, 2001, 2002a, 2002b; Ivanic & Camp, 2001; Lin, 2013; MaCrostie, 2008; Mohammad, et al., 2014; Petch-Tyson, 1998; Pho, 2008; Rahimivand & Kuhl, 2014), results of which offer researchers background knowledge of how writers project themselves linguistically and rhetorically in writing. Bringing corpora to identity studies, on the other hand, offers researchers to approach issues of identity from perspectives that might have been neglected through qualitative rhetorical analysis because the regular and repeated patterns of language use observed through frequency counts, concordances, or keyword analyses inform us about the preferred practices of collectives and individuals (Hyland, 2008, 2012). Therefore, corpus-

based frequency and text-based analysis were employed in the present study.

This study was done by analysing the corpus of 30 English research articles (RAs) in the field of Applied Linguistics (AL). For the native English corpus, 15 RAs were drawn from each of the world's four leading peer-reviewed journals in Scopus: *Journal of English for Academic Purposes*, *Language Testing*, *English for Specific Purposes*, and *TESOL Quarterly*. For the Thai Corpus, 15 RAs were taken from each of the five peer-reviewed Thai university-based journals: *The PASAA Journal* (PASAA), *Journal of English Studies*, *Language Education and Acquisition Research Network Journal* (LEARN), *Silapakorn University Journal of Social Sciences, Humanities and Arts*, and *Journal of Liberal Arts* (Prince of Songkla University). The articles were selected based on three criteria: time span (during 2007-2015), having Introduction, Method, Result, Discussion, and (or) Conclusion sections (IMRDC), and high-quality journals (impact factor > 1.2 for the native English corpus, and group-one quality of Thai journals for the Thai corpus).

In previous studies, the number of research articles used as a sample for data analysis varies considerably. Some studies (such as by Kuhl et al., 2013; Lin, 2013; Pho, 2008, 2013; Rahimivand & Kuhl, 2014) analysed between 30-40 RAs on authorial identity. These studies had yielded good results; however, a large number was always recommended for future studies. For example, in Pho's (2008) study, 30

RAs were used as a representative sample which produced significant results. Hence, 30 RAs as used in the present study should be a suitable representation of the applied linguistics RAs from each context (Native English and Thai contexts) and they should offer significant findings.

Considering the significance of the current research that could provide a useful resource and pedagogical value for novice writers regardless of whether they are native or non-native English speakers, the researcher chose relatively well-established journals for both corpora in order to attempt at reliable quality of representative sampling. Due to a limited number of English RAs with independent section headings: Introduction, Method, Result, and Discussion/Conclusion in AL in Scopus indexed journals, the Thai corpus was chosen, based on purposive sampling, from group-one quality of Thai journals. Since the ‘*nativeness*’ of writers could not be easily traced, the writers’ affiliation and background were used as a guide.

All abstracts, acknowledgments, footnotes, end notes, reference lists, linguistic examples and titles were excluded from the analysis to avoid the interference of non-authorial stance features. The corpus was analysed through the following steps. Firstly, all stance markers were imported into Antconc 3.2.3, a concordance programme, to identify elements which convey the authorial stance. Secondly, each of the elements found was cautiously analysed manually according to the context in which it occurs. Finally, the frequency of the different categories of mentioned stance markers in each discipline was calculated per 10,000 words because the size of both corpora differs.

RESULTS AND DISCUSSION

By comparing the use of stance markers between the native English writers and Thai writers in AL as in Table 1, the results show that the native English writers used slightly more hedges and epistemic stance words, while the Thai writers employed slightly

Table 1
Overall frequency of stance marker in the Native English and Thai corpus

	Native English Corpus (106,610 words)		Thai corpus (64,678 words)	
	No. of items	Items per 10,000 words	No. of items	Items per 10,000 words
Self-mentions	199	18.6	11	1.7
Hedges	1580	148.2	744	115.3
Boosters	805	75.5	432	30.4
Attitude markers	402	37.7	319	49.3
Attitudinal stance words	2,076	194.7	1,542	238.4
Epistemic stance words	1,104	103.5	537	83
Total	6,166	578.2	3,585	518.1

more attitude markers and attitudinal stance words. In term of boosters, the native English writers were found to use twice more boosters than the Thai writers. There was another explicit difference in the use of self-mentions, specifically the pronouns

I-we, were used eight times more by the native English writers than the Thai writers.

To better illustrate these findings, Figure 2 gives us a general view of the categories of authorial identity in the corpus.

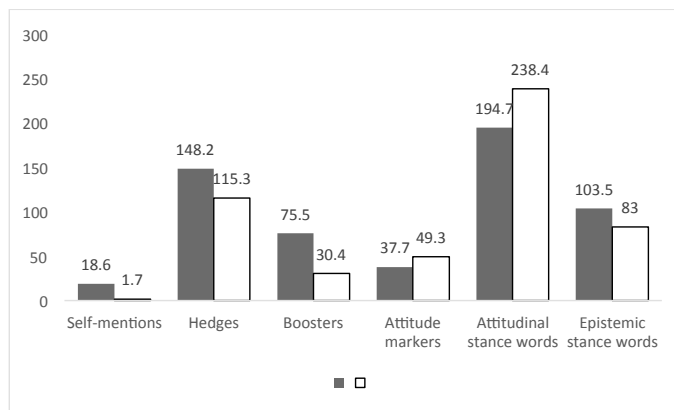


Figure 2. Overall categories of authorial identity in comparison

Hedges

In terms of the use of hedges, among the top 10 frequently used hedges were modal verbs such as *can*, *may*, *would*, *might*, *should*, and adverbs and verbs such as *frequently*, *likely*, *often*, *tend to* and *suggest*. Despite the slight difference between the two groups of writers in terms of the top 10 frequently used hedges, it was noticed that a few hedges that were frequently employed by the native English writers appeared at low frequency with the Thai writers. For instance, a hedge word such as the modal *verb* *would*, which appeared at a high frequency in the native English writers' texts, rarely appeared in the texts of Thai writers. The rare use of *would* among the Thai writers might be ascribed

to their unawareness of the multifunction in the use of *would*. The native English writers seemed to use *would* in a variety of functions such as for hypotheses and conditionals, while the Thai writers were more likely to use it as a past form of *will* to report what somebody has said. Example (1) from the Thai corpus elucidates this:

- (1) They were also informed at the beginning that they *would* have to complete the reading-strategy report form immediately after they completed the test. (T5M)

The present study found that when assessing the results or making judgments, the native English writers tended to use *would* with

hedging such as *seem* to present cautious view in conveying evidence, as in (2) and (3):

- (2) ...does not necessarily imply causality, this finding *would seem* to resonate with interlanguage pragmatics studies. (N13DC)
- (3) It *would seem*, based on the data from both corpora, that Jürgen should avoid using the word procedure. (N4DC)

In addition to the use of *seem* with *would* as explained earlier, there was also no obvious difference with respect to the use of *it seems that* between the native English and Thai writers, as in (4) and (5). We expect the writers to be able to make decision on whether different studies have revealed different results or not, but the insertion of *it seems that* suggests a hesitation or lack of ability to do so. The effect of *it seems* suggests indecisiveness about the statement made in the *that-clause* (Hewings & Hewings, 2004). Examples from the native English and Thai corpus are in (4) and (5).

- (4) Taken together with other previous research that shows the potential to impact undergraduate students' attitudes (Kang, 2008; Smith et al., 2005), it seems that contact, especially contact that takes into account the ideal contact conditions ... (N3D)
- (5) Even though not only cognitive but also metacognitive

strategies contribute to reading comprehension, *it seems that* cognitive strategies are directly related ... (T5D)

Moreover, Hyland (2011) pointed out that using *modal* such as *can*, with inanimate subject, can downplay the person making the evaluation. Examples from the native English and Thai corpus are in (6) and (7). These examples suggest that the native English and Thai writers used similar word when stating something less visible to depersonalise their views in order to restrict the scope of their claim or to distance themselves from the proposition.

- (6) It *can* be argued that ELT and Christian missionary work continued... (N12R)
- (7) It *can* be concluded that the participants took micro-sociolinguistic cues. (T9DC)

In the two contexts (*it can be argued; it can be concluded*), it can be implied that the writer supports the subsequent propositions, suggesting that the writer at least has secured or acquired the validity of the propositions. However, the use of *it may* has ambiguous meaning. The use of *it may* in academic writing is infrequent, especially in published writing because of its ambiguity in meaning (Hewings & Hewings, 2004).

However, the most significant difference between the two corpora is in the use of the verb *assume* in *it-clause*. The writers signpost the non-factual status of a proposition by presenting it as being their suggestions,

contentions, arguments, assumptions and so on (Hewings & Hewings, 2004). The anticipatory *it*-clause co-occurring with the hedging word *assume* in the Thai writers' corpus serve as a means for the writers to present ideational content in an objective way, whereby they become less visible, as shown in (8) and (9). This finding corroborates with the study of Prasithrathsin (2014), who also highlights the significant features of objectivity and detachment in Thai academic writing. However, none of this particular anticipatory *it*-clause occurred with *assume* in the native English corpus. Examples (10) and (11) show that the native English writers chose to use *assume* to report the views of others rather than those of the writers. It is interesting to note that to strengthen the hedging word *assume*, the native English writers used may not with attitudinal verb *unreasonably* prior to gaining supports from others' views, as in (10):

- (8) However, *it is legitimate to assume* that some aspects of the attitudes are highly related to achievement. (T8I)
- (9) *It is reasonable to assume* that linguistic misunderstandings will occur when communication events involve people... (T9R)
- (10) *One may not unreasonably assume* that attention to ESL pragmatic input occurred in the process of the formal learning of the several L2s ... (N13D)

- (11) Nation (2006) seemed to *assume* that multiword expressions that have some element of transparency, however small, will be reasonably interpretable through guessing. (N8I)

Examining high frequently used hedges that ranked from 10 to 20 shows that some stance markers such as *somewhat* and *perhaps* appeared in higher frequency in the native English corpus compared to the Thai corpus, as a downtoner to hedge discourse. Hooi and Munir (2014) pointed out that hedges permit writers to make claims more easily acceptable with precision, caution and diplomatic deference to the views of the readers. On the other hand, *mostly*, *mainly*, *sometimes* were found to be used only in the Thai writers' RAs, suggesting that their propositions were based on evidence rather than interpretative fact, which is in line with previous studies (Perez-Llantada, 2007; Prasithrathsin, 2014), which recommended objectivity to non-native writers to use when presenting facts. The following examples illustrate what the Thai writers had written:

- (12) While the TES *mainly* used Appreciation Token (45%) and Agreement (25%)... (T9R)
- (13) This was also in agreement with the other two studies (Al-nofaie, 2010; Saricoban, 2010) that teachers *mainly* used L1 when dealing with new vocabulary. (T10D)

The use of the hedging word, *argue*, merits closer attention because it is found 7 times

in the native English corpus, most of which are in the passive voice. However, none was found in the Thai corpus. The following example illustrates how the hedging word *argue* was used by a native English writer:

- (14) ... However, *it is argued* throughout the present article that not only are multiword expressions much more common than popularly assumed, but they are also difficult for readers to both accurately identify and decode. (N8I)

The above pattern *it is argued* suggests that the writer's argument is being offered, which might also be marked as *I argue* (Hewings & Hewings, 2004). If we examined closely the use of the verb *argue* in the Thai corpus, of the 10 occurrences (including *argue*, *argues* and *argued*), nine of them have a subject other than the author, and only one in occurrence the author is the subject, as in (15). This suggests that the Thai writers tended to use *argue* to display the views of others rather than those of the writers. This is in line with Jogthong (2001) who points out that Thai writers are likely to avoid forming a central claim as an opening strategy in writing a research article. This event may be ascribed to the Thai culture in which too forceful claim is avoided. In contrast, the native English writers are likely to use *argue* to present their own opinions and arguments. Examples (16) and (17) illustrate how *argue* was used by the English native writers:

- (15) This study arises out of problems Thai students have in learning to speak in ESL classrooms in Thailand. *I argue* problems stem from the grammar translation approach rather than the Communicative Language Teaching (CLT) approach. (T8I)
- (16) In this article, *we argue* not only for a recognition that USUGs' attitudes towards ITAs contribute to the successful communication of ITAs, but also focus on ... (N3I)
- (17) *We would argue* that it is in this arena more than any other that the values of evangelical Christianity stand in opposition to the values of the field of TESOL. (N12D)

Attitude markers and Attitudinal stance words

In term of the use of attitudinal devices, even though the Thai writers employed slightly more attitude markers and attitudinal stance words than their native counterparts, a closer examination of the texts revealed that affective attitude markers such as *surprised (ing(ly))* were highly frequently used by the native English writers as in (18) but not by the Thai writers. Therefore, this suggests that the Thai writers were uncomfortable using this affective attitude marker that could have affected their objective voice in their research articles. This finding is consistent with the study by Prasithrathsin (2014), who found significant features of objectivity and detachment in the Thai

academic writing. Example 18 illustrates the use of affective attitude marker, *surprised*.

- (18) We were somewhat *surprised* to discover that the ICAO itself has not chosen to approve or disapprove of any testing procedure. (N7M)

Epistemic stance words

In terms of the use of epistemic stance words, when examining common words used by both the native English writers and Thai writers, it was discovered that words which were used by the native English writers such as *indeed* were rarely used by the Thai writers. On the other hand, words frequently employed by the Thai writers such as *really* were found to be rarely used by the native English writers. Presumably, the way the two groups of writers represent themselves differently in the use of epistemic stance words such as *really* and *indeed* might be attributable to their vocabulary repertoire (Lin, 2013).

Boosters

In terms of the top 10 frequently used boosters, the native English writers seem to be more overt in the use of boosters to express their judgment and proposition. This can be seen in the high occurrence of *reliable* which appeared only in the native English corpus in order to highlight or comment the significance of their method. This event may be due to the Thai culture in which such an argument seems to be too assertive and less acceptable; this is consistent with Jogthong (2001) who suggests that Thai authors are

more likely to be reluctant to assess the work of others. Examples from the native corpus include the following:

- (19) However, the difference between MRC and MAC was statistically *reliable* in Test 2 only where the test was composed of multiword expressions ($t(100) 53.95$, $p < 0.001$, $g250.07$). These data, therefore, appear to support a positive answer to the second research question. (N9R)
- (20) As a result, much of the data used in this paper have been taken from the BoE because, as the larger of the two corpora, it is liable to yield more *reliable* results. (N4R)

Self-mentions

In terms of self-mentions, the Thai writers were found to use far less self-mentions than the native counterparts in terms of frequency. In an effort to further explain why the Thai writers employed the pronouns *I-we* less often and how it was used in the context, the concordance lines of all occurrences of *I-we* were examined to identify discourse purposes that the native English and Thai writers conveyed. The contextual analyses of the use of *I* in both group of writers' texts showed that the Thai writers did not use self-mentions to express a strong authorial identity or to indicate contribution to the studies, but tended to merely recount what was done, as in (21):

- (21) In the third research question, *I* further explored if there was any

metacognitive and cognitive reading strategy... (T5R)

However, when examining the use of *we* in the concordance lines of Thai corpus, it was discovered that the majority of them used inclusive *we* in order to shorten the distance between the writers and readers and to claim solidarity with readers as in (22)

- (22) Therefore, *we* can see that in this case there is a direct transfer from the Punjabi culture. (T9R)

The native English writers, on the other hand, seemed to show overt authorial involvement with the use of *we* as in (23) and (24), suggesting that the native English writers used inclusive *we* to emphasise the solidarity with their readers. This is in line with Hyland (2002a, 2002b, 2011) and Lin (2013) who claimed that through the first person pronoun, writers can claim authority by expressing their conviction to seek recognition for their works.

- (23) These assumptions, as *we* shall see, do not stand up well under scrutiny. (N13I)
- (24) We concluded that *we* can have little confidence in the meaningfulness, reliability, and validity of several of the aviation language tests. (N8A)

Moreover, the native English writers also used inclusive *we* to lessen their responsibility in making claim, as in (25):

- (25) *We* assumed that the tests were in some sense discrete and therefore included the results below. (N8R)

However, the infrequent use of the personal pronoun among the Thai writers may be attributable to their academic rhetoric characteristics to appear modest in front of expert audience, defer to authority and distance themselves for the purpose of objectivity, as corroborated by the previous studies (Charoenroop, 2014; Flowerdew, 2001; Jogthong, 2001; Prasithrathsin, 2014). The recent study of Charoenroop (2014) claimed that these differences between Thai and native English writers resulted from their different cultures, i.e. the collectivistic culture (such as people from Thailand) versus the individualistic culture (such as people from the United States), which shapes their linguistic style. Jogthong (2001) also believes that citing of one's own research was hardly found in the Thai authors' research article introductions, which may result from self-promotion that seems to be less acceptable in the Thai culture. Similarly, Prasithrathsin (2014) also found significant features of objectivity and detachment in Thai academic writing. However, Hyland (2011) argues that in social science, presenting authorial self can help to construct an intelligent work and create a credible image, as well as engage a reader. Due to limited access to the world, our understanding can merely be negotiated by a theory to explain it; thus, knowledge is considered as a rhetorical construct.

CONCLUSION

Traditionally, academic writing has been considered as expressing information in an objective manner, which avoids stating personal views and orientates towards the research activities being reported (Hewings & Hewings, 2004). However, grammatical devices that reflect authorial identity help writers to form opinions, evaluate and make judgments on the ideational content that they are writing about. Through such expressions, the writers can shape how the readers construe and assess the content matter. In this study, the frequency analysis, which was followed by textual analysis of the seven stance markers and contextual analysis, in its widest sense revealed that the native English writers were found to be overt when promoting their authorial identity in using stance markers, while the Thai writers' use of stance markers was intended to exhibit rhetorical functions that lessen strong degree of authority. This difference is attributable to their different culture-oriented background, i.e. collectivism versus individualism, which, in this study, is discovered to influence their linguistic features. For instance, in the case of self-mention, it was shown that the native English writers and the Thai writers expressed different affinity towards the authority as they become the prominent features in the native English corpus but not in the Thai corpus. In conclusion, discourse choices are socially shaped and

influenced by the researchers' socio-cultural background.

Given that evaluation emerges from the context and co-text, rather than isolation, this current research explored authorial identity beyond individual lexicogrammatical forms by taking clause-level linguistic features such as the *anticipatory* it pattern into consideration. With a larger corpus, additional clause or sentential level linguistic features of authorial identity such as *that*-clause type, verb tense and voice merit closer investigation in future studies. Moreover, to achieve a more comprehensive knowledge about the influence of socio-cultural background on the linguistic features usage which manifest the authorial identity, it is necessary to compare and contrast various cultural background other than those included in this study.

The implication of the current study is its pedagogical aspect to educate Thai writers to display research novelty that aligns with the global community and to project authorship in ways that conform to the requirements for international publication. This study could help academic writing instructors of English as a foreign language (EFL) and second language (ESL) learners to expose linguistic features that highlight authorial identity and examine how writers present their authorial stances throughout their article. This study has also provided useful knowledge for novice writers regardless of whether they are native or non-native English speakers.

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The Subaltern Speaks: A Feminist Reading of Eugene O'Neill's "Sentimental Stuff"

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ABSTRACT

Eugene O'Neill has always attracted criticism for his biased portrayal of women characters in his plays. Women have been portrayed solely from the male point of view and O'Neill is not alone in this as this lopsided depiction of women is as old as patriarchy. O'Neill's short poem "Sentimental Stuff", thus becomes an enigmatic expression of the traditional male and emancipated female voice in a typical courtship setting. The poem under consideration, unfolds like a well-crafted drama wherein we witness the frustration of a male poet when his beautifully written poetry fails to please his lady love. The male poet cannot think beyond the sensuous charms of his ladylove whereas the woman concerned wants to be appreciated for her wits rather than physical beauty. This paper places this contrast under the wider ambit of feminist criticism, where the male gaze is dissected using the concept of *ékphrasis* and the latent patriarchy in supposed romantic poems is exposed. The paper also deconstructs the poem to bring out various ways of objectification of women. Historically, men have always controlled the pen and therefore, portrayal of the sexes. Any effort by the 'signified' to break the stereotype is met with disapproval by the 'signifier'. This poem by O'Neill brings to surface the vast gap between perception and reality and the refusal of the traditional mindset to accept it when it comes to male-female equation.

Keywords: Feminism, *ékphrasis*, objectification of women, patriarchy

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INTRODUCTION

Eugene O'Neill has long been celebrated as one of the greatest dramatists that the USA has produced. His plays have always struck a chord with those at the margins of popular discourse. Breaking the shackles of popular melodrama, he brought the heroism inherent

in the ordinary men on surface and imbued them with nobility, vitality and grandeur. Amidst all the glorification of a Nobel Prize and multiple Pulitzer Prizes, there have been accusations of biased portrayal of women characters in his plays.

It is in this context that this paper seeks to present the poem "Sentimental Stuff" as a very interesting and intriguing read. Through this paper, an attempt is made to explore the way women have traditionally been objectified in poetry and the way Eugene O'Neill has tried to break the mould of conventionality and given voice to the women by actually placing the female at the subject position in contrast with the patriarchal system. This poem manages to convincingly break many stereotypes associated with Eugene O'Neill, the artist and the portrayal of women in literature - both at the same time.

The poem can be analysed as a dramatic monologue interjected with a very powerful voice of "femininity". The dramatis personae are a male poet and his beautiful muse. It consists of a total of nine passages of five lines each - the first five passages are deceptively simple, written in typical fashion of courtly love poems, extolling the physical charms of the lady who is apathetic to the ballads, sonnets and villanelles written in her praise. She does not succumb when the male poet pens beautifully worded and rhymed poetry, honouring her freckles and lips and nose. The turnaround comes in passage six, when out of sheer desperation, he writes something half-heartedly, appreciating her mental faculties and wit, and the lady falls

for it. The male poet is exasperated, he does not believe his own work, he does not agree with what he has written but it is accepted by the object of his love and writing. This is a unique situation - a triangle between the subject, the object and the work of art. In the first five passages, the male poet is the dominant one, objectifying the female through his poetry and by the end of it, the object takes control of her portrayal and turns the age-old patriarchal depiction of women on its head and has the last laugh.

DISCUSSION

Let's have a look at the poem now:

I WROTE a sonnet to her eyes,
In terms Swinburnian and erotic;
Poured out the burden of my sighs
With language lurid and exotic--
She did not heed.

I wrote a ballad I deemed fair
With sprithy play of silver rhyme
To sing her glorious golden hair
Aglow with sun in summer time--
She did not hear.

I wrote a soulful villanelle
About the wonder of her mouth,
Lips like the crimson flowers that dwell
In forests of the tropic south--
She made no sign.

I wrote a musical rondeau
To praise her roguish little nose,
Dabbed at with powder, white as snow,
Through which a freckle warmly
glows--
She would not see.

I wrote a solemn, stately ode,
Lauding her matchless symmetry,
I thought that this might be a road
To open up her heart to me--
She spoke no word.

Then in a feeble triolette,
I told the keenness of her wit;
A blush of anger o'er me crept
I was so much ashamed of it
--She fell for it--
--And this is it--

"What matters it if you are fair?
I love you for your wit,
Your mental poise, your wisdom rare,
What matters it if you are fair?
Beauty is fleeting, light as air
I'll nought to do with it,
What matters it if you are fair?
I love you for your wit."

She praised this assininity
And scorned the good ones that I wrote,
This bunch of femininity,
On whom my fond affections dote--
Has got my goat.

She put my real ones on the pan,
And gave my puerile one a puff,
And said, "I'll love you if you'll can
That horrid sentimental stuff--
I've had enough."

(Neill)

A classic war between the sexes - a desire by the man to measure women on the scale of beauty and an equally strong resistance by the woman and the counter effort to be measured on the scale of wit - this is the crux of this poem by Eugene O'Neill. The poem

opens itself up to multiple interpretations at various levels - from ekphrasis to male gaze to phallocentric nature of language to feminism. Primarily, the premise is very simple - an effort by a male poet to win the favours of his lady love by writing verses appreciating her physical beauty. This is what men have been doing since ages - this is what they decided, is to be praised in a women other than her purity, of course! No one has ever asked what the women want to be appreciated in them - do they feel delighted when they are treated as mere bodies without a functional brain or a single logical thought? Thus, for the male artist, the woman becomes an object to be painted - either with colours or with words - hence the charges of objectification of women.

The Oxford Dictionary of the Classical World defines ekphrasis as "an extended and detailed literary description of any object, real or imaginary". Thus, ekphrasis bridges the gap between the visual and the literary i.e. the image and the word or the signified and the signifier. According to WJT Mitchell in his Picture Theory, in feministic terms this binary opposition can be extended to the female image verses the male word. The female image is objectified and gazed, while the male author or artist is the subject and the gazer. (Uzundemir, 2014) O'Neill cheekily refers to Swinburne as if foretelling this very interpretation of his effort because being a prominent member of Pre- Raphaelite Brotherhood, creating sensuous, verging on the erotic, images of females, was the forte of AC Swinburne. The same objectification of female form is evident in the works of

male Romantic poets such as John Keats and P. B. Shelley. John Keats's "Ode on a Grecian Urn" (1819), a poem that explicitly feminises the work of art, figuring it as "a still unravished bride", paradigmatically reflects the inherent tendency of ekphrasis to conceive aesthetic relations between poet and art object in terms of gender and sex role (Guimarães, 2012).

In "Sentimental Stuff", the male poet follows this age-old tradition of portraying women as objects very seriously. In the first five passages, the reader is subjected to the description of the loveliness of the parts of the object concerned. Not even once, is she referred to as being whole- she is just a sum of many beautiful parts. Blazon was introduced by the great Italian sonneteer Petrarch during Renaissance, in his romantic poems wherein, different parts of the beloved's anatomy are described, analysed and compared with other objects as a way of appreciation by the male suitor. And it was imitated by numerous love poets including Philip Sidney, Edmund Spenser in the 16th century to John Donne, Andrew Marvell in the seventeenth century. In 18th century, from mere objectification of female form, it got converted into satirical and degrading description of woman's physical attributes whereas Pre-Raphaelites and Romantic era poets used it to evoke sensual imagery- the common refrain being passive, silent body of woman under intense male gaze where each part of her anatomy is poetically described ostensibly for the male reader of the work under the garb of appreciating woman.

Sir Edmund Spenser in stanza 10 of 'Epithalamion' describes the beauty of his newly wedded wife without realising that in the process, he is actually objectifying her by comparing her body parts to unconnected inanimate objects:

Her goodly eyes lyke Saphyres shining
bright,
Her forehead yvory white,
Her cheekes lyke apples which the sun
hath rudded,
Her lips lyke cherries charming men
to byte,
Her brest like to a bowle of creame
uncruded,
Her paps lyke lyllyes budded,
Her snowie necke lyke to a marble
towre,
And all her body like a pallas fayre,
Ascending uppe with many a stately
stayre,
To honors seat and chastities sweet
bowre. (Spenser, 1997. Print)

Her eyes, forehead, cheeks, lips, breast, neck... are compared to precious jewels, fruits, flowers and white smooth cream, later her chastity and shyness are over emphasised and we are left wondering at this advertisement of a perfect bride- she should be beautiful and untouched - two basic conditions set by patriarchy which hold true even today to eulogise woman.

And Spenser still fares better than his contemporary Philip Sidney who wrote love poetry in which the lady was not only the object but also incidental and the love was more of self-love. For him appreciating

his lady love is akin to praising parts of her body irrespective of the fact that such fragmentation of another human-being renders her into a mere object with the poet manipulating and controlling the image. In the first song of *Astrophel*, for instance, Sidney writes a blazon on his beloved, devoting a separate stanza to each adored body part: eyes, lips, feet, breast, hand, hair and voice.

According to Maria Baker:

"Segmented and scattered into images of fetish worship, the adored female body like a shattered mirror broken into brightly polished fragments reflects to the speaker his own act of self-creation as a master poet.

"Doubt you to whom my Muse these notes intendeth

Which now my breast o'ercharged to music lendeth"

He begins and focuses attention as much on his own act of creation as on the woman." (Baker, Vol. 56, No. 2 (May, 1991))

There can be several other instances of such objectification of the female body but Robert Herrick's short poems focusing only on parts of Julia's body without mentioning her as a sum of those parts is worth mentioning here. He writes 'Upon Her Eyes', 'Upon Her Feet', 'Upon Julia's Breasts', not to please the lady love but to share his erotic fancy with his male readers. And as per Ms. Baker, "The eroticized part, in fact, denies the female body its integrity and erotic power

which Herrick transfers to one part. The erotic relationship of greatest import is not the imagined one between the poet and the woman but the one between the poet/gazer and the fetish he has created in language."

Andrew Marvell's 'To his Coy Mistress' is a poem of seduction, scaring the woman of transience of beauty and youth and exhorting her to make use of it by making love to the male suitor without pretending to be coy.

An hundred years should go to praise
Thine eyes, and on thy forehead gaze;
Two hundred to adore each breast,
But thirty thousand to the rest; (Marvell)

Again, the physical charms of the mistress have been alluded to - right from her eyes to breasts and other parts which are worthy of long devotion but alas, human life is not long enough to indulge in the games of love and she should drop the act of coyness and get into the act of sexual love making without wasting further time.

"worms shall try
That long-preserved virginity,
And your quaint honor turn to dust,
And into ashes all my lust"

She is passive and silent throughout and the poet takes the objectification further by making it sufficiently clear that it's her body which he is interested in and any denial on woman's part would mean that she is inviting death and decay. The sentiments

shift from adoration to accusation pretty swiftly as the male subject is not willing to give much room for denial or dissent to the object. There seems to be a basic inability to accept woman as a whole - a complete person with a mind, a body and a soul. And the reason is simple - body can be objectified, can be versified, can be owned or controlled while portraying a complete persona through words would be a complex task, since it will involve viewing the woman as a human being - at par with man and not as a beautiful object.

Mitchell cites a passage from German writer Gotthold Lessing's *Laocoon* (1766) in which Lessing describes words recreating images as "convert[ing] a superior being into a doll," an attitude Mitchell characterises as word's fear of "castration" by the image (Mitchell, 155). Thus, the poet narrator in "Sentimental Stuff" is in control of those words which, according to him, best describes the virtues of his lady love. Thus, her eyes become the topic of an erotic sonnet on the lines of Swinburne and the hair which have long been a symbol of femininity and latent sexuality, inspired a fair ballad and the wonders of her mouth saw themselves getting transformed in to a villanelle. The male contemplator excels in creating word painting of his aesthetic object. He controls the pen; therefore, the authority to represent the woman lies with him rather than her. Here, speech and control are the male domains whereas being a passive visual is the female destiny. If we look at it in terms of binary opposites then it's a clash between the word and the image, subject and the

object, male and the female. The word, the subject, the male tries to define, control and own the image/object/female.

"The female head is a particularly rich and important site in the symbolization of gender and the linking of gender to the transcendental values of specific cultural and religious systems"...the anatomical part of female body that gives women a voice and an identity that thereby threatens to unmake and disrupt the classic gender discriminations that have linked men to speech, power, identity and mind (Eilberg-Schwartz, 1995).

This phenomenon of male image-ownership of female identity thus, serves to sate both lust and the need for men to remain the dominant gender. In our poem, the male poet has some latent need to project the lady as physically very attractive, perhaps which satisfies his sense of possession or ownership and this possession he wants to show off through equally fetching verse which again, is aimed at self-satisfaction. He controls the pen i.e. the art and the woman i.e. the object.

This observation brings us to the second half of the poem where there is a complete volte face. The male poet writes a technically weak poem with a different content. Hence, this time the form is weak; it's not a fair ballad, or an ode or a technically perfect sonnet but a weak triollette. He is not happy with his work. He doesn't find it critically praise worthy but the lady succumbs to it. This poem so beautifully sums up the typical masculine response to 'this bunch of femininity'- this bunch of femininity

that refuses to feel flattered by the choice of words or the poetical form which the poet narrator so lovingly bestows upon her. The man is so used to objectification of women that even in poetry, he is disturbed about having to pen verse to accommodate the demands of his lady love, feeling insulted that his superior verse was rejected and just cannot quite understand how an inferior quality work can make a woman so happy. The reason is quite simple - the typical male cannot see beneath the skin - the form, the rhyme, and the words i.e. the outer covering has to be perfect and as per the accepted norms of literary canon but the sense which is being conveyed, the message being rolled out, once again confirms the traditional equation between the sexes. An interesting point is that the lady in question is absolutely blasé about the appreciation of her physical attributes and does not care much about the form of the verse which finally appreciates her wit, intelligence and mental poise. Are we not turning the long-held notions about superficial and deep here? The male poet cannot see beyond the surface whereas the female is more particular what the words are conveying rather than the form or the outer covering. Hence, poem and woman become one in the hands of poet the man. In both the cases, he is more concerned about the body than the soul - what he has to say slides behind how he is saying it.

And there is a way to put the female down despite all her efforts at retaining control over her portrayal - the females of the world just cannot appreciate good

poetry. The ability to appreciate art still remains a masculine bastion.

She praised this assininity

And scorned the good ones that I wrote,

The women can read and write, they might become aware of their rights and the injustice meted out to them, still they cannot separate good poem from the bad one i.e. the aesthetics are not developed yet. The Feministic war cry sounds shrill, because the woman is made to appear immature and unappreciative of standards set for good poetry. Here, the charge is that of culture and class - it is almost a colonial mindset where the coloniser can never accept that the colonised can ever reach the sublime intellectual levels which come naturally to them. It's the voice of the subaltern which is being made fun of. In a predominantly male discourse, the women are made to sound illogical. The poem at one level comes across as some inside joke among the men - a joke on feminists, those who are serious about their portrayal in literature. At the end, it's the man laughing at the attempt of woman to be taken seriously. He can condescend, he can oblige, but can never actually credit the woman with wit or intellectual capacity and lady's approval of bad poetry is all the proof that he needs to show that despite their best efforts, the women don't have it in them.

Derrida states that language, by its very nature, is logocentric, phallogocentric and operates in binary oppositions. According to him, Western thought since Plato has

been greatly affected by the “metaphysics of presence”- a system of thought which operates in binary oppositions and tends to define one as the lack or absence of other/s and inadvertently creates a hierarchy where one term of each dichotomy is perceived to be more privileged than the other- master/slave, culture/nature, subject/object, male/female and so on. This dualism essentially conveys the idea that a male is what a female is not; hence, if the male is rational then the female is irrational, if he is strong, it automatically implies that she is weak and if he is the subject then of course, she has to be one of the objects. Therefore, women can never achieve active subject position in a discourse as language, invariably gets trapped in the system where distinction empowers subject at the cost of object and patriarchy ensures that man remains in the subject position. As per Juliet Mitchell, women have been excluded from symbolic order. Men have controlled pen and therefore, the system of language, education and eventually culture. To become a part of this symbolic order or language, one needs to be masculine. Thus, females or feminine can make appearance only as objects within this masculine order and serve as commodity to be exchanged within masculine economy. Hence, Lacan and Spivak contend that women can never acquire subject position, can never speak and cannot develop a feminist symbolic.

The most serious threat to the patriarchal system comes from the fact that masculine depends on the female body for its birth, survival and sustenance. Therefore, in most

patriarchal systems, women have been reduced to biological functions. If a female refuses to be typecast, it is no surprise that she ends up frustrating the male.

Hence, the declaration by the baffled poet:

This bunch of femininity,
On whom my fond affections dote--
Has got my goat.

In O'Neill's poem, the male poet himself plays the critic to his own work and smugly attributes perfection to his initial poetic creations. He is measuring his work by the yardstick set for good piece of poetry and is not concerned in the least about the impact it is having or not having on the female for whom this piece was originally conceptualised. What the lady expects from her poet lover is immaterial...being a woman she should be happy that her eyes and nose are being immortalised through poetry. How she wants to be known or remembered is inconsequential. The poet lover is at his best when he has to portray her physical features but is at total loss of ideas when he is forced to appreciate her wisdom, mental poise and wit. These virtues certainly, to him, are not suitable for being applauded through the medium of poetry or perhaps these virtues are not to be appreciated in the lady who he loves. So, a woman can be loved merely for her physical charms, intellectual gifts are not required. And if they are there, then praising them becomes a challenge, because either the woman's wit is not praiseworthy when compared to man or it is not praise worthy

in a woman at all! For either of these two reasons, the poet lover is at a total loss of inspiration and poetic flair when forced to write on some other attributes other than physical.

The lady in our poem wants to be identified as witty, sharp and intellectually gifted. She needs this assertion from the man. It is as if she believes this fact about herself when it comes from him. This demand from her, limits the freedom that the male poet earlier had while writing poetry. He could choose his subject and write freely, but with this new imposition, his freedom is arrested and the result is a weak artistic creation. This system is often mistakenly called love but is in fact nothing more than emotional alienation and a denial of freedom through conflict with the other (Sartre, 1958, 2003).

She needs to see herself through the eyes of the man as an intellectually competent person; she doesn't want to be stereotyped. From the philosophical point of view, this again is a kind of submission to someone other than the self; yet, from the Feminist point of view, this is a major breakthrough. After centuries of objectification, we finally have a female who rejects this man-made sentimentality as:

And said, "I'll love you if you'll can
That horrid sentimental stuff--
I've had enough."

The lady certainly is Avant-garde. She is not interested in these age-old techniques of wooing. She is assertive and demanding, has the tenacity to reject beautifully worded

poetry if it does not appeal to her own parameters of appreciation. She does not accept praise as a favour rather, she accepts it as her due and knows exactly what in her she wants to be extolled. She is the new woman - she wants an acknowledgment of her gifts beyond a mere biological coincidence. She knows that she is beautiful but does not want to be defined by her looks alone. She is challenging enough to force the man think out of his comfort zone. There is nothing new or creative in praising the eyes or lips or neck of the women; she raises the bar here, and not surprisingly, the man fails. He comes up with his weakest work yet. And he is upset with himself as well as her for being put in this situation. His frustration is the frustration of every single man who still refuses to see women other than mere objects. O'Neill makes the woman appear logical, rational and calmly assertive in contrast with the initially over-confident suitor.

CONCLUSION

From the above discussion, it can safely be concluded that Eugene O'Neill was not indifferent to the age-old bias against women in literature. In this poem, he actually manages to distance himself from his male protagonist who is also a poet just like him, and create a female who is self-assured enough to reject sentimentality in favour of wit and intellectualism. This rejection of "sentimental stuff" does not make her less feminine, rather, it helps her in breaking the Madonna/ Eve stereotype. In fact, O'Neill's lady is a complete individual in her own

right. She does not symbolise 'lack' of anything; she is a complete individual in and she has full support of O'Neill in her endeavour. That is the reason the poem that started with the traditional literary attempts of the male poet, ends with the calm assertion of the female that: "I've had enough". To put forward her point of view, she does not have to portray the male in a negative light, she does not have to either accuse him or make fun of him the way the male does. She is not playing in the realm of binary oppositions for a change. The male poet though comes across as bigoted, used to having his way, while the female simply rejects his efforts with the confidence of one who knows her worth.

Thus, through this poem, Eugene O'Neill successfully presents himself as a conscientious artist who is equally sensitive to the dissent and frustration among the intellectually aware females as to the lost and highly sensitive men on the margins of popular discourse. In his plays, probably the women did not get much space, perhaps he, as a dramatist, desired to highlight certain other issues which claimed his attention but at least in this poem, he manages to bring out the grudge of several generations of feminist thinkers against the objectification of women in literature to hammer home the point that perhaps, it is high time that women get a voice of their own, even in the literature penned by "the other sex".

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Procrastination Behaviour, Stress Tolerance, and Study Habits: A Cross-Culture Analysis

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ABSTRACT

The study 'Procrastination Behaviour, Stress Tolerance, and Study Habits' attempts to fill some gap of cross culture analysis in two places: Kerala and Abu Dhabi, since there are large numbers of Indians in Abu Dhabi. A student showing procrastination behaviour in a school setting is likely to be stressed out with poor study habits. Data were analysed using the statistical techniques; such as Test of significance (t-test) of the difference between means for large independent sample, Product-moment coefficient of correlation – person r. The results of this research revealed that students of U.A.E. have a lower level of stress tolerance, when compared to those from Kerala, but no significant difference was observed with procrastination behaviour and study habits.

Keywords: Academic achievement, learning behaviour, procrastination, stress tolerance, study habits

INTRODUCTION

"Time and tide waits for none", this proverb stands correct in today's competitive world. Time is irreplaceable and irreversible. The way we elect to spend our time determines the quality of our lives. As far as an

individual is concerned, time has a major role to play. So, all students should be aware of it, and try to properly schedule time. One who fails to do so ends up losing. Most of the time students are found to procrastinate because of their lack of awareness on how to schedule time properly. Very few studies have been done to understand students' Procrastination Behaviour, Stress Tolerance, Study Habits, and Academic Achievement. This study attempts to fill this gap by looking at Kerala and Abu Dhabi, since a huge percentage of Abu Dhabi population is from India. Again, this is a large-scale study conducted in this area.

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Procrastination behaviour, as noted above, means postponing or putting off doing something until a future date. It also implies a failure to initiate or complete a task. The phenomenon of procrastination has received attention from various researchers in recent years. It is considered as an unfavourable behaviour. It has its own role in the field of education. A student showing procrastination behaviour in a school setting is likely to continue this attitude to other organizational settings. It therefore becomes essential to identify the procrastinators and give them guidance to change the behaviour. The present study deals with the procrastination behaviour of students of Class X and Class XII. According to Morris (1978), for Harris and Sutton (1983), "Procrastination is an act of putting of a task that either the local person or other role senders expect to be done at the present time". Solomon and Rothblem (1986) have described, "Procrastination as the act of needlessly delaying tasks to the point of experiencing subjective discomfort". Lay (1986), considers "Procrastination as the tendency to delay that, which is necessary to reach some goal". The term "Stress Tolerance" refers to a person's ability to withstand stress without becoming seriously impaired (Carson & Butcher, 1992, p. 144) if a person is marginally adjusted, the slightest frustration or pressure may be highly stressful. A person who is generally unsure of his/her adequacy and worth is much more likely to experience threats than a person who is generally confident and secure. Stress tolerance is the "ability to handle

emotionally charged situations and to resist turn out in demanding environments". A habit is an automatically learned behaviour pattern that enables an individual to handle specific types of environmental situations easily. The student who has acquired good study habits has developed a behaviour, which enables him or her to sit down and begin working on his or her assignments with minimum concentration. Habit permits to attend to routine pattern connected with settling down to work without having to give them much thought. The term "Study Habits" indicates the score yielded by the Study Habits Inventory (Tussing, 1962). Study Habits is defined as, to help the students see some areas in which successful student differs from those who are doing well as they should. The student is able to see his or her learning behaviour compared with other student patterns.

Most students face serious threat due to the lack of awareness on how to perform well academically. Students who are low in conscientiousness typically have poor study habits and lack of self-discipline and control. These students can be found partying or watching videos the night before exams. Students who lack conscientiousness seem to lose their notes, books, and assignments, have trouble settling down to study, and give up quickly when the material is difficult. In short, students who are under stress can cause a big loss to the nation. The critical requirement is to sweep out stress from student's brains. Therefore, the need to identify stress tolerance of students and explore the various factors like

procrastination behaviour, stress tolerance and study habits becomes important.

LITERATURE REVIEW

Anxiety is one of the causes for procrastination. Students are particularly fearful of tests and other situations in which their performance is evaluated. Low conscientiousness also is the basis for academic procrastination. Students who are low in conscientiousness typically have poor study habits and lack of self-discipline and control. Lack of planning is the common fault among students who procrastinate. Planning has a few simple components that need to be thoughtfully combined; awareness of time, events, and resources (Robert, 1997). Those who procrastinate are vulnerable to stress as a result of their lower self-esteem and perceived inability to cope and to control their lives. Flett, Blankstein and Martin (1995), studied procrastination and stress and found that people who score high on procrastination also report feeling hassled. In addition, they report that their hassles are persistent and have an impact on their lives. They feel unable to cope and are upset about their situation. Studies also show that these feelings of stress are related to the depression that is so often associated with procrastination. Feelings of constant stress are related to overall psychological adjustment and life satisfaction. Mc Dermott (1996), did a nationwide study of developmental and gender prevalence for psychopathology in childhood and adolescence. The study indicated that boys and girls express their

adjustment problems somewhat differently, especially during middle adolescence. Troubled boys usually externalize their turmoil through rebellious and disobedient behaviour; whereas girls are more likely to internalize distress by withdrawing socially, complaining of somatic complaints or feeling tense, depressed or moody. For most teenagers, positive life events and supportive relationships with family members, other adults and peers serve as an emotional buffer during hard times (Frey & Roethlisberger, 1996). Kleijin & Topman (1994), conducted a study on cognition, study habits, text anxiety and academic performance. The Study Management and Academic Results Test (SMART) were developed to measure study and examination related cognitions, time management and study strategies. This questionnaire was used in three prospective studies, together with measures for optimism and test anxiety. In the first two studies done among 253 first year students enrolled in four different faculty, the highest significant correlations with academic performance were found for SMART scales. In a replication study among 156 first year medical students at a different university, the same pattern of result was observed. A step wise multiple regression analysis, with academic performance as a dependent variable, shown significant correlations only for the SMART Test Competence and Time Managements. Gonzales, Cauce, Friedmen, and Mason (1996), conducted a study on family, peer, and neighbourhood influences on academic achievement among African-American adolescents.

Using a 1- year prospective design, this study examined the influence of family status variable (family income, parental education, and family structure), parenting variable (maternal support and restrictive control), peer support, neighbourhood risk on the school performance of 120 African-American junior High School students. In addition to main effects of these variables, neighbourhood risk was examined as a moderator of the effects of parenting and peer support. Family status variables were not predictive of an adolescent school performance as indexed by self-reported grade point average. Maternal support at Time 1 was prospectively related to adolescent grades at Time 2. Neighbourhood risk was related to lower grades, while peer support predicted better grades in the prospective analysis. Neighbourhood risk also moderated the effect of maternal restrictive control and peer support on adolescent grades in prospective analysis. These finding highlight the importance of an ecological approach to the problem of academic achievement within the African-American community.

From the above literature, it can be seen t hardly any investigation has been done in this area and the following hypothesis are formulated for further investigation based on the above-mentioned variables.

- H1. There is a significant difference between students in Kerala and United Arab Emirates based on the variables, Procrastinations Behaviour and Study Habits.

- H2. There will be significant correlations among Procrastinations Behaviour, Stress Tolerance, Study Habits, and Academic Achievement for Kerala and United Arab Emirates samples.

MATERIALS AND METHODS

The major variables in this study are Procrastinations Behaviour, Stress Tolerance, Study Habits, and Academic Achievement. The data for these variables were collected from students of Class X and Class XII of Thiruvananthapuram and Abu Dhabi. The data were analysed using the following statistical techniques. Test of significance (t-test) of the difference between means for large independent sample, Product-moment coefficient of correlation – person r.

Sample selection and survey administration

Stratified sampling has been used to select the sample for the investigation. Researcher divides the entire population into different strata based on the location of the school, then randomly selects the final subjects proportionally from the different strata. The sample for the study has been drawn from Higher Secondary Schools of Thiruvananthapuram district, Kerala, and from Higher Secondary Schools of Abu Dhabi, U.A.E. The population for the study consists of students (male and female) from class X and class XII.)

The following representation was made in the sample. Initially, the total sample size was 500. Out of these 500 around 250

students from Abu Dhabi and 250 students from Thiruvananthapuram were taken. The students were from Class X and Class XII and in the age group of 15 years to 18 years. Equal importance was given to both male and female students. The sample included members of all the three main religion groups, viz., Hindus, Christians and Muslims. The students in both culture (U.A.E. culture and Kerala culture) were following the same system of education. Of this targeted 250 students only 210 students were selected to maintain the homogeneity of the group.

Table 1

Categories of male and female students in Thiruvananthapuram on the basis of the class in which they are studying

Class	Male Students	Female Students	Total
X	50	59	109
XII	48	53	101
Total	98	112	210

In Table 1, the sample of 98 male students, 50 study in Class X and 48 study in Class XII. Similarly of 112 female students 59 study in Class X and 53 study in Class XII. Female students are slightly more in number than the male students.

Table 2

Categories of male and female students in Abu Dhabi on the basis of the class in which studying

Class	Male Students	Female Students	Total
X	61	59	120
XII	43	47	90
Total	104	106	210

In Table 2, the sample of 104 male students, 61 study in Class X and 43 study in Class XII. Similarly of 106 female students 59 study in Class X and 47 study in Class XII. Female students are slightly more in number than the male students.

MATERIALS

It is necessary to adopt or evolve a systematically relevant and valid procedure to collect essential data. In the absence of adequate tools, the investigator has to develop the same for the purpose of research. A brief description of the materials is given below:

Procrastination Behaviour Inventory

An inventory was used to measure the procrastination behaviour of school students studying at or above High School level. This inventory covers five aspects or areas where students may generally show procrastination behaviour. They are examination, assignment, sports and games, extra-curricular activities, and time management. For a positive item, a score of 5, 4, 3, 2 or 1 was awarded for A, B, C, D, or E respectively. For a negative item, the procedure was reversed i.e. a score of 1, 2, 3, 4, or 5 was awarded for A, B, C, D or E respectively.

Examples of Items are:

- a) *I always see that the assignments are submitted much before the due date*
- b) *I complete all my assignments in time*

Item Analysis

Mathew's Analysis Table (Mathew, 1982) was used for item analysis. The table gives item criterion correlation (Phi-coefficient) and percentages of tested marking the keyed answer (P value). The items were selected from those with highest correlation values and medium (in middle range) P values. Thus, items having a correlation value of 0.30 and above, and P value of 0.22 to 0.54 were chosen as the final items. The final scale considers 20 items of a total of 32 items.

Reliability

To deduce the reliability of the test Split-Half method was used. The test was split into two halves on the basis of scores on the odd and even items of the test. When the two-half screen was obtained for each person, it was correlated using Pearson-Product Moment method. The reliability of half test was found to be 0.74 (N=60). Using Spearman-Brown formula, the reliability of the test was found to be 0.85.

Validity

Studies have shown that procrastination behaviour was positively and significantly related to external locus of control (Trice & Milton, 1987). Considering this correlation was seen between the test and Locus of Control Scale (Sony & Sananda Raj), for this both the test was administered to a fresh sample of 50 Class X and Class XII students. The correlation was found to be 0.84. This shows that the test has concurrent validity.

A systematic examination of the test content showed that the test covers a representative sample of the behaviour domain to be measured. The content validity was built into the test from the outset through the choice of appropriate items, done through and systematic examination of relevant test books and consultation with subject matter experts.

AN INDEX OF STRESS TOLERANCE (STUDENT VERSION)

The test consisted of 20 items (statements) relevant to elicit students' stress tolerance level. All the items in the test were in the form of self-descriptive statements. In the draft test, there were 30 items. The test contains an equal number of positive (favourable) and negative (unfavourable items) items, and was administered to a sample of 350 individuals. "Mathew Item Analysis Table" (Mathew, 1982) was used for Item Analysis. The table gives item criterion correlation (Phi coefficient) and percentage of tested marking the keyed answer (P value) from the P values at the tails of distribution according to the criterion.

For doing analysis, response sheets were arranged in the ascending order, in order to select the top and bottom 100 subjects, who represent the high and low groups respectively. Counter 100 answer sheets having the highest criterion score, which constitute the upper tail. Similarly, 100 answer sheets having the lowest score forming the lower tail. For each item, the number of sample tested giving the keyed answers (items having a weightage of 4 &

5) was counted. The cases are 100 in each tail (upper and lower tail) so the number of persons making the keyed answers is in the form of percentage. Thus, the total number of sample tested for each item in the upper group (PU) and lower group (PL) was found out. From the table Phi-coefficient (Item Criterion Correlation) and P value for corresponding PL and PU for each item was noted.

Reliability

Split-half reliability method was used to estimate the reliability of the test. The test was split into two equal halves on the basis of odd items and even items (odd-even reliability method). A correlation coefficient between the 2 halves was found using Pearson Product-Moment Formula. Thus, the half test reliability coefficient of 0.7 was estimated. The reliability of the whole test was found out using Spearman Brown Formula. Thus, reliability coefficient of 0.82 was obtained. This index of reliability shows that the test is highly reliable. This value of reliability is significant at 0.01 level.

Validity

The validity of the test was estimated with the help of empirical or criterion related validity, and determined by correlating the present scale with "Stress Tolerance Inventory" of Balagangadharan (1998), as reported in the manual (Sananda Raj & Reshmy, 1999). Both the tests were administered to a sample of 40 subjects and the correlation coefficient was estimated

as 0.72. This index of validity shows that the test is an adequately valid, the value of validity coefficient being significant at 0.01 level.

STUDY HABITS SCALE (REVISED)

The scale consisted of 20 items (statements) to elicit responses of students 'study habits'. The scoring was done as follows. A score (weightage) of 5, 4, 3, 2, or 1 was given to the category A, B, C, D, or E respectively in the case of a positive item. The weightage was in the reverse order for a negative item, i.e., 1, 2, 3, 4, or 5 was given for A, B, C, D, or E respectively. The scores for the separate items were then summed to obtain the Study Habits Scale score of the individual. The maximum obtainable score was 100 and minimum was 20.

Reliability

The test-retest reliability of the scale is reported to be +0.92, on a sample of 75 students, with a time interval of one month. The odd even reliability was found to be +0.95 after correlation for alternation, calculation on a scale of 60 students.

Validity

Validity of the scale had been established by correlating the scores of the scale with the scales of Attitude towards Academic Work and Achievement motivation and the validity coefficient were found to be +0.84 and +0.79 respectively. This indicates that the scale is reliable and valid for measuring study habits of students.

PERSONAL DATA SCHEDULE

The investigator developed a Personal Data Schedule to collect data regarding relevant variables. The variables such as class studying, sex, place of study, educational qualification of parents, occupation of parents, total monthly income of the parents, order of birth, number of brothers and sisters, religion, and percentage of marks obtained in the previous examination.

RESULTS AND DISCUSSION

Comparison of Students in Kerala and U.A.E. for the variable Procrastination Behaviour

For the variable Procrastination Behaviour, the mean value for the students in Kerala is

50.50 and the standard Deviation is 9.40. The mean value for students in U.A.E. for the variable is 48.69 and the standard deviation is 10.06. The t-value obtained is 1.904. The details of the t-test are shown in Table 3.

For the variable procrastination Behaviour, the mean value for students in Kerala is 50.50 and the SD is 9.40. The mean value for the students in UAE for the variable is 48.69 and the SD is 10.06. The 't' value obtained is 1.904. The details of the 't' test is given below.

Table 3

Data and results of the t-test for the variable procrastination behaviour: Comparison of students in Kerala and U.A.E.

Sl.No	Group	N	Mean	Standard Deviation	t-value
1	Kerala	210	50.50	9.40	1.904
2	U.A.E.	210	48.69	10.06	

Note: The t-value is not significant statistically

In Table 3, the results indicate that there is no significant difference between students of Kerala and U.A.E. for the variable Procrastination Behaviour. This shows that even if there is Procrastination Behaviour among students of Kerala and U.A.E., it might be in equal amount.

Comparison of Students in Kerala and U.A.E. for the variable Stress Tolerance

For the variable Stress Tolerance, the mean value for the students in Kerala is 60.14 and the Standard deviation is 9.34. The mean value for the students in U.A.E. for the variable is 59.39 and the Standard deviation is 9.15. The t-value obtained is 4.158. The details of the t-test are given in Table 4.

Table 4

Data and results of the t-test for the variable stress tolerance: Comparison of students in Kerala and U.A.E.

Sl.No	Group	N	Mean	Standard Deviation	t-value
1	Kerala	210	60.14	9.34	4.158*
2	U.A.E.	210	56.39	9.15	

Note: The t-value is not significant statistically

In Table 4, the results indicate that there is significant difference between students of Kerala and U.A.E. for the variable Stress Tolerance, and still different if culture is considered. Students of Kerala have more level of stress tolerance compared to the students of U.A.E. The present study shows that students studying at U.A.E. have low tolerance level. The children of U.A.E. have very less chances of facing stressful situation. They are overprotected by their parents and so hardly have to face any problems. This makes them more

susceptible to stressors, and very less tolerant to stressful situation (Carlson & Butcher, 1998).

Comparison of Students in Kerala and U.A.E. for the variable Study Habits

For the variable Study Habits, the mean value for the students in Kerala is 69.89 and the Standard deviation is 9.53. The mean value for the students in U.A.E. for the variable is 69.00 and the Standard deviation is 11.30. The t-value obtained is 0.873. The details of the t-test are given in Table 5.

Table 5

Data and results of the t-test for the variable study habits: Comparison of students in Kerala and U.A.E.

Sl.No	Group	N	Mean	Standard Deviation	t-value
1	Kerala	210	69.89	9.53	0.873
2	U.A.E.	210	69.00	11.30	

Note: The t-value is not significant statistically

In Table 5, the results indicate that there is no significant difference between students of Kerala and U.A.E. for the variable Study Habits. This shows that the study pattern followed by both the group might be the same or efficient enough.

Comparison of Students in Kerala and U.A.E. for the variable Academic Achievement

For the variable Academic Achievement, the mean value for the students in Kerala is 65.83 and the Standard deviation is 10.77.

The mean value for the students in U.A.E. is -0.995. The data and results of t-test are for the variable is 67.05 and the Standard deviation is 14.11. The t-value obtained given in Table 6.

Table 6

Data and results of the t-test for the variable academic achievement: Comparison of students in Kerala and U.A.E.

Sl.No	Group	N	Mean	Standard Deviation	t-value
1	Kerala	210	65.83	10.77	-0.995
2	U.A.E.	210	67.05	14.11	

Note: The t-value is not significant statistically

In Table 6, the results indicate that there is no significant difference between students of Kerala and U.A.E. for the variable Academic Achievement. The level of achievement is the same for both groups. The culture variation, the difference in the environment of the school is not creating any difference between the students in the academic achievement. This is in contradiction to the study done by Varghese and Govinda (1993), which stated that environment variation such as classroom environment, school setting and location of the school affects the academic achievement of students.

CORRELATION ANALYSIS

To find out the extent of relationship existing among the four major variables – Procrastination Behaviour, Stress Tolerance, Study Habits, and Academic Achievement, Correlation analysis is applied.

Correlation Analysis of the variables in Kerala Culture

The correlation coefficients existing among the four variables in the Kerala culture are given in Table 7.

Table 7

Correlation matrix of the four variables in Kerala culture

Sl.No	Variable	1	2	3	4
1	Procrastination Behaviour	()	-0.422*	-0.571*	-0.238*
2	Stress Tolerance	--	()	+0.420*	+0.060*
3	Study Habits	--	--	()	+0.284*
4	Academic Achievement	--	--	--	()

The correlation coefficients given in Table 7 are discussed below:

Correlation between Procrastination Behaviour and Stress Tolerance

In Table 7, the correlation between the variables Procrastination Behaviour and Stress Tolerance of the students in Kerala is -0.422, which is significant at 0.01 level. This indicates that there is a marked or substantial negative relationship between the two variables.

Research shows that many people who procrastinate suffer from stress. Those who procrastinate are vulnerable to stress as a result of their lowered self-esteem and perceived inability to cope and to control their lives (Onwuegbuzie, 2000b). This study stands in support to the findings that there is negative correlation between Procrastination Behaviour and Stress Tolerance.

Correlation between Procrastination Behaviour and Study Habits

The correlation between the variables Procrastination Behaviour and Study Habits of students in Kerala is -0.571, which is significant at 0.01 level. This indicates that there is a marked or substantial negative relationship between the two variables.

Tussing (1962), has stated that procrastination behaviour can influence study habits negatively. The higher the procrastination behaviour the poorer the study habits and, inversely, the better the study habits the lower the procrastination

behaviour, which results. Academic procrastinators have a low conscientiousness and low conscientiousness typically lead to poor study habits (Rorer, 1983).

Correlation between Procrastination Behaviour and Academic Achievement

The correlation between the variables Procrastination Behaviour and Academic Achievement of students in Kerala is -0.238, which is significant at 0.01 level. This indicates that there is a marked or substantial negative relationship between the two variables. Good performance academically is possible with proper study procedure. Many times, students fail to perform well not because they lack motivation, or because they are of lower intelligence level. But it is because they have a tendency to putting off their work without any reason; then they are procrastinating (Steel, 2010). The negative low correlation shows that in the case of students in Kerala, a low relationship exists between their academic achievement and their non-procrastination behaviour.

Correlation between Stress Tolerance and Study Habits

The correlation between the variables Stress Tolerance and Study Habits among students in Kerala is +0.420, which is significant at 0.01 level. This indicates that there is a marked or substantial positive relationship between the two variables.

If the level of stress tolerance is high, then the students tend to follow better time management procedure, which is very

much related to the good study habits. It has been found that stress impairs learning (Deshpande, 1978; Van Eerde, 2003). Here, in the case of students of Kerala, a positive correlation exists between stress tolerance and study habits.

Correlation between Stress Tolerance and Academic Achievement

The correlation between the variables Academic Achievement and Stress Tolerance of students in Kerala is +0.060, which is not significant. This indicates that there is no relationship between the two variables.

Student with low levels of stress tolerance tended to perform poorly academically. It has been found that stress impairs learning (Deshpande, 1978). But, there are studies, which prove that students under stress perform much better (Lazarus, et al., 1952). Often the level of academic achievement can either cause frustration, conflict, pressure and anxiety, which contribute to the level of stress tolerance (Heckhausen, 1967 & Izutsu et al., 2003). But, here no significant correlation has been

found between the two-variable academic achievement and stress tolerance.

Correlation between Study Habits and Academic Achievement

The correlations between the variables Study Habits and Academic Achievement of students in Kerala is +0.284, which is significant at 0.01 level. This indicates that there is low relationship between the two variables.

Good performance means high academic achievement. High achievement or good performance academically, is always possible only with a proper 'study habit'. It is in the absence of a proper study procedure that the students fail to achieve the maximum within the limited schedule (Tussing, 1962).

Correlation Analysis of the Variable in U.A.E. Culture

The correlation coefficients existing among the four variables in the U.A.E. sample are given in Table 8.

The correlation coefficient given in Table 8 is discussed below.

Table 8
Correlation matrix of the four variables in Kerala culture

Sl.No	Variable	1	2	3	4
1	Procrastination Behaviour	()	-0.386*	-0.632*	-0.308*
2	Stress Tolerance	--	()	+0.385*	+0.248*
3	Study Habits	--	--	()	+0.506*
4	Academic Achievement	--	--	--	()

Correlation between Procrastination Behaviour and Stress Tolerance

In Table 8, the correlation between the variables Procrastination Behaviour and Stress Tolerance of students in U.A.E. is -0.386, which is significant at 0.01 level. This indicates that there is low negative relationship between the two variables. Procrastination behaviour of students always makes them do work under pressure. Students who procrastinate tend to postpone the work they have to do for a future date, resulting in hectic workload in the end. This creates a stressful situation in the end (Flett, 1996). The lesser the procrastination behaviour the lower will be the level of stress tolerance.

Correlation between Procrastination Behaviour and Study Habits

The correlation between the variables Procrastination Behaviour and Study Habits of the students in U.A.E. is -0.632. This indicates that there is a marked or substantial negative relationship between the two variables.

The low conscientiousness of academic procrastinator always leads to poor study habits (Robert, 1997).

Correlation between Procrastination Behaviour and Academic Achievement

The correlation between the variables Procrastination Behaviour and Academic Achievement of the students in U.A.E. is -0.308, which is significant at 0.01 level.

This indicates that there is a low negative relationship between the two variables.

Whatever be the reason the end result will be lower academic achievement. Good performance academically is not possible if there is procrastination behaviour (Tussing, 1962).

Correlation between Stress Tolerance and Study Habits

The correlation between the variables stress tolerance and study habits of the students in U.A.E. is +0.385, which is significant at 0.01 level. This indicates that there is low positive relationship between the two variables.

If the level of stress tolerance is high, then students tend to follow the good time management procedure, which is very much related to good study habits. It has been found that stress impairs learning (Deshpande, 1978). Here, students of U.A.E. show a low positive correlation for the variables stress tolerance and study habits, which is in support of the above study.

Correlation between Stress Tolerance and Academic Achievement

The correlation between the variables Stress Tolerance and Academic Achievement of the students in U.A.E. is +0.248, which is significant at 0.01 level. This indicates that there is low positive relationship between the two variables.

Students with low level of stress tolerance tend to perform poorly academically. Often

the level of academic achievement can either cause frustration, conflict, pressure, and anxiety, which contributed to the level of stress tolerance (Heckhausen, 1967).

Correlation between Study Habits and Academic Achievement

The correlation between Study Habits and Academic Achievement of students in U.A.E. is +0.506, which is significant at 0.01 level. This indicates that there is substantial or marked positive relationship between the two variables.

Good performance means high academic achievement. It is in the absence of a proper study procedure, that the students fail to achieve the maximum within time schedule (Tussing, 1962). Jamuar (1961) & Brunstein (2004) conducted studies in which they found that study habits are positively related to academic achievement in students.

CONCLUSION

The fundamental basis of education seems to be purposeful training of children with a view of preparing them to shoulder the responsibilities required for normal adult life. Students have to face academic demands, such as answering questions in class, preparing for examinations, showing progress in school subjects, understanding what the teacher is teaching, competing with other class-mates, and fulfilling teachers' and parents' expectations. It is clear that in such situations students are under pressure from all sides. Competition has increased so much that the best and topper is always successful. To be the best,

one has to be a high academic achiever, which is possible only with a very good and systematic procedure. Procrastination Behaviour of students influences their goals negatively. Low level of stress tolerance also affects their academic performance. The present investigation was intended to study these variables on two groups of students coming from two different cultures – one group living in U.A.E. and, the other group living in Kerala. The study was entitled: "Procrastination Behaviour, Stress Tolerance, and Study Habits: A Cross Culture Analysis." The findings of the present investigation are as follows:

1. Students studying in Kerala and U.A.E. showed no significant difference in Procrastination Behaviour.
2. Students studying in Kerala showed significantly higher level of Stress Tolerance in comparison to those in U.A.E.
3. Students studying in Kerala and U.A.E. showed no significant difference in their Study Habits.

The limitations of the study were, Intelligence and its relationship with variables such as, Procrastination Behaviour, Stress Tolerance, Study Habits, and Academic Achievements, were not been done in the present study. In future studies these aspects can be included. This study made use only X grade and XII grade students. It is suggested that further studies may be conducted using college students or students studying for professional courses.

Academic implications

The study revealed that students of U.A.E. have a lower level of stress tolerance, when compared to the students in Kerala. They face many difficulties as they go for higher studies, have to face competitive examinations, and get admission for better courses. The fear of failure and stressfulness can only impair their performance.

It is generally accepted by those who favour the concept 'individual difference' that 'study' is an individual matter; it is also true that methods which suit some students may not suit others; and also, that the methods which are appropriate for one subject need not necessarily be the same for another subject. It should be understood there are some general principles that will enable a student to work out schemes of study more effectively. Many students fail because they might have never learned how to study effectively, how to keep away procrastination behaviour, and how to achieve better level of stress tolerance.

Implications for Practice:(Teachers, school administers, policy makers, NGO's etc)

In a classroom, students vary in many respects, viz., physically, psychologically, and socially. Some of the students may be from poor social environment. Teachers should identify children with poor study habits, having procrastination behaviour and low level of stress tolerance, and try to find the reasons for their problems. This requires greater personal attachment

between teachers and students. The teacher needs to keep a good rapport with parents of students also, and give them suggestions to overcome difficulties faced in school. In other words, the teacher should help the students in all possible ways to develop positive feelings and to avoid unnecessary anxieties. To enrich the academic achievement of students in Kerala the teacher should provide additional learning experiences and remedial measures. This can be done within the structure of the classroom system.

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Shadow Economy in Malaysia: A State Level Analysis

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ABSTRACT

Literature on the estimation of the size of shadow economy at national level is well studied. However, estimation of the size of shadow economy at state level is still scarce. This study attempts to estimate the size of shadow economy to state GDP ratio for the states of Malaysia by employing the Multiple – Indicators – Multiple – Causes (MIMIC) model using panel data from 13 states of Malaysia from 2006 to 2013. Additionally, the relationship between size of state shadow economy and other state level variables was investigated and analysed. Several findings were obtained. First, rural population and rural labour play significant roles in contributing to the development of shadow economy in the states of Malaysia. Second, smaller and more advanced states have smaller shadow economy to state GDP ratio, while the two East Malaysia states, Sabah and Sarawak, are by far the states with the largest shadow economy to state GDP ratio among all Malaysia states. Third, shadow economy is positively affected by crime index and primary sector productions, and negatively affected by state GDP growth. State shadow economy decreases if the state is ruled by opposition party. This study suggests better regulations in rural economy, rural labour, criminal activities and primary sector contributions to reduce shadow economy activities in the states of Malaysia.

Keywords: Malaysia, MIMIC, state shadow economy

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INTRODUCTION

Estimation on the size of shadow economy has been well studied using various methods. Most of these studies focus on the estimation of ratio of shadow economy to GDP at national level¹ using various direct and

¹Refer Schneider and Enste (2002), Giles (1999a) among others

indirect estimation techniques. However, to date, very few studies have focused on estimating the size of shadow economy at state level. This is due to reasons such as lack of available data, lack of appropriate estimation techniques, lack of research interest and also problems in identifying causes attributable to the determination of shadow economy at state level.

Since 1957, Malaysia's poverty rate has reduced from 50% to 0.6% in 2014², while GDP per capita has increased from about USD 250 to USD 10933, a year-on-year increase of over 73%. Despite that, around 55% of the population and 78% of the rural population earn less than USD 1250, about one ninth of the per capita income.³

It is important to note that the economic structure of the states in Malaysia is vastly different. According to the official data from the Department of Statistics Malaysia from 2006 to 2013, Pulau Pinang had the highest average annual per capita GDP at RM44,847, followed by Sarawak at RM44,012 and Selangor at RM42,611. Kelantan had the lowest average annual per capita GDP at RM12,075 followed by Kedah at RM18249 and Sabah at RM19,734. Melaka, Pulau Pinang and Selangor are the states with the lowest unemployment rate at 7%, 17% and 25%, respectively, while Sabah, Perak and Sarawak are the states with

the highest unemployment rate at 52%, 39% and 38%, respectively. A similar scenario also applied to the ratio of low-skilled labours to total labour force. Selangor, Melaka and Penang are the states with the lowest ratio of low-skilled labours at 11.4%, 13.7% and 13.9%, respectively, while Sabah, Sarawak and Pahang ranked the worst for low-skilled labour at 37.6%, 30% and 23.1%, respectively. As for the ratio of rural population to overall population, Selangor, Pulau Pinang and Melaka were the states with the lowest ratio of rural population with 7.3%, 15.5% and 15.7%, respectively, while Sarawak, Kelantan and Sabah were the states with the highest ratio of rural population at 64.8%, 59.4% and 53.1%, respectively.

This study aimed to determine the size of state level shadow economy (ratio to state GDP) of the states of Malaysia. Its relationships with other economic variables would be studied once the size of shadow economy had been obtained.

The size of global shadow economy is still relatively high. Hassan and Schneider (2016) estimated that the average size of the global shadow economy in 2013 was at 35.45%. Schneider (2012) estimated that the average size of the global shadow economy in 2007 was at 29.6%. Elgin and Oztunali (2012) estimated the size of the global shadow economy at 30.9% in 2008, while Alm and Embaye (2013) estimated the size of the global shadow economy at 31.01 percent in 2006. Such research showed that around 30% of the world economy was operating in the shadow.

²<http://www.themalaymailonline.com/malaysia/article/poverty-rate-down-to-0.6pc-parliament-told>

³Latest (2014) data from Economic Planning Unit

For Malaysia, Hassan and Schneider (2016) estimated that the size of shadow economy in 2013 was at 37.35%, while Schneider (2012) estimated the size of shadow economy was at 29.6% in 2007. Meanwhile, Elgin and Oztunali (2012) estimated the size of shadow economy in Malaysia at 29.34% in 2008, and Alm and Embaye (2013) estimated the size of shadow economy in Malaysia at 30.7% in 2006. The average size of shadow economy stood at around 30% in the period from 2006 to 2013, very similar to the world average.

According to the official informal employment information by the Department of Statistics of Malaysia in 2013, 1.3 million labours or 9.7% of total labour force in Malaysia engaged in shadow economy activities, an increase of 1.5% from the previous year. Nonetheless, such shadow economy ratio was much smaller than previously estimated by Schneider and Enste (2000), Abdul (2001), OECD (2002), Schneider (2012), Hassan and Schneider (2016), etc. State-wise, nominally, Selangor contributed the highest informal labours at 15.2%, followed by Johor at 11.8% and Sabah at 11.5%.

The first regional informal economy estimation was done by Williams and Windebank (1998) using direct approach. As expected, they found that households with no income earner were more likely to accept shadow works and high income group was more likely to supply the opportunity of shadow activities.

The first literature in the state-level shadow economy estimation using the MIMIC approach was done by Chaudhuri, Schneider, and Chattopadhyay (2006) on the states of India. Unlike the national level estimation, they used state GDP growth rate and total employees in the manufacturing industries as their indicator variables. Causes selected were state budgetary variables such as ratio of capital account developmental expenditure to state GDP, ratio of capital account non-developmental expenditure to state GDP and state revenue (tax and non-tax).

Besides that, to date, only two other literature studied the state-level estimation of size of shadow economy. Buehn (2012) used state (GDP) growth rate and new entrepreneurial activities as his indicators in determining the size of shadow economy in German regions. Causes selected were municipality trade tax rate, enforcement of tax rules and regulations, change of state government, share of low-skilled labour, unit labour cost, unemployment rate, patent density, new business registration, average distance to next high-order central place, and disposable per capita income.

Meanwhile, Herwartz, Tafenau, and Schneider (2015) employed the same variables used by Dell'Anno, Gómez-Antonio and Pardo (2007) in their state-level estimation of the European Union region (NUTS2), real GDP per capita and labour force participation ratio. For that purpose, they selected direct and indirect taxes, social

security distribution, unemployment rate and self-employment ratio as their causes.

MATERIALS AND METHODS

Annual data on all 13 states of Malaysia from 2006 to 2013 were gathered for this study⁴. State budgetary data were obtained from the state annual audit reports from the National Audit Department under the Ministry of Finance Malaysia. Unemployment rate and other labour market data, as well as data on rural population, rural labours, state primary sector productions, and state GDP growth were obtained from the Department of Statistics Malaysia, while state crime index was obtained from the Royal Malaysia Police (PDRM).

This study used the Multiple-Indicators-Multiple Causes (MIMIC) method to estimate the size of shadow economy in the states of Malaysia. It consists of structural equations and measurement equations. The structural equation defines the relationship between the selected causes and the latent variable (size of state level shadow economy). It is given by:

$$\eta = \gamma'x + \zeta \quad [1]$$

where η is the latent variable (size of state shadow economy), γ is $(q \times 1)$ vector of

parameters describing the relationships between the shadow economy, η , and its causes $x = (x_1, x_2, \dots, x_q)$, while ζ is $(q \times 1)$ vector of the random errors.

The measurement equation defines the relationship between the latent variable and the selected indicators. It is given by:

$$y = \lambda \eta + \epsilon \quad [2]$$

Where, $y = (y_1, y_2, \dots, y_p)$ is a vector of indicators of the shadow economy (η), λ is $(p \times 1)$ vector of parameters describing the relationships between the latent variable and its indicators, and ϵ is a $(p \times 1)$ scalar of random errors.

By substituting [1] into [2], we can get:

$$\begin{aligned} y &= \lambda(\gamma'x + \zeta) + \epsilon \\ &= \Pi x + v \end{aligned} \quad [3]$$

Where, $\Pi = \lambda\gamma'$, $v = \lambda\zeta + \epsilon$

As all the parameters λ s and γ s cannot be estimated individually, normalisation condition for one of the indicator's coefficients ($\lambda=1/-1$) is included. According to Tedds (2005), the choice of which λ to normalise "is arbitrary as the normalization does not identify the dependent variable in any formal or causal sense. The relative impacts of η on the other indicator variables are then measured relative to this pre-assigned value". Based on previous literature, the growth rate of GDP is usually chosen as the normalised variable by fixing its coefficient at (-1) .

⁴Data for all states before 2006 are unavailable. Wilayah Persekutuan Kuala Lumpur, Wilayah Persekutuan Labuan and Wilayah Persekutuan Putrajaya were omitted due to issue of data availability

With three indicators (y_1 , y_2 , and y_3) and with normalizing $\lambda_1 = -1$, the model consists of the following two reduced equations:

$$y_{1t} = \gamma'x_t + v_{1t} \quad [5a]$$

$$y_{2t} = \lambda_2 \gamma'x_t + v_{2t} \quad [5b]$$

$$y_{3t} = \lambda_3 \gamma'x_t + v_{3t} \quad [5c]$$

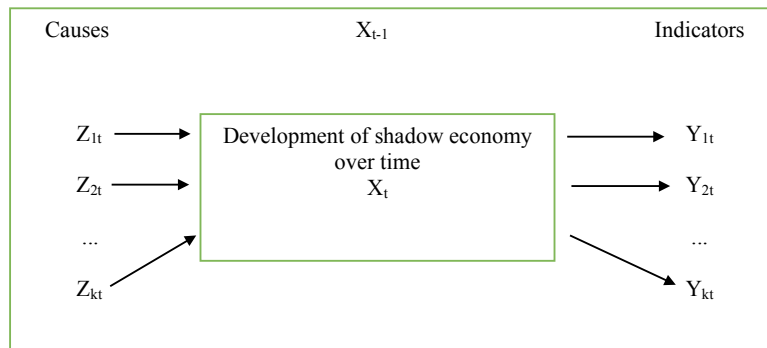


Figure 1. General Structure of a MIMIC Model

The Causes and Indicators of the State Level Shadow Economy

As mentioned earlier, due to the lack of data availability, selection of the variables is particularly difficult. For the purpose of this study, the variables used in the previous literature on national level shadow economy estimation such as Schneider and Enste (2000) as close as possible and use proxies, should there be issue of regional data availability. These methods were chosen due to two reasons: 1) most literature in national level shadow economy estimation follows the same variables selection method, and 2) most problems rose by critics such as statistical accuracy problem and reliability problem have been addressed⁵.

⁵See Dell'Anno and Schneider (2006) and Elgin and Schneider (2013)

Based on previous literature such as Chaudhuri et al. (2006) and Buehn (2012), causes of state level shadow economy were grouped into three categories: size of state government, state labour market variables and demographic indicators. Meanwhile, demographic indicators (not included in Enste and Schneider, 2000, and all available literature) were included due to the significant disparity in wealth distribution and social diversity in the states of Malaysia, as stated earlier.

The Causes of the State Level Shadow Economy Estimation

Almost all previous literatures ascertained that overall, tax burdens are among the main causes for the development of shadow

economy⁶. As taxes affect the choice of labours and stimulate labour supply in the shadow economy, the distortions in the tax burden may have significant impact to the size of shadow economy. According to Schneider et al. (2010), the bigger the difference between the total cost of labours in the formal economy and the after-tax earnings (from work), the greater the incentive to avoid this difference and to work in the shadow economy. Empirical findings from almost all the previous literature found a significant positive relationship between taxation and the development of shadow economy.

As tax rate is unified across all the states in Malaysia, variables in states budgetary data were used as proxies similar to the previous literature in the state level estimation of the size of shadow economy such as in Chaudhuri et al. (2006) and Buehn (2012). The variables included were state tax revenue, state non-tax revenue, state non-tax receipt, state government operating spending and state government development spending. As tax increases, firms and labours are more encouraged to involve in shadow economy due to greater tax burden. Inversely, if state governments

increase both operating and development spending, quality and quantity of public infrastructure will improve, reducing the appetite for firms and labours to join shadow economy. Hence, state tax revenue, state non-tax revenue and state non-tax receipt should be negatively related to state shadow economy, while state government operating spending and state government development spending should be positively related to state shadow economy.

Labour market variables may be strong causes or drivers for the development of shadow economy as argued by Schneider et al. (2010). During recession with high unemployment rate, labours are more encouraged to be shadow workers as unemployed individuals have less disposable income for basic necessities in the formal economy, especially low-skilled labours. The same conclusion had been made by Dell'Anno et al. (2007) for the cases of Spain, Greece and France. According to Chen (2012), labours, particularly low-skilled labours, may be forced to join shadow works due to problems of qualification, friction, or recession. Labour market regulations lead to a substantial increase in labour costs in the formal economy. In order to avoid such problems, self-employed labours either directly volunteer for shadow works or involve in shadow works indirectly. Unemployment rate and ratio of low-skilled labours are expected to be negatively related to the size of shadow economy while ratio of self-employment labours is expected to be positively correlated with the size of state shadow economy.

⁶See Thomas (1992); Lippert and Walker (1997); Schneider (1994a,b, 1997, 1998a,b, 2000, 2003b, 2005, 2007); Johnson, Kaufmann, and Zoido-Lobaton (1998a,1998b); Tanzi (1999); Giles (1999a); Mummert and Schneider (2001); Giles and Tedds (2002) and Dell'Anno (2003), as well as Feld and Schneider (2010), among others

Two demographic variables (namely, ratio of rural population to total population and ratio of rural labours employed to total labours) were included as the causes. As employment opportunity is scarcer in rural areas compared to urban area, high ratio of rural population often means some labours are left with no alternative but to engage in shadow activities to earn their living (Bhattacharya, 2011). Hence, this variable was expected to be positively related to shadow economy. As for the ratio of rural labours employed to total labours, rural labours are more likely to involve in shadow activities. Hence, the high ratio of rural labours employed signals less labours are involved in the shadow economy, vice versa. Ratio of rural labours employed are expected to be negatively related to shadow economy.

The Indicators of the State Level Shadow Economy

In this study, three indicators were selected: growth rate of state GDP per capita for the entire period of study (gdp), growth rate of the total state labour force (l), and state labour market participation rate (lp).

The MIMIC technique requires estimation of more than one model specification to obtain the best fitting model. In this study, it was started with 10-1-3 specification and insignificant variables were omitted to reach the best fitting model for Malaysia.

As the most prominent measurement of (past) prosperity, economic growth serves

as the best benchmark for any economies. A higher growth rate indicates that this state contributes significantly to the creation of value, and thus potentially offers significant employment opportunities in the formal economy for a large share of a region's population. With such importance, it is used as indicators in almost all literatures on shadow economy estimation. Buehn (2012) concluded that shadow economy and GDP growth were negatively related, while Schneider and Enste (2000) argued that shadow economy contributed positively to GDP growth as shadow labours spent two third of their income immediately in the formal economy.

The growth rate of total state labour force reflects the overall state labour market condition and serve as the overall indicators of labours involvement in formal economy, which is expected to be negatively correlated with size of state shadow economy as high growth rate of total state labour force indicates a high involvement of labours in formal economy.

The state labour market participation rate provides an overall picture of the state labours that are active in the formal economy, while those inactive in the formal economy are likely to be either looking for work in the formal economy or engage in shadow economy activities. A low participation rate indicates many labours are not in the formal economy, thus the size of shadow economy is large. Hence, state labour market participation rate is expected to be negatively related to shadow economy.

With such causes and indicators selected, equations [5a], [5b] and [5c] can be combined into:

$$y^*_{it} = \gamma'x^*_{it} + v^*_{it} \quad [6]$$

where, y^* represents growth rate of state GDP per capita for the entire period of study (GDP), growth rate of the total state labour force (l), and state labour market participation rate (lp), while x^* represents ratio of state tax revenue to state GDP (t), ratio of state non-tax revenue to state GDP (nt), ratio of non-tax receipt to state GDP (ntr), ratio of state government operating spending to state GDP (os), ratio of state government development spending to state GDP (ds), state unemployment rate (u), ratio of self-employment labours to total labour force (sl), ratio of low-skilled labours to total labour force (ll), Ratio of low-skilled labours to total labour force (ll) and ratio of rural population to overall population (r).

For benchmarking process, the average rate of the shadow economy was used as a percent of GDP in Malaysia for the year 1999, from Schneider (2007) and Schneider et al. (2010); which equalled to 30% of GDP as a reference indicator to benchmark (calibrate) the estimated annual cardinal indexes of the shadow economy in Malaysia. The process of benchmarking procedure by Dell'Anno (2007) and Schneider (2009) was used in the present study.

⁷Refer Baharom and Habibullah (2008), Poutvaara and Priks (2011)

The Relationship between State Shadow Economy and State Economic Variables

After the ratio of state shadow economy to state GDP (SE) has been obtained, further investigation was done for its relationship with selected state economic variables so as to identify the “contributors” of state shadow economy activities. The basic model is given:

$$SE_{it} = \alpha + \gamma (Crime_{it}) + \delta (Primary_{it}) + \zeta (Gov_{it}) + \lambda (Growth_{it}) + u_{it} \quad [7]$$

where *Crime* is the state crime index, *Primary* is the ratio of state primary sector production to state GDP, *Gov* is the dummy variable for state government coalition with 1(0) if the state government is Barisan Alternative (Barisan Nasional), and *Growth* is the state GDP growth. Meanwhile, u is the error term and time variable is added to control aggregate shock. The Hausman test will be used to determine whether the fixed effect model or random effect model is preferred.

Crime index is expected to be positively linked to state's shadow economy. Such relationship exists as rise in crime index tends to increase the unemployment rate, forcing labours to engage in shadow economy activities⁷. Crime diverts productive resources, increases costs for businesses, represents a threat to private property, and discourages domestic and international investment due to the deterioration of investment climate (Enamorado, López-Calva, & Rodríguez-Castelán, 2014). Such problems not only force firms and

labours into shadow economy, but serves as encouragement as more resources are diverted to shadow economy, providing better returns for shadow productions and works⁸. Robles, Calderón and Magaloni (2013) also found that violence crime reduces labour force participation and increases unemployment rate.

The agriculture sector may play a significant role in affecting the development of shadow economy. Vuletin (2008) found that the shadow economy was significantly affected by the agriculture sector in South America and Caribbean countries. A similar finding was also obtained by Wedderburn, Chiang and Rhodd (2011) in Jamaica and Angel-Urdinola and Tanabe (2012) in Yemen and Morocco. Such a relationship can be explained by the difficulty of enforcement and weak government control in agricultural productions, especially as most agricultural productions are located in the rural areas. Hence, the ratio of primary sector contributions and shadow economy should have a positive relationship.

Moreover, the government coalition affects shadow economy by influencing the level of trust among labours and firms to the government. Shadow economy increases the lack of trust in institutions and feeds resentment among citizens (Dell'Anno et al., 2007). People who have higher trust in

the government tend to stay in the formal economy and not involve in any shadow economy activities (Knack & Keefer, 1997; Zak & Knack, 2001; Beugelsdijk, De Groot & Van Schaik, 2004; Tabellini, 2010). As public trust decreases, the size of shadow economy will rise (D'Hernoncourt & Méon, 2012). Hence, in the case of low level of public trust to the national ruling party (Barisan Nasional), the states ruled by national opposition party (Barisan Alternative) should have smaller size of shadow economy, vice versa.

RESULTS AND DISCUSSION

The MIMIC model begins with 10 causes and 3 indicators (10-1-3 specifications), as shown in Table 1 below. Two causes (state government operating spending and self-employed labours) were insignificant and thus excluded from the second estimation.

For the second estimation (8-1-3 specification), two more causes were dropped; state non-tax revenue and unemployment rate. Hence, third estimation begins with six causes and three indicators (6-1-3 specification). This time, there was only one insignificant cause: state non-tax receipt.

Finally, the fourth estimation was executed (5-1-3 specification). Five causes and three indicators are significant. These causes are the ratio of state tax revenue to state GDP, ratio of state government development spending to state GDP (state budgetary causes), ratio of low-skilled labours to total labour force (labour market

⁸see Fajnzylber et al. (1998), Londoño and Guerrero (2000), Demombynes and Ozler (2002), Stone (2006), Powell et al. (2010), Cardenas and Roza (2008), Detotto and Otranto (2010)

causes), ratio of rural population to overall population and ratio of rural labours employed to total labour force (demographic causes).

Table 1
MIMIC model estimation for state shadow economy with demographic variables (10-1-3)

Model	10-1-3	8-1-3	6-1-3	5-1-3
Causes				
Ratio of state tax revenue to state GDP (t)	-0.16 (-4.13)	-0.14 (-3.67)	-0.14 (-3.48)	-0.13 (-3.24)
Ratio of state non-tax revenue to state GDP(nt)	-0.07 (-2.06)	-0.05 (-1.43)		
Ratio of state non-tax receipt to state GDP (ntr)	-0.24 (-3.12)	-0.19 (-2.49)	-0.07 (-1.90)	
Ratio of state government operating spending to state GDP (os)	0.02 (0.22)			
Ratio of state government development spending to state GDP (ds)	0.12 (2.56)	-0.12 (-2.59)	0.11 (2.37)	0.11 (2.15)
State unemployment rate (u)	4.8188 (2.17)	3.8997 (1.70)		
Ratio of self-employed labours to total labour force (sl)	3.3523 (-1.59)			
Ratio of low-skilled labours to total labour force (ll)	7.4606 (-4.13)	7.0359 (-3.96)	6.3390 (-3.59)	5.7622 (-3.26)
Ratio of rural population to overall population (rp)	40.8061 (-8.16)	44.6865 (-8.70)	44.7595 (-8.73)	45.5681 (-8.81)
Ratio of rural labours employed to total labour (rl)	-43.1788 (8.41)	-46.3072 (8.66)	-46.5226 (8.70)	-47.5198 (8.79)
Indicators				
Growth rate of state GDP per capita (gdp)	1.00	1.00	1.00	1.00
Growth rate of the total state labour force (l)	0.39 (3.54)	0.33 (3.26)	0.32 (3.15)	0.30 (3.04)
State labour market participation rate (lp)	0.87 (4.44)	0.86 (4.40)	0.84 (4.36)	0.83 (4.32)
Goodness of fit indices				
Degree of freedom	20	16	12	10
Chi-square	24.96	15.31	13.08	11.71
AGFI	0.902	0.900	0.904	0.907
RMSEA	0.049	0.000	0.029	0.040
P-Value for Test of Close Fit (RMSEA < 0.05)	0.78	0.740	0.588	0.509

Note: The numbers in the parentheses are t-statistics. AGFI larger than 0.90 and RMSEA smaller than 0.05 indicate a good fit

Based on the estimation, as expected, state tax revenue is inversely related to state shadow economy, the finding which is consistent with the previous literature such as Chaudhuri et al. (2006). As more labours and firms engage in shadow activities, the state revenue will then decrease.

As for labour market causes, similar to Buehn (2012), low-skilled labours are positively related to size of shadow economy. As low-skilled labours are more likely to be discriminated and underpaid, they have greater risk of cyclical unemployment in the formal economy; thus, they are expected to engage in shadow activities more than skilled labours.

As for the total rural population, it is positively related to state shadow economy. Rural population is generally more likely to engage in shadow works due to lower availability of job opportunity in the rural

area. As for rural labours employed, it is negatively related to state shadow economy.

Using the results from last estimation specification (model 5-1-3), the size of state shadow economy can be estimated. The underlying time series are multiplied with the corresponding, estimated coefficients. This results in an index value of the latent variable for each of the 13 states in Malaysia. In order to convert this index into state shadow economy estimates, an exogenous estimate was for the size of the shadow economy in Malaysia. This exogenous estimate was taken from Schneider (2007) and Schneider et al. (2010), where the average size of shadow economy in Malaysia was 30% of the official GDP in 2006.

With such benchmark, the size of shadow economy to the official GDP in the states of Malaysia from 2006 to 2013 is shown in Table 2 and Figure 2. Melaka is

Table 2
Shadow economy for states of Malaysia from 2006 to 2013

	2006	2007	2008	2009	2010	2011	2012	2013	Average
Johor	25.33	20.75	22.41	21.83	18.46	17.56	17.37	16.40	20.01
Kedah	29.02	27.81	30.17	28.02	17.10	24.60	24.41	18.11	24.91
Kelantan	23.42	26.10	22.76	16.74	19.16	12.09	17.10	15.80	19.15
Melaka	15.82	17.99	14.11	16.30	14.12	11.14	12.65	12.47	14.33
Negeri Sembilan	32.74	25.23	22.51	27.55	24.69	17.94	22.57	22.19	24.43
Pahang	28.90	36.89	28.53	31.03	24.77	20.23	22.03	26.24	27.33
Pulau Pinang	18.81	17.29	17.31	18.11	17.09	14.73	15.75	15.43	16.82
Perak	35.93	26.76	28.55	23.22	21.85	20.77	20.55	20.26	24.74
Perlis	26.99	20.86	15.63	16.96	18.22	23.32	20.37	17.40	19.97
Selangor	17.11	17.47	18.84	16.71	17.37	17.27	15.42	13.79	16.75
Terengganu	30.45	23.88	26.89	26.64	21.62	18.84	18.28	21.84	23.56
Sabah	58.60	57.96	54.75	55.62	59.26	60.01	52.74	51.73	56.33
Sarawak	46.86	45.28	53.38	44.11	45.64	36.56	35.49	35.47	42.84
Average	30	28.02	28.37	26.37	24.56	22.70	22.67	22.09	

Note: percentage of state shadow economy to GDP

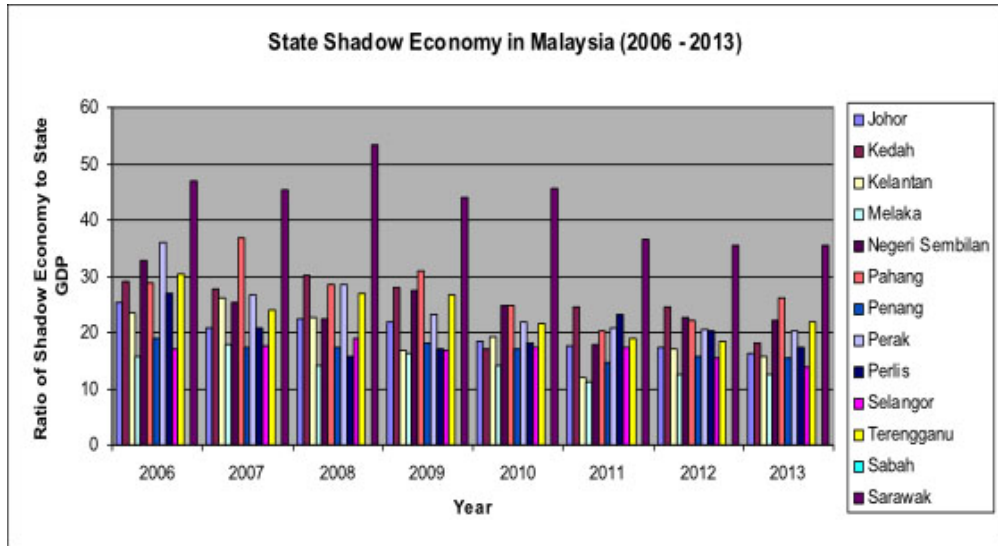


Figure 2. State shadow economy as ratio to state GDP

the state with the smallest shadow economy, except for one year (2007), ranging from 11.14% of GDP to 17.99% of GDP. This was followed by Selangor, which is the state with the second smallest shadow economy, with the average between 13.79% of GDP and 18.84% of GDP. Meanwhile, Pulau Pinang ranked the third, ranging from 14.73% of GDP to 18.81% of GDP.

As expected, Sabah and Sarawak ranked the bottom two for all eight years (i.e., from 2006 to 2013) due to poor regulation and size of rural population. Sabah ranked thirteenth with the range of 51.73% of GDP to 60.01% of GDP, while Sarawak ranked twelve with the range of 35.47% of GDP to 53.38% of GDP. The average size of shadow economy for all the thirteen states of Malaysia showed a downtrend from 30%

of GDP in 2006 to 22.09% of GDP in 2013.

The actual size of state shadow economy in Ringgit term, as shown in Table 3 and Figure 3, is worrying and it deserves the attention from regulators. The state with the smallest shadow economy in Ringgit term was Perlis, ranging from RM507.84 million in 2008 to RM794.94 million in 2006, with the average of RM655.81 million from 2006 to 2013. Melaka, the state with the smallest average ratio of shadow economy to GDP, had RM2745.93 million average of shadow economy, with the lowest at RM2281.07 million in 2011 and highest at RM3010.01 million in 2009. Selangor, the state with the highest GDP in Malaysia, had an average of RM25,090.36 million of shadow economy, with the lowest at RM20,332.38 million in 2006 and highest at RM28,431.92 million

Table 3
State shadow economy in Ringgit

Year	2006	2007	2008	2009	2010	2011	2012	2013	Total	Average
Johor	13309.24	11349.17	12769.05	12065.97	11200.65	11339.66	11946.87	11850.52	95831.14	11978.89
Kedah	5587.07	5849.69	6399	5909.31	3760.732	5869.49	6177.90	4786.28	44339.51	5542.43
Kelantan	2261.93	2735.52	2549.52	1914.49	2297.29	1543.51	2302.05	2206.67	17811.02	2226.37
Melaka	2584.57	3134.34	2575.22	3010.01	2779.94	2281.07	2777.39	2824.91	21967.49	2745.93
Negeri Sembilan	7057.33	5722.61	5324.02	6558.01	6216.52	4737.56	6255.21	6367.	48238.3	6029.78
Pahang	7136.99	9298.49	7550.32	8130.95	6807.58	5904.55	6775.07	8524.81	60128.8	7516.1
Pulau Pinang	8164.33	7994.35	8436.98	7900.02	8229.77	7368.91	8273.16	8480.5	64848.05	8106
Perak	10619.05	8307.42	9437.05	7594.00	7554.32	7680.10	8143.27	8467.17	67802.42	8475.30
Perlis	794.94	658.630	507.845	537.043	604.618	788.773	720.017	634.675	5246.55	655.81
Selangor	20332.38	22395.42	26354.11	23267.48	27050.75	28431.92	27172.4	25718.42	200722.9	25090.36
Terengganu	5136.13	4326.95	4974.32	4720.44	3997.57	3573.17	3588.76	4488.65	34806.03	4350.75
Sabah	20054.84	20469.79	21414.06	22798.06	24948.8	25604.26	23435.14	23688.14	182413.1	22801.64
Sarawak	28242.71	29560.51	34950.96	28308.9	30553.36	25895.23	25506	26561.14	229578.8	28697.35
Total	131281.6	131802.9	143242.5	132714.7	136002	131018.2	133073.3	134598.9		
Average	10098.58	10138.69	11018.65	10208.83	10461.69	10078.33	10236.41	10353.76		

Note: RM Million GDP at constant price 2005

in 2011. As expected, Sabah and Sarawak had very high shadow economy in Ringgit term, with Sarawak edging slightly ahead. Sarawak had an average of RM28,697.35 million of shadow economy with the lowest at RM34,950.96 million in 2008 and the

highest at RM25,506 million in 2012. Sabah had an average of RM22,801.64 million of shadow economy with the lowest at RM20,054.84 million in 2006 and highest at RM25,604.26 million in 2011.

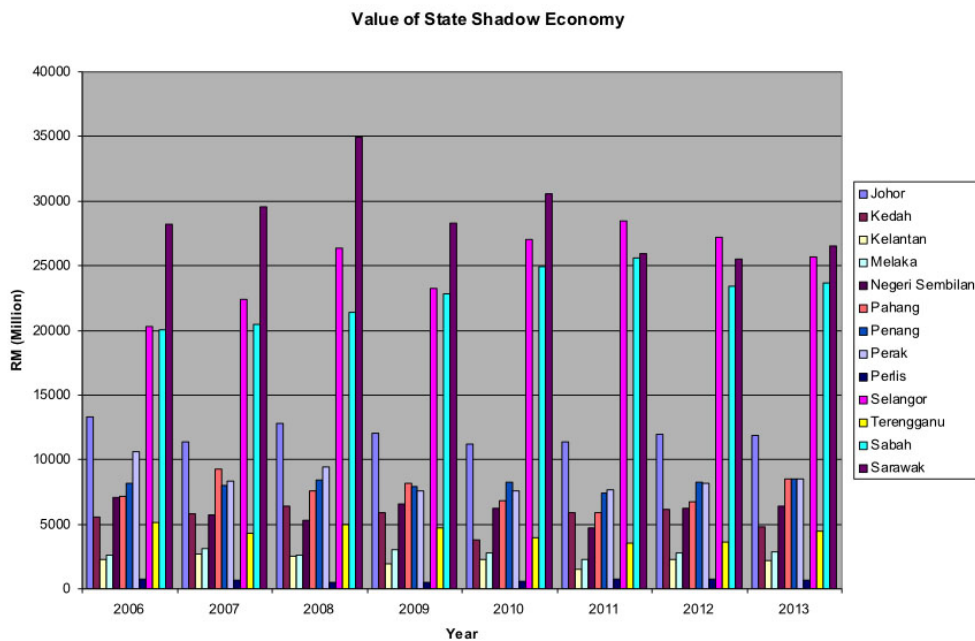


Figure 3. State shadow economy in Ringgit

Table 4 shows the relationships between state shadow economy and selected state variables. The P-value obtained from Hausman Test is insignificant ($p > 0.05$), which fails to reject the null hypothesis that the model is random, indicating that random effect estimator is preferred in this study. All the variables are significant at 99% confidence level, except for the coalition of government (*Gov*) which is at 95% confidence level. As expected, crime

index is positively linked with state's shadow economy. Such relationship exists as a rise in crime index tends to increase the unemployment rate, forcing labours to engage in shadow economy activities⁹. Ratio of primary sector production is positively affecting the size of state's shadow

⁹Refer Baharom and Habibullah (2008), Poutvaara and Priks (2011)

Table 4
Regression Result: Growth in the Size of State Shadow Economy

Independent Variable	Fixed effect	Random Effect (preferred)
Crime	1.7916 (0.7147)	2.5345*** (5.2816)
Primary	-0.0521 (-0.2001)	0.5012*** (11.6178)
Gov	2.6132** (2.0126)	-1.6103** (-1.8610)
Growth	-9.0359* (-1.9427)	-20.9015*** (-2.3461)
Year	-1.1531*** (-5.9649)	-0.8224*** (-6.2381)
Cons	23.2455*** (5.7336)	16.3719*** (6.1571)
Number of observation	104	104
R ²	0.8496	0.809201
Hausman Test (p-value)		0.2236
Breusch-Pagan LM (p-value)	0.1987	0.2270

Notes: The dependent variable is SE. The numbers in the parentheses are t-statistics. *** = 1% significance, ** = 5% significance and * = 10% significance

economy. Interestingly, the state's coalition government dummy yields negative result, suggesting that state ruled by opposition party (formerly known as Barisan Alternatif) has smaller shadow economy. Such a relationship can be explained by the low level of public trust to the ruling national party, Barisan Nasional; as the size of shadow economy rises, the public trust also decreases (D'Hernoncourt & Méon, 2012). Meanwhile, the growth rate of state's GDP is negatively related with state shadow economy, as more advanced states were

found to have smaller size or lower rate of shadow economy.

CONCLUSION

As shadow economy exceeds 30% of world GDP in 2013¹⁰, it is important to understand the structure of the shadow economy at state level in order to have effective policy against it. This study attempted to estimate the size of shadow economy at state level in Malaysia using the estimation technique developed for shadow economy at country level by previous literature such as Giles (1999) and Schneider and Enste (2002).

From 2006 to 2013, Melaka had the smallest shadow economy compared to all other states in Malaysia, with the average ratio of 14.33% to state GDP; followed by Selangor with the average ratio of 16.75% to state GDP and Penang with the average ratio of 16.82 to state GDP during the same period. These three states were ranked the highest due to their size in terms of high levels of modernisation and urbanisation. On the other end, unsurprisingly, Sabah and Sarawak had the largest shadow economy among all states in Malaysia by significant margins. Sabah had the largest shadow economy with the average ratio of 56.33% to state GDP, followed by Sarawak with the average ratio of 42.84% to the state GDP during the same period. These two states had such large shadow economy activities due to their large land size, high ratio of rural population to urban population and high amount of unskilled labours.

¹⁰Hassan and Schneider (2016)

The actual value of state shadow economy is similar to the previous analysis, with Melaka having a relatively small value of shadow economy with an average of RM2745.93 million during the same period. Perlis had the smallest average value of shadow economy at RM507.84 million. On the contrary, as expected, Sabah and Sarawak had the highest average values of shadow economy at RM22,801.64 million and RM28,697.35 million, respectively.

State shadow economy is positively related to crime index and primary sector productions, while negatively related to state's GDP growth. The states ruled by the opposition party have smaller shadow economy.

Based on the results obtained, it is clear that the states with high ratio of rural population tend to have greater size of shadow economy and vice versa. Policy makers should either improve the process of urbanisation or deploy more economic resources to rural populations to encourage shadow labours from the rural area to join the formal economy. Policy makers should also improve the productivity of low-skilled labours through various human development programmes since these will allow these labours to compete in the formal economy with higher wages and better safety working environment.

In addition, crime rate should be reduced as well. Eliminating criminal activities will reduce the size of shadow economy, allow the economic resources to be used in the formal productions and increase growth. Thus, regulators should

also reduce the economic dependency of primary sector productions and relocate the economic resources from the primary sector to secondary or tertiary sector to increase the productivity of economic resources, higher growth and reduce the size of shadow economy.

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Exploring Malaysian Based Intercultural Knowledge and Behaviour among Secondary School Students through English Language Intercultural Reading Programme (ELIRP)

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ABSTRACT

In a multicultural country, education is considered the best medium for the three major ethnic groups to work together and achieve unity. However, to what extent education has been successful in achieving national unity is questionable. This quantitative research investigated the intervention of intercultural knowledge and behaviour among Form Four secondary national school students via a newly constructed English Language Intercultural Reading Programme (ELIRP). The results indicate respondents' level of intercultural knowledge and intercultural behaviour improved during post-ELIRP stage. The implications of this study indicate the need for constructive initiatives and intervention in school reading programmes in order to improve the level of intercultural knowledge and behaviour among Malaysian secondary school students.

Keywords: Intercultural knowledge, intercultural behaviour, Intercultural Reading Program (IRP), secondary school students

INTRODUCTION

According to the Malaysian Demographic Profile 2014, Malaysia is made up of 50.1% Malays, 22.6% Chinese, and 6.7% Indians besides its minority ethnic groups from the east. Each ethnic group has its own cultural norms, lifestyle, traditions, and belief systems that recognises the Malaysian community for its blending pot

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of culture. According to National Institute of Public Administration (INTAN), unity is a process of uniting members of a society via national ideologies in order for the members of the society to construct an identity, universal values and a sense of belonging (INTAN, 1994). Therefore, the Malaysian government has taken measures to nurture the young generation to build unity among its people; beginning with schools. New national educational policies such as recognising one national language and establishing a national school system (Ramlee, Norzaini, Faridah, Abdul Razak & Maimun, 2009) also paves the path to instilling and sustaining a strong unity in the country.

Reading, being a part of the main concern in the education system, helps students to enhance their world view on the diverse cultures, belief systems and helps enhance one's knowledge.

OBJECTIVES OF THE STUDY

This study explores how reading helps the students to enhance their intercultural knowledge. Specifically, the study investigates the impact of an English Language Intercultural Reading Programme (ELIRP) on the level of intercultural knowledge and intercultural behaviour among secondary school students in Malaysia. The study aims to answer two main research questions:

What is the level of intercultural knowledge among the 4th form secondary school students?

What is the level of intercultural behaviour among the 4th form secondary school students?

RELATED LITERATURE

Fostering Unity through National Curriculum: Reading as a Tool

The Malaysian government is committed to developing human capital and is ready to engineer an educational system that is capable of producing students who are competent and competitive with moral values (School of Malaysia Directory 4th Ed., 2013). Thus, the desire to ensure that education has a major role in uniting a nation of different ethnic backgrounds remains significant and vital in Malaysia (Ministry of Education, 2013). In the context of developing a holistic and culturally competent student, Cortazzi and Jin (1999) stated that school textbooks can be a teacher, a trainer, a map, an authority, an ideology and a valid resource. For example, unity can be achieved via the infusion of Malaysian literature in educational system. It is conceded that reading of story books and school textbooks can contribute to national unity among students. Therefore, story books and school textbooks that have been a part of national curricular are able to become a resource for Malaysian students to explore, understand and adapt with the differences. This is because a student does not only engage cognitively and emotionally with cultural embedded story books and text books, but it also works to build up

the student's intercultural knowledge and intercultural behaviour (Wallace, 2003). Furthermore, according to Rajyashree and Urjani (2013) there are a lot of benefits in representing a diverse world through literary texts.

Manjet, Fatin, Jaganathan, Karupiah and Ahmad (2016) in their conceptual research on intercultural understanding among secondary school students asserted that the use of Malaysian based literature is crucial to promote intercultural understanding among secondary school students in Malaysia. ELIRP that heightens students' intercultural knowledge and brings positive changes in their intercultural behaviour will contribute towards the development of intercultural competence among students.

In general, intercultural knowledge refers to a set of knowledge that assists in understanding cultures that differ from one's own worldview. Judith and Nakayama (2004) divided intercultural knowledge into three components with the first component known as culture general knowledge that necessitates a person to become familiar with the patterns and constituents of certain cultures. The second component constitutes of culture self-knowledge that suggests a person's recognition of their own culture and the way they perceive it from others. The final component is known as culture specific knowledge and refers to one's familiarity with the culture in question, including social norms, values, and history.

Bennett (2008), conceptually defines intercultural knowledge as a set of cognitive, affective, and behavioural attributes that

support affective and appropriate interaction in a diverse cultural context. Within the framework of this research, intercultural knowledge is defined as a systematic way to classify students' own cultural patterns, getting used to unfamiliar ways of being whether empathically or flexibly by comparing and contrasting cultural patterns of others (Bennett, 2008).

Other than intercultural knowledge, intercultural behaviour is also seen as one of the important aspects that helps in developing unity among students as it highlights approaches when communicating with one another. According to Bruhlmeier (2010), intercultural behaviour represents the actions of a person according to their knowledge and values. Chodzkiene (2014) agreed with Chen and Starosta (1996) who described intercultural behaviour as communication skill as well as social skills. Thus, in developing unity among students, it is important to measure the level of intercultural knowledge as well as their intercultural behaviour (Chodzkiene, 2014).

A previous research by Najeemah (2008) utilised a survey research methodology to study the patterns of social interaction between students of different ethnic groups in Malaysia. The results showed that students generally accorded unequal treatment to those from different ethnicities with some even behave negatively towards the other. The study concluded that when students from different ethnic backgrounds are gathered within a multicultural setting they tend to polarise.

This theme of polarisation is also prevalent in several other studies pertaining to intercultural relations in Malaysia. Furthermore, most research is heavily focused on tertiary education, involving university students due to its ethnically diverse campus environment (Ramlee et al., 2009). Findings of studies in tertiary education revealed that the nature of the students towards ethnicity has been internalised in the self, originating from their individual history in social settings especially in schools and the home (Faridah & Amir, 2004). Consequently, it highlights the importance of school as the best place to build intercultural knowledge and intercultural behaviour.

A recent preliminary study (Fatin, Manjet, Jaganathan, Karupiah, & Ahmad, 2016) indicated low level of intercultural knowledge among secondary school students and this phenomenon indicates poor intercultural awareness. A later study by Manjet and Fatin (2016) to gauge English language teachers' perspective on the intervention of English readers infused with Malaysian cultural elements indicated success stories. The readers were able to enhance students' intercultural knowledge and improve their intercultural behaviour.

METHODS

Research Design

This research is quantitative in nature and aims to investigate the level of intercultural knowledge and intercultural behaviour among Malaysian secondary school students during pre-and post-English Language

Intercultural Reading Programme (ELIRP) stage. ELIRP is a reading programme that is specifically developed for the purpose of a research grant sponsored by the Ministry of Education, Malaysia through Fundamental Research Grant Scheme (FRGS). Throughout eight weeks of ELIRP, four short stories in English language were introduced to the Form Four students in the state of Penang, Malaysia with the help of 13 language English teachers from 13 selected schools during English lessons in their respective school. These teachers attended a training workshop conducted by several of the researchers who have vast experience teaching in the schools before the implementation of the ELIPR project.

The schools were selected based on their racial composition. The study sought schools where the composition of Malays, Chinese and Indians were balanced based on data from the Penang State Education Department. Prior permission was obtained from the Ministry of Education and the State Education Department to approach the thirteen schools who volunteered to take part in the study. The study was implemented according to the stages summarised below:

Implementation of Study

Phase one. This phase included the development of the pre-and post-ELIRP questionnaire. A pilot study was conducted in order to test the instrument by using a sample of 20 students. The results obtained from the pilot test was analysed using Statistical Pack of Social Sciences (SPSS) software and the Cronbach Alpha

obtained is .749. According to Nunnally (1978), minimum level of .7 for Cronbach's Alpha coefficient value is required to determine good internal consistency. The result obtained suggested that the items in the questionnaire have acceptable internal consistency. The pilot test was followed with the selection of the participating schools. Initially, 20 schools around Penang were selected based on purposive sampling and the schools were approached through school principals after obtaining the consents from Ministry of High Education (MoE), and Penang State Education Department (JPN).

Phase Two. A total of 292 Form Four students from 13 volunteering schools were involved in the second phase of this quasi experimental study. Form Four students were selected as they were not involved in national examination. Slightly over half of the respondents were Malays (63%). This was followed by Chinese (19.5%), Indian (16.8%) and respondents with ethnicity other than the three major ethnics in Malaysia ranked last with (0.7%) from the total percentage of respondents. For the purpose of this study, the students' English language competency was not taken as a consideration and thus serves as a limitation of the study.

During the first meeting between the respondents and the participating English language teacher, respondents were briefed about ELIRP and the teachers distributed the students' consent form and pre-test questionnaire. Respondents were given a reader titled 'Ripples' that consists of

Malaysian culture based short stories. Four short stories were selected for the purpose of this study. The respondents read and discussed the stories throughout the eight weeks of ELIRP based on the guidelines which were provided. This text, *Ripples*, was chosen because it was found to be suitable to the Malaysian multicultural context. After the completion of ELIRP, respondents were required to answer post-ELIRP questionnaire.

Phase Three. In this phase the Statistical Package for Social Sciences (SPSS) version 22.0 was used to analyse the data together with an adaptation of Intercultural Competence Value Rubric by Association of American Colleges and Universities (AAC&U) (Bennett, Brown, Cartwright, Gin, Davis, Deardorff, Huston, Knefelkamp, Nishishiba & Smith, 2009) as shown in Table 1 was used to measure the level of Intercultural Knowledge and Intercultural Behaviour of the respondents. 'Poor' and 'Average' category indicates low level of intercultural knowledge and intercultural behaviour, whereas 'Good' and 'Average' category indicates high level of intercultural knowledge and intercultural behaviour.

Instruments

Ripples (Reading Material). The first instrument, the reader titled *Ripples* was written by Shih-Li Kow and was published by Silverfish Books Sdn. Bhd. in 2008. It consists of 25 short stories, but for the purpose of this research, only four short stories were selected. The themes

Table 1
Intercultural Competence Value Rubric by Association of American Colleges and Universities (AAC&U) (2009)

	Poor 1-5	Average 6-10	Good 11-15	Advanced 16-20
Knowledge Cultural self-awareness	Shows minimal awareness of own cultural rules and biases	Identifies own cultural rules and biases	Recognizes new perspectives about own cultural rules and biases	Articulates insights into own cultural rules and biases.
Knowledge Cultural worldview	Demonstrates surface understanding of the complexity of elements important to members of another culture in relation to its history, values, politics, communication styles, economy, or beliefs and practices.	Demonstrates partial understanding of the complexity of elements important to members of another culture in relation to its history, values, politics, communication styles, economy, or beliefs and practices.	Demonstrates adequate understanding of the complexity of elements important to members of another culture in relation to its history, values, politics, communication styles, economy, or beliefs and practices.	Demonstrates sophisticated understanding of the complexity of elements important to members of another culture in relation to its history, values, politics, communication styles, economy, or beliefs and practices.
Behaviour Empathy	Views the experience of others but does so through own cultural worldview.	Identifies components of other cultural perspectives but responds in all situations with own worldview.	Recognizes intellectual and emotional dimensions of more than one worldview and sometimes uses more than one worldview in interactions.	Interprets intercultural experience from the perspectives of own and more than one worldview and demonstrates ability to act in a supportive manner that recognizes the feelings of another cultural group.
Behaviour Verbal and non-verbal communication	Has a minimal level of understanding of cultural differences in verbal and nonverbal communication; is unable to negotiate a shared understanding	Identifies some cultural differences in verbal and nonverbal communication and is aware that misunderstanding can occur based on those differences but is still unable to negotiate a shared understanding.	Recognizes and participates in cultural differences in verbal and nonverbal communication and begins to negotiate a shared understanding based on those differences.	Articulates a complex understanding of cultural differences in verbal and nonverbal communication

and structures that emphasise the issues of history, identity (both individual and communal), ethnicity, and place (Leon,

2009) was used as the guide to select the four stories.

Table 2
Title of story

Story	Title	Value Acculturation	Topic
1	One Thing at a Time	Interracial Harmony	Interracial Marriage
2	Deep Fried Devil	Interracial Harmony	Traditional Food Customs
3	Courting of Cik Zahirah	Intercultural Values	Cultural Beliefs
4	The Prize	Intercultural Values	Religious Beliefs

The selection of the short stories in Table 2 above were limited to four due to time constraint as the ELIRP was held during English language period and the participating teachers have to alternate ELIRP intervention with daily English language teaching. Participating teachers and respondents were expected to finish reading each story and discuss the story based on the guidelines provided. A time frame of two weeks was provided to complete each story. A total of eight weeks was required to complete the ELIRP.

Questionnaire. The questionnaire involved two parts: pre-IRP questionnaire and post-ELIRP. It was administered to 292 respondents Form Four students from 13 participating schools in Penang before ELIRP started and after the completion of ELIRP. The same set of items was used in order to observe the differences in the level of intercultural knowledge and intercultural behaviour of the respondents during pre- and post-ELIRP stage. The questionnaire comprises of two parts whereby Part 1

consists of personal information of the respondents and Part 2 was divided into Section A and Section B. Each section consisted of 5 items; Section A focused on Intercultural Knowledge and Section B on Intercultural Behaviour and a total of 40 items were prepared for four short stories.

RESULTS

The results of the level of intercultural knowledge and intercultural behaviour among Malaysian secondary school students in the pre-English Language Intercultural Reading Programme (pre-ELIRP) stage and post- English Language Intercultural Reading Programme (post-ELIRP) are presented according to the research questions.

Research Question 1: What is the level of intercultural knowledge among the 4th form Malaysian secondary school students?

The data came from 292 respondents in 13 secondary schools in the Penang area before the four short stories were

introduced. The respondents were provided with a questionnaire that consisted of two different parts according to four short stories with total of 20 items to learn the level of intercultural knowledge among respondents. Respondents were graded

according to the marks awarded to the respective items. Guttman scale was used to measure respondents' intercultural knowledge; Table 3 shows the respondents' evaluation of their level of intercultural knowledge during pre-ELIRP test.

Table 3
Title of story

Short Story	Mean Score
Story 1 : One Thing at a Time [Topic : Interracial Marriage]	3.95
Story 2: Deep Fried Devil [Topic : Traditional Food Customs]	4.59
Story 3: The Courting of Cik Zahirah [Topic: Cultural Beliefs]	3.99
Story 4: The Prize [Topic: Religious Beliefs]	3.18
Total Pre-English Language IRP stage score	15.70

The mean score above represents mean of the marks obtained by the respondents. In measuring respondents' intercultural knowledge, total mean score received by respondents will serve as the indicator of their level of intercultural knowledge in the pre-ELIRP stage. As for post-ELIRP test, respondents were given the same

questionnaire as the pre-IRP stage and the results were measured based on the mean score obtained according to short stories as well as overall score. Table 4 shows the mean score obtained in measuring the respondents' level of intercultural knowledge during post-ELIRP test:

Table 4
Level of intercultural knowledge during post-English Language Intercultural Reading Programme Stage

Short Story	Mean Score
Story 1 : One Thing at a Time [Topic : Interracial Marriage]	4.02
Story 2: Deep Fried Devil [Topic: Traditional Food Customs]	4.74
Story 3: The Courting of Cik Zahirah [Topic: Cultural Beliefs]	4.25
Story 4: The Prize [Topic: Religion Beliefs]	3.22
Total Pre- ELIRP test	16.24

In comparison to the mean score results for pre-ELIRP and post-ELIRP questionnaire, the findings revealed that there were positive changes in the total mean score of pre-

ELIRP test and post-ELIRP test. The difference of the scores is as shown in table 5 below:

Table 5

Comparison of English Language Intercultural Knowledge Pre-Intercultural Reading Programme Stage and English Language Post-Intercultural Reading Programme Stage Questionnaire Score

Short Story	Mean Score (Pre-ELIRP)	Mean Score (Post-ELIRP)
Story 1 : One Thing at a Time [Topic : Interracial Marriage]	3.95	4.02
Story 2: Deep Fried Devil [Topic : Traditional Food Customs]	4.59	4.74
Story 3: The Courting of Cik Zahirah [Topic: Cultural Beliefs]	3.99	4.25
Story 4: The Prize [Topic: Religion Beliefs]	3.18	3.22
Total Test Score p-value = 0.000	15.70	16.24

Although the total mean score showed that respondents' level of intercultural knowledge fell under the same category during pre-ELIRP stage and post-ELIRP stage as according to Intercultural Knowledge and Competence Value (2009), indicated that respondents have a good level of knowledge during post-ELIRP stage. The rubric indicates good level of intercultural knowledge suggesting that respondents are able to recognise new perspectives about own cultural rules and biases as well as demonstrate adequate understanding of the complexity of elements that are important to members of other cultures. This proves that respondents have high level of intercultural knowledge.

Moreover, paired sample t-test for two related samples was also conducted to compare the means as the repeated measures. In this research study, subjects were measured on two occasions and under two different conditions. Paired sample t-test revealed that the p-value obtained after comparing overall mean score during pre-ELIRP stage and post-ELIRP stage is 0.000 which is less than 0.05. Therefore,

the findings indicate that overall two sets of scores are significantly different.

Research Question 2: What is the level of intercultural behaviour among the 4th form Malaysian secondary school students?

In Section B of pre-English Language Intercultural Reading Programme (ELIRP) test, a total of 20 items to examine the level of intercultural behaviour among respondents were prepared and the items divided according to the topics portrayed in the short stories. Respondents used a Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Scale 1 (strongly disagree) and scale 2 (disagree) were combined for reporting purpose. Scale 3 (agree) and scale 4 (strongly agree) are combined for reporting purposes whereby scale three (neutral) stands alone. According to Allen and Seamen (2007), Likert scale is best to use as wide scale as possible, however, it is appropriate for the researcher to condense categories for analysis purpose. Therefore, the purpose of combining the scales is to report respondents' answers and responses

and categorise them into three major categories, which are; agree, neutral and disagree. Tables 6 until Tables 9 summarise the level of intercultural behaviour during the pre-ELIRP stage according to the short stories and the scale is as follows: Scale: 1= Strongly Disagree, 2= Disagree, 3= Neutral, 4= Agree, 5= Strongly Agree.

Table 6
Pre-ELIRP Story 1 (*One Thing at a Time*)

Items	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)	Mean Score
1. <i>I think inter-racial marriage should be promoted</i>	7.5	11.3	53.1	16.1	35	3.14
2. <i>I will practice interracial marriage in the future</i>	16.1	21.9	40.4	15.1	6.5	2.74
3. <i>I would like to learn the languages of other races</i>	0.7	1.4	12.0	36.6	49.3	4.33
4. <i>If I can speak another language, I will be able to learn about the culture better</i>	0	4.1	15.8	40.8	39.4	4.15
5. <i>I would like to learn traditional dances of other races in Malaysia</i>	6.8	11.3	34.6	27.1	20.2	3.42

Table 7
Pre-ELIRP Story 2 (*Deep Fried Devil*)

Items	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)	Mean Score
1. <i>I think traditional food is ethnic free</i>	2.4	9.9	35.6	27.1	25.0	3.62
2. <i>I eat traditional food of other races prepared by cooks of my race only</i>	16.1	24.3	26.4	25.7	7.5	2.84
3. <i>I eat traditional food of other races prepared by cooks of other races</i>	3.8	11.6	34.6	31.2	18.8	3.50
4. <i>We should not change the original recipe of traditional food that belongs to other races</i>	2.7	8.2	26.0	31.5	31.5	3.81
5. <i>I think food can be unifying symbol for Malaysians</i>	0.7	2.7	15.4	32.2	49.0	4.26

Table 8
Pre-ELIRP Story 3 (Courting of Cik Zahirah)

Items	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)	Mean Score
1. <i>I believe that practicing black magic is cultural practice specific to Malay community</i>	28.8	31.8	27.4	9.6	2.4	2.25
2. <i>I understand why some culture/communities forbid courtship before marriage</i>	3.1	9.2	51.0	26.7	9.9	3.31
3. <i>I would date a woman before marriage/engagement irrespectively of my/her cultural/religious beliefs</i>	12.3	12.0	42.5	25.3	7.9	3.04
4. <i>In my opinion, Malay superstitions are defined by culture and not religion</i>	4.1	13.0	52.4	21.9	8.6	3.18
5. <i>I feel that modern Malay society is still tied to superstitious beliefs</i>	5.5	6.5	48.6	30.8	8.6	3.30

Table 9
Pre-ELIRP Story 3 (Courting of Cik Zahirah)

Items	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)	Mean Score
1. <i>I believe that all forms of gambling are prohibited in my culture</i>	8.6	14.4	29.8	22.3	25.0	3.41
2. <i>I think that it is permissible to partake in games of chance as one can control one's luck</i>	10.6	25.7	47.9	13.7	2.1	2.71
3. <i>In my opinion, the prohibition on gambling is more religious in origin than cultural</i>	3.1	14.0	43.2	3.6	16.1	3.36
4. <i>I think that gambling is a destructive habit and I should not participate in it</i>	2.1	6.5	19.9	24.7	46.9	4.08
5. <i>I think gambling is a form of social and is culturally sanctioned</i>	17.1	23.6	34.6	18.8	5.6	2.73

In finding the difference in the level of intercultural behaviour among the secondary school students at the pre-ELIRP stage and post IRP stage, the same procedure was repeated. During post-ELIRP stage, the same questionnaire was distributed among the same respondents in pre-ELIRP stage.

Tables 10 until Tables 13 summarise the respondents' evaluation on the level of intercultural behaviour during post-IRP questionnaire and the scale is as follows: Scale: 1= Strongly Disagree, 2= Disagree, 3= Neutral, 4= Agree, 5= Strongly Agree

Table 10
Post-ELIRP Story 1 (One Thing at a Time)

Items	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)	Mean Score
1. <i>I think inter-racial marriage should be promoted</i>	4.5	8.9	45.2	29.1	12.3	3.36
2. <i>I will practice interracial marriage in the future</i>	10.3	21.6	46.2	17.8	4.1	2.84
3. <i>I would like to learn the languages of other races</i>	0.7	0	10.3	40.4	48.6	4.36
4. <i>If I can speak another language, I will be able to learn about the culture better</i>	0	1.7	18.5	42.5	37.3	4.15
5. <i>I would like to learn traditional dances of other races in Malaysia</i>	2.7	7.9	38.7	30.5	20.2	3.58

Table 11
Post-ELIRP Story 1 (One Thing at a Time)

Items	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)	Mean Score
1. <i>I think traditional food is ethnic free</i>	1.7	7.9	43.2	30.5	16.8	3.53
2. <i>I eat traditional food of other races prepared by cooks of my race only</i>	17.5	24.7	26.4	25.3	6.2	2.78
3. <i>I eat traditional food of other races prepared by cooks of other races</i>	2.4	17.1	29.1	30.5	28.4	3.50
4. <i>We should not change the original recipe of traditional food that belongs to other races</i>	1.0	8.2	31.8	30.5	28.4	3.77
5. <i>I think food can be unifying symbol for Malaysians</i>	0	0.7	15.4	39.4	44.5	4.28

Table 12
Post-ELIRP Story 3 (Courting of Cik Zahirah)

Items	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)	Mean Score
1. <i>I believe that practicing black magic is cultural practice specific to Malay community</i>	19.9	28.8	38.4	11.0	2.1	2.47
2. <i>I understand why some culture/communities forbid courtship before marriage</i>	6.8	6.5	46.6	27.4	12.7	3.33
3. <i>I would date a woman before marriage/engagement irrespectively of my/her cultural/religious beliefs</i>	9.9	13.7	42.5	25.3	8.6	3.09
4. <i>In my opinion, Malay superstitions are defined by culture and not religion</i>	7.9	14.0	51.0	17.8	9.2	3.07
5. <i>I feel that modern Malay society is still tied to superstitious beliefs</i>	3.8	10.6	53.8	26.4	5.5	3.19

Table 13
Post-ELIRP Story 4 (The Prize)

Items	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)	Mean Score
1. <i>I believe that all forms of gambling are prohibited in my culture</i>	8.9	9.9	31.5	25.0	24.7	3.47
2. <i>I think that it is permissible to partake in games of chance as one can control one's luck</i>	11.6	28.1	47.6	10.6	2.1	2.63
3. <i>In my opinion, the prohibition on gambling is more religious in origin than cultural</i>	6.8	9.9	43.2	29.8	10.3	3.27
4. <i>I think that gambling is a destructive habit and I should not participate in it</i>	6.5	5.1	20.2	27.1	41.1	3.91
5. <i>I think gambling is a form of social and is culturally sanctioned</i>	16.8	20.5	43.2	14.7	4.8	2.70

In comparison to the results obtained from the pre-ELIRP questionnaire and post-ELIRP questionnaire, the findings revealed that there were only slight changes in relation to the total scores obtained by the respondents. Adding to that, based on the mean score for

every story, the respondents were found to be neutral in each item in the questionnaire. Table 14 shows the difference of the scores on the level of intercultural behaviour of the respondents during pre-and post-ELIRP questionnaire.

Table 14
Comparison of Pre-ELIRP and Post-ELIRP stage questionnaire score

Short Story	Mean Score (Pre-ELIRP)	Mean Score (Post-ELIRP)
Story 1 : One Thing at a Time [Topic : Interracial Marriage]	3.56	3.66
Story 2: Deep Fried Devil [Topic : Traditional Food Customs]	3.60	3.57
Story 3: The Courting of Cik Zahirah [Topic: Cultural Beliefs]	3.01	3.03
Story 4: The Prize [Topic: Religion Beliefs]	3.26	3.20
Overall Score	13.43	13.46

The overall score obtained by respondents indicate that respondents have the same level of intercultural knowledge during pre-and post-ELIRP stage. According to Intercultural Competence Value Rubric (2009), respondents have 'Good' or high level of intercultural behaviour during

pre-and post-ELIRP stage. This means that, their level of intercultural behaviour allows them to recognise intellectual and emotional dimensions of more than one worldview, and sometimes uses more than one worldview in interactions and respondents are able to recognise and

participate in cultural differences in verbal and non-verbal communication and begins to negotiate a shared understanding based on the differences.

However, a non-parametric Wilcoxon Signed Ranked test was performed to validate the changes of intercultural behaviour before the stories were being introduced and after the respondents were exposed with four of the related stories based on the English Language Intercultural Reading Programme test that they have to answer during pre-ELIRP stage and post-ELIRP stage according to items. Table 15

Table 15
Intercultural behaviour Pre-ELIRP and Post-ELIRP p-value

Pre-ELIRP	Post-ELIRP	Z-value
PrS1Q1	PS1Q1	0.001
PrS1Q2	PS1Q2	0.165
PrS1Q3	PS1Q3	0.326
PrS1Q4	PS1Q4	0.991
PrS1Q5	PS1Q5	0.035
PrS2Q1	PS2Q1	0.164
PrS2Q2	PS2Q2	0.231
PrS2Q3	PS2Q3	0.821
PrS2Q4	PS2Q4	0.410
PrS2Q5	PS2Q5	0.740
PrS3Q1	PS3Q1	0.002
PrS3Q2	PS3Q2	0.851
PrS3Q3	PS3Q3	0.572
PrS3Q4	PS3Q4	0.165
PrS3Q5	PS3Q5	0.079
PrS4Q1	PS4Q1	0.588
PrS4Q2	PS4Q2	0.321
PrS4Q3	PS4Q3	0.407
PrS4Q4	PS4Q4	0.024
PrS4Q5	PS4Q5	0.664

S: Story, Q: Question, Pr: Pre, P: Post

summarises the pre-and post-test Z-value according to 20 items based on the four short stories.

Based on the data presented in Table 15, only four out of 20 items have Z-value that is less than .05. The results show that only S1Q1 / PS1Q1 (Z value=0.001), S1Q5 / PS1Q5 (Z value=0.035), S3Q1 / PS3Q1 (Z value=0.002) and S4Q4 / PS4Q4 (Z value=0.024) have significance difference between pre-and post-ELIRP score in respondents' intercultural behaviour. Other than the four items in Table 15 with Z value that is less than .05, the changes in the level of intercultural behaviour of the respondents were not caused mainly by ELIRP, but mainly were caused by other external factors.

DISCUSSION AND CONCLUSION

Based on the findings obtained from the quantitative research study to explore the level of intercultural knowledge among secondary school students, it was shown that respondents have high level of intercultural knowledge during pre-and post-ELIRP stage. However, there is an improvement in the score obtained during post-ELIRP stage as compared to pre-ELIRP stage. This is in line with Bennett (2008) who explained that the development of intercultural knowledge suggests systematic way to classify own cultural patterns, getting used to unfamiliar ways of being whether empathically or flexibly. Savicky (2008) also proposed that such knowledge cannot be assumed and in building intercultural knowledge a balance theory, research, and application is required.

This study suggests that ELIRP has helped respondents to improve their level of intercultural knowledge through intercultural exposures via intercultural reading. In a study of intercultural knowledge among school students, Garza (2008) found that the selection of reading materials and reading activities in classrooms to promote intercultural knowledge is important as they allow students to broaden their perspectives and familiarity of cultures other than their own. Quantitative findings of this research also suggested that respondents explicitly improved their knowledge on their own culture. This illustrated that ELIRP does not only help to increase respondents' intercultural knowledge of cultures other than their own, but also leads the respondents to know their own culture's customs, traditions, practices, beliefs. Thus, if intercultural reading among secondary school students is nurtured appropriately, the results could lead respondents to increase their general knowledge, extra understanding of cultures other than their own.

Intercultural behaviour is seen to be important in fostering unity among Malaysian secondary school students. Although the level of intercultural behaviour among Malaysian secondary school students was found high in this research study, Wilcoxon Signed Ranked test suggested that the changes in the level of respondents' intercultural behaviour varies due to the external factors rather the influence of ELIRP. Chen and Starosta (1996) highlighted that intercultural behaviour is interrelated with

one's communication skill. It is important to realise that such skill improves over time and according to situations or behavioural flexibility, interaction management and social skill. The current study implied that the level of intercultural behaviour of every respondent relies on the amount of stable mental programming over time as suggested by Hofstede (1981).

ELIRP would also be a platform to improve other skills such as critical thinking skills among students. Students are encouraged to ask critical questions that can provoke cultural values in intercultural classroom environment. Therefore, in order to improve understanding of both a student's own culture and that of others more effort should be directed at developing thinking skills.

Learning environment influences the ways in which students process new intercultural information and understand how they should react when involved in discussions on culture. ELIRP is suitable for a class of multi-cultural composition for knowledge sharing of cultural elements among students of diverse cultures. This criterion will truly affect intercultural relationship among the students.

Thus, there is a need for better initiatives and intervention in school based reading programmes in order to help improve the level of intercultural knowledge and behaviour among Malaysian secondary school students. English language competency of the students should be taken into consideration to improve understanding of intercultural infused

texts that are being used. Another element that needs consideration is the extension of the intervention for a longer period to ensure more representative findings on the intercultural relationship among students of different races.

The findings of this research will be used as the indicator in exposing students' level of intercultural knowledge and behaviour. It hopes to initiate more research studies among secondary school students on the same theme.

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Domestic Violence against Women: Empirical Evidence from Pakistan

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ABSTRACT

It is a common belief that women in Pakistan have limited rights or privileges in a male dominated society. Women fare better in urban areas and middle and upper sections of society. The condition of women rights in rural areas is very alarming. In fact, women face different kinds of violence such as sexual violence perpetrated by their family members, domestic abuse including spousal murder, beating, threat, honour killings, torture, acid attacks and child custody problems. Islam and most international organisations condemn violation of women rights. The feminist movements have started worldwide to protect women rights and gender-based violence. The current research focused on all those violations which women have to face in their domestic live. The case study of Bahawalpur indicates conservative environment and its impact on women rights violations. Descriptive and analytical method of study was used in this study. Data were collected through a structured questionnaire from the different areas of the district Bahawalpur. Legal and punitive measures cannot succeed unless social customs, norms and societal mentality are changed. Meanwhile, better education facilities, opportunities of employments and proper social and political participation can overcome this issue. Moreover, proper implementation of law and justice after violence is necessary to eliminate this problem in the Pakistani society.

Keywords: Women rights, domestic violence, education facilities, Pakistan

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INTRODUCTION

Violence against women is generally practiced in every society and recognised as

a global concern as 10 out of 70 women are hit physically by their partners in their lives. In fact, they experience hostile behaviour starting right from their childhood. They mostly face depression, poor physical, psychological and mental health. The consequences of all this have affected their lives and that of their children ultimately pose a great threat to the well-being of the society (Lombard & Mcmillan, 2013). It is a common belief that women in Pakistan have limited rights or privileges in the male dominated society. Although women fare better in urban areas and middle and upper sections of society, the condition of violation in rural areas is very critical and alarming. Seventy-five percent of Pakistani female population are living in the rural and tribal areas (Wikan, 2009). Pakistani women remain structurally disadvantaged and are considered as second class citizens. In the southern Punjab, in particular, women victims confront social and cultural discriminations. Factors behind this discrimination including poverty, low social and economic status of women in different social traditional norms and family rules hinder them to go for jobs (Shahid, 2004). Most existing literatures have attempted to highlight the violations of women rights and urged to address the issues. Islam provides protection for women in every field of life (Faridi, 2010).

Pakistan is considered as the third most dangerous place for women in the world. The status of women varies from class to class, educational profile, number of children and marital status. Women in Pakistan face legal,

social and economic discriminations (Agnes, 2004). The constitution of Pakistan and different laws prohibit these discriminations on the bases of gender but often lack proper enforcement by the authorities. The judicial system, property and family laws create problems and hurdles for women to attain the protection of their rights (Abrar-ul-haq, Jali, & Islam, 2016; Carpenter, 2005).

Bahawalpur is a division of Punjab with three districts. This division is an underdeveloped and backward area. The reason behind choosing this division as a case study is that the women of Bahawalpur are facing multiple forms of threats in their domestic lives. Identification of the multiplicity of forms of violence against women suggests the universality of the problem (Faridi, 2010). The biased mentality of people reflects their cultural and social differences against women. The kinds of violence against women are battering, rape, incest, suttee, foot binding, infibulations, dowry death, selective meal nourishment, emotional abuse, bride burning and child sexual abuse (Ramanamma, 2005).

Problem Statement

For many decades, women have been facing problems in their domestic and social lives. They are treated as inferior and less wise creatures of the world. Meanwhile, their basic rights can be marginalised by everyone in society. However, since the previous decade, the status of women in their society, and even the mentality and judgment of the people, have experienced a transformation. Moreover, this research

would analyse the representation of women domestic problem in Pakistan, especially in the district Bahawalpur. In this connection, the main reasons to choose this issue are the day-to-day observation and experiences that compelled to breakout voices against this situation because thousands of cases against women occur in domestic life but only few are registered. Unfortunately, those registered cases remain unresolved for many years.

There are many reasons behind for not registering the cases as most of the women keep in view the honour and fear of society, as well as the so-called reputation of their family. Generally, police and judges are also reluctant to register violation cases involving women and consider them as family matters or problems which can be solved at family level. Therefore, the current research presents the situation of women facing their domestic lives and highlights all these violations which make them very pitiful victims. Therefore, the key objectives of the current research are to highlight women issues, causes behind these issues and find possible solutions for violations of women rights. Pakistan is mostly a patriarchal society and women in Pakistan have to face many systematic and substantial challenges in their daily lives. Some of these challenges are listed below:

- Violence against women interferes with the roles of women in domestic and social lives and that the mentality of people and traditional values are abominable against women.
- Women have faced domestic violence like honour killing, burning, educational discrimination and child marriage in Bahawalpur.
- The government and civil society, as well as women also do not cooperate due to their social values and fear of society.
- Islam provides protection to women in their domestic lives; however, this concept is commonly misused by the male dominated society.

Literature Review

Violence and crimes against women are a global phenomenon. In order to control or mitigate this issue, a lot of measures have been adopted in different countries and by different international bodies in the effort to curtail such heinous acts against women (Mookherjee, 2002; Rondald, 1997; Shahnawaz, 2002). The Aurat Foundation Reports (2013-14) and the USSD Human Rights Reports (2013-14) indicated that women have to face serious problems when they try to report to the Police as no privacy is provided for First Information Report (FIR) and this encourages both parties to reconcile and mostly women will return to their abusing family members. In addition, the unfriendly environment of courts also discourages women to report such abuse cases.

Phillips and Dustin (2004) explained that forced and child marriages, which mostly involved children at the age of 13 to 15, are very common in Pakistani

societies (Flavia, 1996). Women are also discriminated by their family who are not ready to give them inheritance. The recent global movement for women's rights has achieved considerable re-thinking regarding their rights since many violations of women's rights occur in the private sphere of family life and are justified by appeals to cultural or religious norms. Both families and cultures (including their religious aspects) have come under critical scrutiny (Collins, 2000; Okines, 1998; Wing, 2003).

Women's Rights in Islam

Islam believes on equality, justice and peace. The Islamic teachings concerning women rights are highlighted in the current research because Pakistan is an Islamic country. Their freedom and privileges cannot be compromised by imposing any unnecessary restrictions whatsoever. The Holy Quran explains:

(البقرة: ٢٢٨)

﴿وَلَهُنَّ مِثْلُ الَّذِي عَلَيْهِنَّ بِالْمَعْرُوفِ وَلِلرِّجَالِ عَلَىٰ نَفْسِهِمْ دَرَجَةٌ﴾

Translation: "And they (women) have rights (over their husbands as regards living expenses) similar (to those of their husbands) over them (as regards obedience and respect) to what is reasonable, but men have a degree (of responsibility) over them" (Al-Baqarah 228).

Here, superiority means only protection, covering, ease to each other and the

provision of living expenses. It does not make men dictators over women and at the same, it time does not provide a license to mistreat them. To regularise the worldly matters is the responsibility of man. Family is the basic unit of society and both (Man, Woman) have equal rights in this unit. A degree above means that man is responsible for earning for his family.

(الاحزاب: ٢١)

﴿لَقَدْ كَانَ لَكُمْ فِي رَسُولِ اللَّهِ أُسْوَةٌ حَسَنَةٌ﴾

Translation: "Indeed in the Messenger of Allah (Muhammad) you have a good example." (Al-Ahzab-21)

However, many historians and religious scholars try to downgrade the status of women by saying that women are inferior and they claim that it is because of Eve

that Adam committed the first mistake of eating the forbidden fruit. However, women, according to the Holy Quran, are not to be blamed for Adam's first mistake. Both were jointly wrong in their disobedience to Allah, both repented and were forgiven (Wing, 2003). The Quran states,

﴿فَلَهُمَا يَفْغُورُ فَلَمَّا ذَاقَا الشَّجَرَةَ بَدَتْ لَهُمَا سُرَاتُهُمَا وَطَبَقَا يَحْصِنُونَ عَلَيْهِمَا مِنْ وَرَقِ الْجَنَّةِ وَنَادَاهُمَا رَبُّهُمَا أَلَمْ أَنْهَكُمَا عَنْ تِلْكَ الشَّجَرَةِ وَأَقُلْتُ لَكُمَا إِنَّ الشَّيْطَانَ لَكُمَا عَتُوٌّ مُبِينٌ﴾ (الاعراف: ٢٢)

So “he (Shaitan) misled them with deception. Then, when they tasted of the tree, that which was hidden from them of their sham (Private parts) became manifest to them and they began to cover themselves with the leaves of Paradise (in order to cover their shame). And their Lord called out to them (saying), Did I not forbid you that tree and tell you, Verily, Shaitan is an open enemy unto you?” (Al-A’raf 22).

(الأعراف-٢٢)

Translation: “Indeed in the Messenger of Allah (Muhammad), you have a good example”. (Al-Ahzab-21).

Islam does not force women to marry without their consent. The first consent of

The Islamic laws about women’s rights give a broader framework that needs to be utilised in order to maintain the status of women in Muslim societies. Islam urges men to have good behaviour towards their families and wives. The Holy Prophet (PBUH) behaved very well and politely with his family.

﴿لَقَدْ كَانَ لَكُمْ فِي رَسُولِ اللَّهِ أُسْوَةٌ حَسَنَةٌ﴾

women is essential to accept a marriage proposal, and that the man must promise to give some amount money to the women he is going to marry and that money is called Mahr.

﴿وَعَاشِرُوهُنَّ بِالْمَعْرُوفِ فَإِنْ كَرِهْتُمُوهُنَّ فَعَسَىٰ أَنْ تَكْرَهُوا شَيْئًا وَيَجْعَلَ اللَّهُ فِيهِ خَيْرًا كَثِيرًا﴾

(النساء-١٩)

“Live with them honorably. If you dislike them, it may be that you dislike a thing through which Allah brings a great deal of good”. (An-Nisaa-19).

Islam gives importance to marriage and encourages its followers to marry as per their choices. The Muslim men should

enter into a Nikkah agreement at reaching the age of maturity. However, it is not obligatory for every Muslim to marry if they are not in a position to fulfil the responsibilities marriages will impose on them. The following verses signify the importance of this institution. Allah has said:

(النور-٣٣)

﴿وَلْيَسْتَحْفِظِ الَّذِينَ لَا يَجْتُونَ بَكَ آخًا حَتَّىٰ يُغْنِيَهُمُ اللَّهُ مِنْ فَضْلِهِ﴾

“And let those who find not the financial means for marriage keep themselves chaste, until Allah enriches them of His bounty”. (Al-Noor 33)

These holy verses show that a marriage is a serious decision and must be taken at an appropriate time. Islam ensures every kind of rights to women, but in Pakistan which is an Islamic society, there are great influences

of traditional, cultural and social norms that put strict obstructions in the way of women (Lombard & Mcmillan, 2013). A society that denies women of their due rights, and behaves towards them in an undignified and blameworthy manner can be an example of a traditional structure, but should not be viewed as Islamic.

Feminism and Women Rights

The feminist movement started in the late 19th century against the gender based violence. The goals of the feminist theory are to highlight, understand and address the inequality and encourage the discipline to recognise the importance of gender politics (Wing, 2003). The feminist theory highlights the discrimination and disadvantage that women particularly suffer in international politics. This discrimination is a result of the lack of access to the political, economic and social activities (Abrar-ul-haq, Jali, & Islam, 2016b). In addition, the goal of the feminist theory is to analyse the privileges certain masculine identities and ways of knowing and examining the relationship within and between masculinity, femininity,

men and women. Masculine biasness is the core assumption and concept of the feminist discipline (Collins, 2000).

Domestic Violence against Women

Women are facing a widespread violence around the world because the considerations of their gender alone. Domestic violence can be explained as a pattern of behaviour which is used by a person to control the other person for physical violence, threats, sexual, emotional, economic abuses, isolation and intimidations. Violence is a continuum ranging often escalating economic, sexual, emotional and physical mostly occur and the husband is often the perpetrator (Bahl, 2007). Women mostly suffer due to the social-cultural and traditional norms, their subordinate social status, as well as misinterpretations of religious teaching and economic dependence. Unequal power distribution between men and women is accountable for the violence perpetrated against women. The cultural customs in society are the main obstacles in the way of women's socio-economic empowerment (Weiss, 1985). The list of women violence is explained below:

Table 1
Types of violation of women's rights

Physical Violence	Stabbing, slapping, kicking, punching, pushing, stabbing or killing
Sexual Violence	Unwanted touching, marital rape, derogatory slurs, harassment, the infliction of pain forced sex and refuse to protect her against sexually transmitted diseases
Economic Violence	The total control of the finances of the family inheritance rights
Spiritual Violence	Prevent woman from going to religious places, denigrate religious beliefs or even a religious practice
Psychological Violence	Threats, harming pets, silent treatment forcible confinement, damaging property rights, manipulating victim's feelings, criminal harassment and name-calling are all crimes

Source: Mirza (2011)

The Constitution of Pakistan provides the women the rights to social justice, economic and political rights, equality of status and opportunity to promote their dignity. Some constitutional guarantees for Pakistani women are explained below:

Table 2
Major Laws concerning women rights

Major Laws	Years
The Women Distress and Detention Fund (Amendment Act)	2011
The Protection against Harassment of Women at Workplaces Act	2010
The Add Control and Add Crime Prevention Act	2010
The Criminal Law (Amendment) Act (Sexual Harassment)	2010
The Criminal Law (Amendment) Act (Honour Crimes)	2006
Amendments in family Court Act for Khula	2002
The Hudood Ordinances	1979
Dowry and Bridal Gifts (Restriction) Act	1976
West Pakistan Family Court Act	1964
West Pakistan Rule Under the Muslim Family Laws or ordinance	1961
The Muslim Family Laws Ordinance	1961
The Dissolution of Muslim Marriage Act	1939
Child Marriage Restraint Act	1929
West Pakistan Family Court Rules	1965
The Guardians and Wards Acts	1890
Qanun-e-shahadat Ordinances (Law of Evidence)	1884

Source: Mirza (2011)

The Case Study of Bahawalpur

Bahawalpur was a princely state and annexed with Pakistan after its independence. It remained as a state and with the creation of

one unit, and was included in West Pakistan. Its separate status was not provided after the end of one unit. In recent days, Bahawalpur is the most backward and underdeveloped area. It is a division of the Punjab province with three districts, namely, Bahawalnagar, Raheem-Yar-Khan and Bahawalpur. It is the twelfth largest city of Pakistan. Domestic violence is widespread in this area, with acid throwing, burning, killing, rape and physical abuse as usual practices (Faridi, 2010). The reason to choose this division for the case study is that women in Bahawalpur are facing multiple forms of threats in their domestic lives. The biased mentality of people is reflected in their cultural and social differences against the women. The status of women varies from class to class, their social status, educational profile and number of children. Owing to the cultural and traditional norms, women do not share their problems even with their husband and family members (Shami, 2001). The Aurat Foundation report below shows violation of women's rights in Bahawalpur:

Table 3
Cases of violence against women in Bahawalpur (2014)

Kinds of Women Rights Violation	No. of Cases
Kidnapping	33
Murder	35
Rape	23
Honor killing	5
Domestic Violence	3
Acid throwing	3
Bride Burning	2

Aurat Foundation (2014, p. 19)

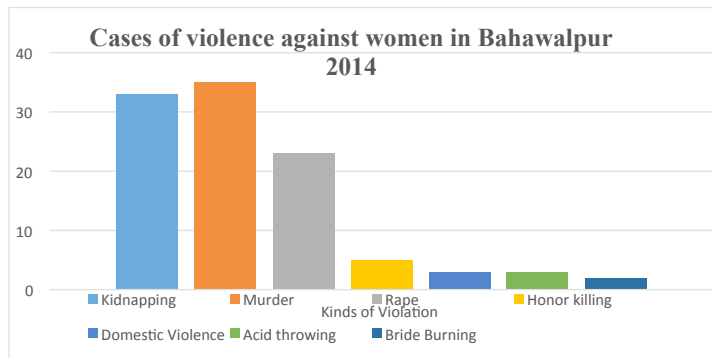


Figure 1. Cases of violence against women in Bahawalpur (2013)

Honour killing

Honour killing is an act in which a male member of a family kills a female relative for tarnishing the family's image. It is the most serious crime against women. Most of this acts of killing are justified on the basis that women bring dishonour and shame to the family. In Pakistan, women are considered as a property of male members and they cannot do anything without the permission of the male members who are usually the father, brother, husband or in-laws (Wikan, 2009). Honour killing has socio-cultural concept and killing of women in the name of honour or to restore the family's honour based on perceived sexual indiscretions is practiced all over Pakistan. Women are accused by family members that they bring shame and dishonour to their families and women are rarely provided with any opportunity to prove themselves innocent.

Women and "girls can be killed due to a variety of "behaviours, which may include talking with unrelated male, consensual sexual relations outside marriage, being a

victim of rape, seeking a divorce, or refusing to marry the man chosen by one's family. Even the suspicion of a transgression may result in a killing. According to the report of the Aurat Foundation, a man killed his wife on the basis of a dream he had about her committing adultery. Women have been killed for ostensibly disrespecting their husbands. In one case, a woman was beaten to death for not performing her domestic duties quickly enough. Women may also be assaulted physically but not killed. When they attempt to seek help from the law enforcement agencies, they may be disbelieved or they may be discredited by the officials who support the prevailing cultural expectations for women. Some countries have passed laws that allow lesser penalties for men who kill in the name of family's honour. In others, the police may be bribed by the family of the killer to ignore attempts to report the killing as a murder (Wikan, 2009).

The many cases reported in the recent years in relation to honour killing in Pakistan indicate a dramatic rise of these cases all over

the country. Pakistan is an Islamic country and its laws are made according to Islamic teachings. Thus, it is necessary to highlight the Islamic teachings regarding honour killing. The Islamic teachings also clarify that honour killings occur due to traditional customs and Islam totally condemns all illegal killing of innocent people. There is no

concept of honour killing in Islam (Agnes, 2004). Ignorant people, traditional views and ideas, holding outworn or principles try to prove that honour killing is according to Islam and just, right or reasonable. This, however, is against the true spirit of Islam, which is totally against it. The Quran also makes it clear:

(نبي اسرائيل - ٣٣)

﴿وَلَا تَقْتُلُوا النَّفْسَ الَّتِي حَرَّمَ اللَّهُ إِلَّا بِالْحَقِّ﴾

Translation; “And do not take life which Allah has made sacred except for a cause (under courts verdict)” (Al-Isreal 33).

In some cases, murders are committed for other motives and regarded as “honour killing”. For example, women demanding for divorce and bringing smaller amount of dowry give excuses for the in-laws and husband to kill. Avoiding provision of proper shares in property is another reason to do so and all these reasons have been used to kill women and term these killings

as honour killings. They kill women and then accuse that particular women (wife, sister or daughter) as being bad (Amnesty International, 1999).

Honour killing is a murder and the person committing it must be punished according to Islam (Lombard & Mcmillan, 2013). Islam keeps every soul in a particular position of high regard. Islam does not allow people to take the law into their own hands because this will lead to complete social disorder and lawlessness.

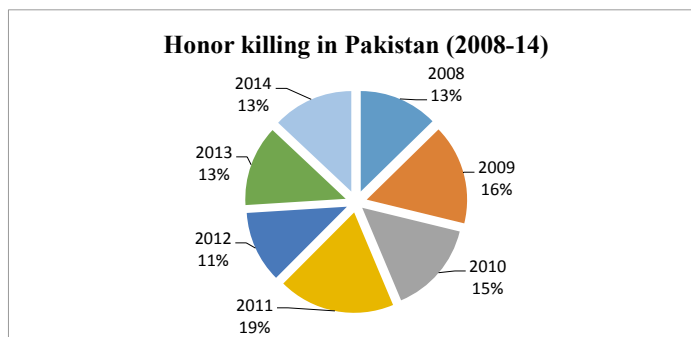


Figure 2. Honor killing (Aurat Foundation, 2014 , p. 77)

Bride Burning

Bride burning is yet another form of barbaric and inhuman domestic violence within the walls of the home. In bride burning, “it is alleged that a husband or the family of the husband burn the man’s wife with kerosene or gasoline oil leading to her death” (Barlas, 2002, p. 76).

This is a great abuse of human rights violation. Bride burning is usually explained as a suicide attempt or kitchen accident. There are many reasons for committing bride burning, but the main causes include the failure to provide enough dowry by the bride family to the groom. Husbands and in-laws are usually involved in these crimes and they believe that bride burning is an easy technique to get rid of her without any evidence as it may be termed as a suicide. This may provide a chance to receive a sizeable dowry again through the second marriage. This shows the greediness of the husband and in-laws which urges them to

this inhumane killing of his wife (Lombard & Mcmillan, 2013).

Bride burning is not only a violation against women’s rights but it is also a heinous and shocking kind of violence against humanity. The question arises as to why they do not poison or shoot them. Most bride burning occurs while she is cooking, and the individuals committing this offence would claim it as fire breakout due to her own carelessness that burnt her (Caprioli & Boyer, 2001). The failure to give birth to a child or to a baby boy could also be a cause for such burning. Pakistan is an Islamic country and such practices are part of the very fabric of its society. Islam protects every soul and everyone’s life is secured according to its teachings, but in practice, Islamic rules are not enforced by the authorities (Bahl, 2007). In Pakistan, a great number of such cases are reported every year. According to the Aurat Foundation report, the percentage of bride burning indicates figures from 2008 to 2014, as follows.

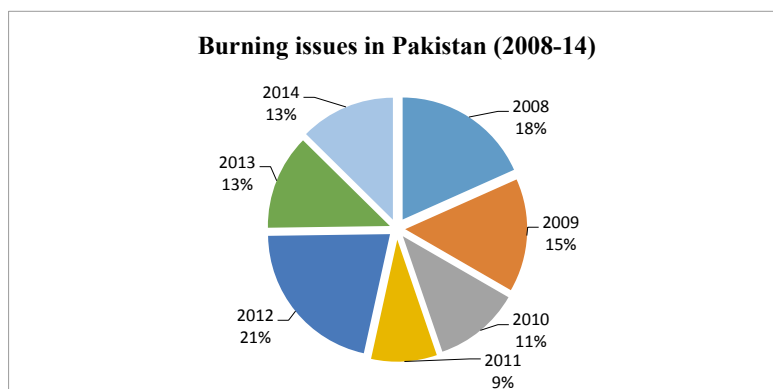


Figure 3. Burning issues (Aurat Foundation, 2014, p. 76)

Inheritance Rights

Inheritance means money or property received from ancestors or parents. Legally, the property is inherited from an ancestor under the laws of inheritance and property right (Wal and Banergi, 2001). There is a vital role of women Inheritance right to empower them in the field of socio-political and economic and education but unfortunately women rights to inheritance are denied usually due to “deep-rooted patriarchal system, biased interpretation of divine directives, laws of the land and inefficient mechanism for the implementation and enforcement of laws” (Balchin, 1996).

In Pakistan, the share from father’s property is not given to women and people claim that they have provided the share as a dowry. Both the spouses have share in their property but if they do not have a child, it is not provided and even not claimed. Women also feel hesitant to demand for their inheritance right. Nausheen claims that there are very few cases dealing with women’s property right under the civil law which have been interpreted by the Supreme Court.

It is the obligation according to the perspective of different religious beliefs, constitutional guarantees and standards of

international human rights to provide and ensure the women’s inheritance rights. The *de facto* and *de jure* lacunae prevalent policy investigate customary practices and provide mechanism for the implementation of the law of inheritance in Pakistan (Shahid, 2004, p. 98).

Therefore, it is necessary to provide equal opportunities in the economic field. There is a need to remove all inequalities and imbalances against women and socio-economic development in all sectors of life. In Pakistan, however, there is no consistent mechanism for proper implementation (London, 2004).

Educational Discrimination

Education is the right of every citizen without any restriction of race, religion, colour, caste, or nationality according to international law, constitution of Pakistan and Islam. Women contribute to half of the population in Pakistan and their roles are very important for development of society. Islam urges all men and women to acquire knowledge and become knowledgeable. The divine verses have made education compulsory to every woman, as follows:

عَنْ اِمَامٍ قَالَ: قَالَ رَسُولُ اللّٰهِ ﷺ: طَلِبُ الْعِلْمِ فَرِيضَةٌ عَلَى كُلِّ مُسْلِمٍ

“Acquisition of knowledge is obligatory on all Muslims” (Muslim).

The first verses of Quran put also emphasis on learning. The women basic rights have been suppressed due to the lack of education and low level of awareness by their partners and other family members.

﴿طه-114﴾

﴿وَقُلْ رَبِّ زِدْنِي عِلْمًا﴾

“My Lord! Increase me in knowledge” (Ta-Ha-114).

Education is necessary as it is a religious obligation, but in Pakistan, instead of spending money on education, most parents save it for dowry. The social prejudice against female has caused them to neglect their education and parents normally describe the education of daughter as having or giving any advantage because after marriage, she will only clean the house and wash the dishes (Clarke , 2005). The mentality of the majority of people indicates that they do not educate their daughters because they do not like to send them outside and work with unknown people. That shows education only benefits in seeking job and have no other purposes, and thus, the education of children usually depends on the mother.

Limited opportunities in educational fields, lack of employment facilities and traditional norms are also among the hurdles for the mobility and empowerment of women in Pakistan (Faridi, 2010). However, the cultural prescription of gender roles and inadequate number of vocational training and professional institutions for women can help overcome the problem.

Child Marriage

The many reasons behind the child marriages are:

- People sell their daughters to get some money in return.
- Owing to the Watta-Satta norm in which two families barter their children and marry them.

Table 4
The number of crimes against women (2008-2013)

Crime	Years						Total
	2008	2009	2010	2011	2012	2013	
Kidnapping	1784	1987	2236	2089	1607	2026	11729
Murder	1422	1384	1436	1575	1745	1425	8987
Domestic Violence	281	608	486	610	989	498	3471
Suicide	599	683	633	758	575	668	3916
Honour Killing	475	604	557	705	432	487	3260
Pape / Gang Rape	778	928	928	827	822	956	5239
Sexual Assault	172	274	74	110	58	38	726
Acid Throwing	29	53	38	29	71	42	291
Burning	61	50	38	29	71	42	291
Miscellaneous	1970	1977	1580	1792	1134	1669	10122
Total	7571	8548	8000	8539	7516	7852	48023

Source: Aurat Foundation (2013)

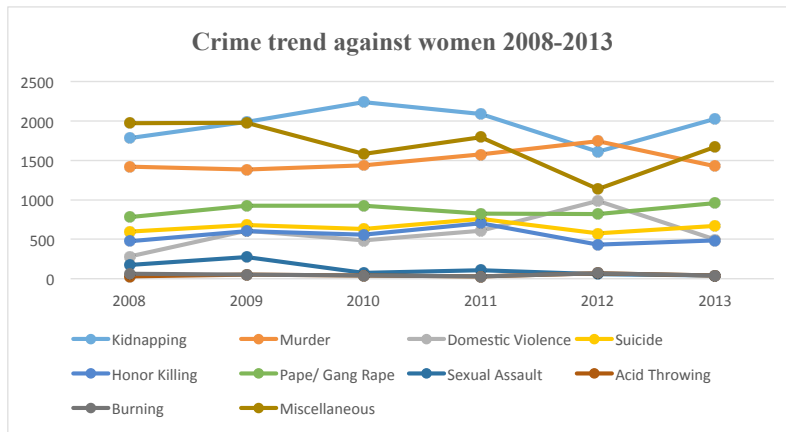


Figure 4. Crime trend against women, 2008-2013 (Source: Aurat Foundation, 2013)

- In many parts of Pakistan, the Swara norm exists in which people give their girls for compensation for their wrong doings.
- The parents wish to see their daughters settled in their homes as early as possible and this is considered as the wellbeing of their daughters.
- They think that girls will bring dishonour to their family, so they marry their daughters at the tender age (Shahnawaz, 2002).

METHODS

The current research is based on the primary source of data which were collected through a random sampling survey of the district Bahawalpur. A total of 200 females were interviewed as a sample from different cities of the district Bahawalpur, Pakistan. Moreover, the secondary data from various sources were also used to introduce and elaborate this problem, such as the Quranic

verses, research articles, books, journals, human rights reports and internet sources. The research was conducted by employing descriptive and analytical methods.

Data Analysis

The required data were collected from housewives and working women living in Bahawalpur. The research explains the status of women, violence against women in their domestic lives and also the types of violence done against them for being women in Pakistan generally, and in Bahawalpur specifically.

DISCUSSION AND CONCLUSION

Women form half of the population of Pakistan and their role are very important for the development of society, but in Pakistan the situation of women's rights is very critical and alarming. This creates complete lawlessness and disorder in the society and women cannot participate in the development of Pakistan (Ramanamma,

Table 5
Violence against women

No	Questions	Strongly Agree (Percentage)	Agree (Percentage)	Neutral (Percentage)	Disagree (Percentage)	Strongly Disagree (Percentage)
1	Domestic violence against women is because of male dominating society.	74	13	7	5	2
2	The condition of women's rights is more critical in rural areas than the urban society.	63	13	20	5	13
3	Mostly violence against women is done by family members and husband.	90	0	6	6	0
4	The customs and traditional values of Pakistan are against women's liberty.	75	7	10	5	4
5	The hostile attitude towards women is changing in the day-to-day life.	41	12	5	2	45
6	Women have faced ever any domestic violence of honour killing, burning, educational discrimination and child Marriage in Bahawalpur.	79	12	5	7	8
7	In Pakistan, the concept of Purda and Izzat is misused.	56	8	16	9	13
8	The political and economic stability of women can resolve the violence against women.	80	15	5	0	0
9	The school based and national level program should be started for awareness of women rights.	50	13	12	20	6
10	The government and NGOs should take immediate actions on this particular issue.	76	9	7	5	3

2005). They are suffering many problems not only at domestic level but are also discriminated in political, economic and social spheres of life. These psychological, physical and sexual violence are mostly attempted by their own family members (father, brother, partner). The current study presents the issue of honour killing in which female are killed to restore the so-called family's honour and they are accused of bringing dishonour and shame to their family. Women are also murdered inhumanely if they bring low dowry or neglect any of the in-law's orders (Agnes, 2004).

The study concluded that 90% of the women from the Bahawalpur district are facing domestic violence and all these violations are made by their own family members such as husband, brother, father and other male family members. The literacy rate of women is very high and no proper attention has been given to their education. Child marriage is also a very common practice in Pakistan, which has brought about many diseases and large-scale deaths every year. The customs and traditional values bind them for any struggle against violations. Hence, it is necessary to take actions all these at the national and local levels to eradicate this violation.

The research further concludes that the issues of domestic violence must be highlighted and redressed at the national level through integrative support services. These intervention strategies include women's support to restore and rebuild their lives after violence, while counselling,

relocation, credit support and employment must be ensured. Medical, judicial and legal support should be included in new interventional plans with the collaboration of the civil society, political and religious leaders and health team and rehabilitation centres. The implementation of these strategies should be enforced. Though the overall picture is still bleak and requires special attention, there are rays of hope if the mentality of the society is changed in relation to the so-called honour. This research is a little effort to help improve the lives of millions of women who deserve justice in this regard in Pakistan, especially in the Bahawalpur region.

RECOMMENDATIONS

On the basis of the discussion above, the study makes the following recommendations:

1. There is a need to redress the domestic violence issue, especially in Bahawalpur.
2. Honour killing must be addressed and actions should be taken in this regard. There should be laws to prohibit the act of women compensation resulting from murder and this law should strictly be reinforced.
3. Age limit should be specified for marriage and if it is not a suitable age, marriage should not take place and the violator must be punished.
4. Better Education facilities should be provided for girls. Laws must be made by the government that at least 14 years of education must be made necessary for women. Employment opportunities

and proper participation in politics can be overcome this issue.

5. Dowry is the main reason of violation of women's rights and actions should be taken to restrict unlawful demand of dowry.
6. Women have the right to get their share in their family inheritance.
7. Proper implementation of laws and justice after violence is necessary to eliminate this problem in the Pakistani society.
8. The NGOs, civil society and women activists should be assisted with the legal aid, vocational training and provisions for women.
9. Awareness programmes should be conducted for both women and men and counselling centres must be established in all regions.
10. The rehabilitation centres should be made at the district level and every woman should be able to access these centres easily and at any time.

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What Motivates Youth Enterprenuership? Born or Made

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ABSTRACT

The study aims at understanding the role of entrepreneurship education as a moderator on entrepreneurial motivation and youth entrepreneurial readiness. The human capital, incentive and cognitive evaluation theory form the theoretical framework of the study. Data (n=490) were gathered from Universiti Sains Islam Malaysia (USIM) students through a cross-sectional approach. The study used hypothetical deductive approach through structural equation modelling (SEM). Intrinsic and extrinsic motives as two sub-constructs of entrepreneurial motivation are regressed as the motives of youth entrepreneurship. Findings revealed positive and significant impacts of entrepreneurial motivation (including intrinsic and extrinsic motives) on readiness towards new business start-up. Entrepreneurship education plays a higher moderator role on the entrepreneurial motivation (including intrinsic motives and extrinsic motives) of youth. The study contributes and lends support to literature on motives of creating and sustaining new business ventures. This study contributes on how youth can be fully engaged and developed through various crucial motives. The motives of doing business are very important for successful ventures. As extrinsic motives show higher impact on new business start-up among youth, intrinsic motives are also crucial for sustenance of new business ventures. Evaluating the motives of setting up business will provide researchers and policy makers with an overview of the reasons why youths engage in entrepreneurial activities.

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INTRODUCTION

Entrepreneurship is getting more attention from stakeholders in business schools, universities and educational institutions as a result of the commitment, intellectual and emotional investment and passion among the educators, instructors and all the people engaged in entrepreneurship education and training (Fayolle, 2013). In the past, various aspects of entrepreneurship were looked into but less attention was placed on the motives of new business start-up with respect to youth. GEM (2014) describes youth entrepreneurship as young individuals between the age of 18-64 who see good opportunities to start a business in the area where they live; believe they have the required skills and knowledge to start a business; are latent entrepreneurs who intend to start a business within three years and account that the fear of failure would not stop them from setting up a business. This definition is also supported by GEM (2015) that young entrepreneurs are those who see opportunities in their environment, have the capabilities to engage in entrepreneurial activities and are undeterred by fear of failure. Prior studies have described youth entrepreneurship as a population of students in the formal educational system or students who follow entrepreneurial programmes offered by non-governmental organisations or other organisations (e.g., Geldhof et al., 2014; GEM, 2015). From the definitions given above, youth entrepreneurs are potential entrepreneurs who are ready and capable to exploit entrepreneurial opportunities without

having any fear of failure. Therefore, how entrepreneurial motivation of youth can lead new business start-up remains an uphill task to be addressed.

Motivation is a need or a desire that energises behaviour and directs it toward a goal (Vallerand, 2004). This desire may energise young individuals towards entrepreneurial activities. A previous study has identified two kinds of motivation- intrinsic or extrinsic (Choo & Wong, 2006). Extrinsic motivation is something outside the person that energises the behaviour such as reinforcement contingencies like earning more money, fame, gain power, tangible rewards, family support and regulations, while intrinsic motivation is something that lies within the person that energises the behaviour like one's interest, passion, curiosity, personal enjoyment, personal challenge and improvement (Emily, 2011). Whether or not this reinforcement contingency serves as a pull factor that attracts individuals towards new business start-up has continued to trigger more debates (Reinholt, 2006). For instance, many issues have been raised on whether individuals should be rewarded by government or parents or through bank loans to set up new ventures or it should be based on individuals' needs to achieve something in life (Jeanne, 2007). Some studies have argued that giving individual incentives may affect intrinsic motives such as personal challenge or passion to create successful businesses (e.g., Richter et al., 2015; Deci et al., 1999). These on-going debates have necessitated one of the motives for carrying

out this research. Thus, this study argues between intrinsic and extrinsic factors as the motivation for new business start-ups.

In order to exploit youth entrepreneurial opportunities, there are various motives that can influence young individuals' decisions to engage in entrepreneurial activities. Various aspects of motives (intrinsic or extrinsic) have been identified in relation to sports, psychology, and health, but less attention has been placed by researchers in relation to youth motives towards entrepreneurial activities (e.g., Oudeyer & Kaplan, 2008; Choo & Wong, 2006). Kautonen (2008) explained further that young entrepreneurs are motivated by pull factors (intrinsic motives) to sustain new ventures more so than push (extrinsic) factors. Pull factors pull individuals into creating sustainable business due their desire to be their own boss, passion to utilise opportunity identification, and desire to achieve in life. These factors have greater levels of sustainability compared to ventures that are created due to tangible rewards attached to it or due to the lack of white collar jobs, or sometimes the relaxation of government identified regulations. Individuals are pulled (desire for independence, achievement motive) into new business start-up, while others are pushed due to fear of becoming unemployed or tangible rewards (maintain income or no other option of earning a living) (GEM, 2008). Therefore, in the process of contributing to the academic body of knowledge, this study aims to examine whether young entrepreneurs are intrinsically or extrinsically motivated to

engage in entrepreneurial activities. This study is essential because it combines human capital theory, incentive theory and cognitive evaluation theory to explain two different motives that can influence new venture creation. This helps us discover what motivates youth entrepreneurs and how motives can be controlled. This study also researches further on the role of entrepreneurship education on motives towards new business start-up. Entrepreneurship education as a moderator has been one of the major contributions of this study.

Human Capital Theory and Entrepreneurship Education

There are various schools of thought in relation to the human capital theory that have been examined in the past; these range from Becker view (increases productivity); Gardener view (multi-dimensional skills); Schultz/Nelson-Phelps view (capacity to adapt); Bowles-Gintis view (human capital as the capacity to work in organizations and obey orders) and Spence view (signal of ability than characteristics). All these views have common characteristics such as innate ability, schooling, school quality and non-schooling investments, training, pre-labour market influence (Acemoglu & Author, 2013). Meanwhile, the human capital theory explains the process of developing new generation of youth through necessary skills and knowledge to create new ideas, new businesses through creative approach (Olaniyan & Okemakinde, 2008).

Olaniyan and Okemakinde (2008) argued that entrepreneurship education is seen as a productive investment in human capital, which is an opposing view of what the theory has said to be more worthwhile than physical capital.

Acemoglu and Autor (2013) argued that entrepreneurial education is one of the essential components of the human capital theory that individuals acquire in order to acquire skills useful for new business set-up or set of technological uses. In essence, it is the duty of parents, government, and region to invest in their citizens in order to encourage more investment in such region or economy. As it is important for firms to invest in developing their workers to set up new branches, and it is also important for youth to be trained appropriate skills in order to prepare them ahead of their futuristic venture. Therefore, entrepreneurial education is a continuous process on the life of every individual who aims to become entrepreneurs.

Benjamin et al. (2012) recognises that every individual's decision to engage in entrepreneurship education in order to set up new business is backed up with either direct cost or opportunity cost. The direct cost involves the actual investment but the opportunity cost involves the alternative forgone. The decisions of youth to set up new business are mostly affected by the opportunity cost such as risk involved in setting up in firms, career options, length of entrepreneurship course, as well as the availability of public and private job and so on. The risk averse individual will be

more concerned with the long-term social benefit than the cost due to passion for such entrepreneurial activities or external supports. This view is supported by another study. Goldin (2014) revealed that human capital is the level of skills possessed by individuals and the level of the skills will continue to gather more momentum if the return to investment is greater than the cost. There are often external factors that often influence youth's decisions to be productive when their human capital increases. These may range from where the entrepreneurship education takes place? Who provides for the course and pay for it? and the role of government and the regional community towards the success of youth in such economy.

The Incentive and Cognitive Evaluation Theory

The incentive theory reveals that individuals' behaviours are more motivated by extrinsic factors (Boundless, 2015). Individuals are likely to be more motivated to perform activities not because they enjoy doing them but due to the attached reward (Emily, 2011). Roland and Jean (2003) concluded that a central principle of economics is that incentives influence individuals' decisions. If individuals are rewarded with resources, the tendency to start and invest in new venture creation is paramount.

There has been an on-going issue on how extrinsic or intrinsic motivators change entrepreneurial behaviour. This study suggests that there are two motives that

influence the behaviour of individuals. These are intrinsic motives such as achievement motives, desire for independence and competence and extrinsic motives (things that come from a person's environment or controlled or influenced by others) such as tangible rewards, family/friends supports or regulations (Deci, 1985). Intrinsic or extrinsic motives may be powerful motivators for an individual career decision (Roland & Jean, 2003). The study argued further that intrinsically motivated individuals perform entrepreneurial activities based on their passion and achievement motives. Ryan and Deci (2000a) supported the argument that intrinsic motivation is an essential element in cognitive, social and physical development, and it therefore serves as a natural motivational tendency.

Carlson and Heth (2007) pointed out that extrinsic rewards, if not consistently offered, may affect the prior interest in entrepreneurial activity. This process is known as over-justification effect. This occurs as a result of overjustification attached to extrinsic rewards. This overjustification may as such indirectly affect the intrinsic motives of an individual. This justification shows why extrinsic motives need to be properly monitored in business activity. This may be the reason why most firms are seen as failed businesses at the early stage of their activity (GEM, 2008). The belief is that powerful extrinsic motivators may likely reduce a person's intrinsic motives, especially if the motives are generated and controlled by external factors.

Entrepreneurial Motives and Discontinued Venture

The motives of creating and sustaining new venture start-up have been examined by past studies. There have been various misconceptions that nine out of ten businesses fail in their first few years (Barringer & Ireland, 2015). These misconceptions occur due to the fact that previous studies have failed to recognise the motives of creating such ventures. This misconception has created fear of failures among the prospective young entrepreneurs. Some young entrepreneurs believe that their businesses may fail in the early five years of their start-up. This has discouraged some young entrepreneurs in engaging in entrepreneurial activities. Some businesses are created to generate fast earnings over the short-term due to frictional/seasonal opportunities and others are created to compete with existing firms (GEM, 2008). If the former closes down after the opportunities no longer exist, such business cannot be categorised as failures because the motives have been achieved. GEM (2008) suggests that such businesses should be termed discontinued business. Discontinued businesses are not failed businesses. Discontinued businesses are those ventures who, for whatever reason, have exited from running a business in the past year (GEM, 2015). Most of the firms that discontinued in one activity continues in another area in order to reduce market cost and effectively utilise market areas where such businesses have advantage.

Other studies have shown that over-optimism is one of the reasons for high rate of discontinued businesses (Verheul & Carree, 2007; Eggers & Song, 2013). This view shares that well informed entrepreneurs are less likely to be overoptimistic (Eggers & Song, 2013). The study concluded that intrinsically motivated (pull motives) entrepreneurs are less likely to be overoptimistic than those extrinsically motivated (push motives) to create their own venture. Ciavarella et al. (2004) argued it is evident that entrepreneurial motives and traits are essential towards new venture creation and sustenance. This is in cognisant to prior studies that every new venture has different motives of setting up, process of sustaining, and different manners of funding, and therefore may not follow the belled shaped organisation life cycle by classical growth patterns (Sahay & Sharma, 2008).

Motivation in Entrepreneurship Education

Motivation in entrepreneurship education is of particular interest for various stakeholders because of its crucial impart on students' career progress and learning. The specific kind of motivation in entrepreneurship learning is quite different qualitatively from the general forms of motivation studied in the field of psychology. Ormrod (2003) argued that motivation in learning, especially entrepreneurship education, has various effects on students' behaviours towards new business start-up such as direct behaviour towards a particular goal, increased efforts

and energy; increased business initiation and persistence; enhanced cognitive process; reinforcement consequences and can lead to improved performance and sustenance of business creation. Williams and Stockdale (2004) revealed that if students are developed through giving rewards, the attitude of such productive students will be influenced and this may pull the students decisions towards new business creation. The major lapses of the venture may occur due to non-continuous of such rewards.

Vallerand (2004) pointed out that motivation in entrepreneurship education can be divided into two ideal types; intrinsic and extrinsic motives. Whyte (2007) argued that developing students towards intrinsic motive such as achievement motivation can influence new business start-up because students may find pleasure in doing it and extrinsic motives such as external factors can compel students to carry out business activities due to rewards. Fisher et al. (2009) explained that students with intrinsic motives relate new venture to their personal control and their errors are monitored by achievement motives and orientation. GEM (2008) revealed different reports findings among various countries in general view. The findings revealed that entrepreneurship education of students has greater influence on males' readiness than that of their female counterpart. In addition, the importance of entrepreneurship education has been evaluated based on different countries' perspectives such as Saudi Arabia (Iqbal, Melhem, & Kokash, 2012), Mexico (Álvarez, 2008), Nigeria (Oni

et al., 2012) and host of others. However, the results from these countries further revealed that if entrepreneurship education is not promoted among university students, most of them may likely not pursue new business start-up after school. This promotion of entrepreneurial education could be encouraged in the universities by using the learning by doing method which has been found to focus on positive motivation with greater effectiveness in learning towards new business start-up. Whyte (2007) explained that in order to ascertain students' success in new business venture, various stakeholders need to address the specific needs of students. Addressing these specific needs may encourage and motivate these students towards entrepreneurial venture. The instructor, as a stakeholder, needs to provide sustainable environment to encourage and improve students' internal motivation. This is due to the fact that entrepreneurial education empowers and meets various intrinsic needs of youth who crave for improvement and terms it motivation (Oni et al., 2012).

Various researchers have explored several aspects of motivation and their effects on new venture creation. Most have suffered from significant methodological problems, which will be examined in this study. Various factors determine motivation towards new venture creation. Barringer and Ireland (2015) recognised three reasons that can motivate individuals towards new venture creation. These reasons are the desire to be their own boss (desire for independence),

pursue their own ideas (achievement motive) and realising financial rewards (tangible rewards). These reasons are further categorised into intrinsic and extrinsic motives. For instance, individuals may be encouraged to partake in entrepreneurship course because it will help them create successful ventures after graduation. In this instance, this action is generated internally and as such, entrepreneurship education is not achieved for its sake but because such individuals think it will lead to the separate outcome of a new venture start-up. Therefore, the individual is internally and extrinsically motivated. It is also possible that an individual may undergo entrepreneurship course for the pleasure, passion or fun of new knowledge discovery. Such a motive is intrinsically and internally motivated. In order to meet various needs of the students, universities should aim at assisting the youth through entrepreneurship education and training with respect to the skills required in starting a business venture (Kew, Herrington, Litovsky, & Gale, 2013). On the basis of these discussions, the following hypotheses are developed:

- H1: Motivation has a positive and significant effect on readiness towards new venture creation.
- H2: Entrepreneurship education moderates the relationship between entrepreneurial motivation and readiness towards new venture creation of participant group.
- H3: Entrepreneurship education moderates the relationship between

entrepreneurial motivation and readiness towards new venture creation of non-participant group.

Readiness towards New Venture Creation

Ruiz et al. (2016) define individuals' readiness for entrepreneurship "as the confluence of a set of personal traits (or features) that distinguishes individuals with readiness for entrepreneurship as especially competent to observe and analyse their environment in such a way that they channel their high creative and productive potential, so they may deploy their capability to dare and need for self-achievement". This definition captures a lot of variables such as "ability" from the term "competent or capability". This could also be inferred from the definition that individuals who are productive have higher capability to explore and take calculated risk that will result in new business start-up. From the definition, the ability to observe could be based on the available career options. These options will dictate how and when to exploit the opportunities in their environment. Marvin and Flora (2014) revealed through the Pearson Chi-square analysis of 367 students that participation in entrepreneurial activities would influence readiness of university students towards new business start-up. There are various factors used in evaluating students' readiness towards new venture creation. Some of the variables adapted from previous studies are Career Option (Marvin & Flora, 2014), Willingness

to Invest, Ability to Explore and Risk Taking (Shane et al., 2012).

Career option. In reality, the limited career options in both the public and private sectors have forced and motivated many youth to change their mindset towards what they can offer to their communities. The report from GEM (2015) revealed that the shortage of employment opportunities in different countries is a big problem, i.e. by more than two thirds of the world's population such as Africa (88%), Asia (62%), Europe (71%), Latin America (79%) and North America (64%). According to the report, in 2014, 74 million young people between 15-24 years of age were looking for work. Despite this big problem, the youth in the world display the highest level of entrepreneurial propensity. The report shows that the youth have personal contact with start-up entrepreneurs. Walter and Dohse (2012) suggested that entrepreneurship education could raise entrepreneurial readiness by motivating students rather than increasing their self-perceived qualifications for an entrepreneurial career. Therefore, the current economic situation creates a sense of urgency in devising ways to boost job creation among youth.

Nowadays, many young individuals aim to set up their businesses due to many career opportunities that are available in entrepreneurship. As some may get involved in sole trader, partnership, joint venture, others could also get involved in direct sales, franchise business or acquisition, and so on. It is very important for young individuals

to take initiative, exploit entrepreneurial opportunities and be ready to take risks involved in the entrepreneurial activities. Marvin and Flora (2014) argued that readiness towards entrepreneurial activity is a crucial determinant factor for university students to decide on an entrepreneurial career. After comparing the career options in different countries, the desire to choose entrepreneurship as a career choice is more imminent in factor-driven economies (e.g., Africa) than efficiency-driven economy (e.g., Malaysia) (GEM, 2014).

Willingness to invest. Motivation for engaging in new venture matters; young individuals have indicated that their motives in starting entrepreneurial activities are based on the willingness to invest in a recognised opportunity (GEM, 2014). Shane et al. (2012) pointed that success of new business start-up depends on people's willingness to invest; therefore, discovery of opportunity and ability to utilise depends mainly on the willingness of people to partake in such entrepreneurial activities. Marvin and Flora (2014), on the other hand, revealed that a positive attitude towards entrepreneurship might lead to the willingness to venture into a new business. GEM (2015) explained that young individuals' willingness to invest in entrepreneurial activities is based on their entrepreneurial intention to start in the future.

The questions researchers always ask are: Do all individuals have the same skills? Do all individual have the same level of opportunity recognition? Do all

individuals have the same level of resource utilisation? These are questions researchers need to proffer solutions to because even if individuals can recognise opportunity and utilise resources, people operate at different levels (Shane et al., 2012). This shows the reasons why not all people who participated in entrepreneurship course go into entrepreneurial venture.

Ability to explore. Shane et al. (2012) argued that entrepreneurship involves people who have the ability to exploit opportunity because of their abilities to act differently from each other; hence, this variability can influence entrepreneurship process. GEM (2015) reports showed further statistics that young entrepreneurs especially in South East Asia have the lowest growth motives (ability) to create new firms in the next five years compare to over 70% from other regions.

Meanwhile, a report by World Bank (2008) showed that entrepreneurship education and training help youth initiate new abilities that can be used to tackle entrepreneurial activities. Youth's abilities to explore non-cognitive skills help young entrepreneurs who intend to become or continue as entrepreneurs. These studies further revealed that appropriate entrepreneurial knowledge with technology and supportive network may influence the ability to explore new business opportunities towards international standard (e.g., Cavusgil & Knight, 2014; Oviatt & McDougall, 2005).

Risk taking. Shane et al. (2012) identified risk taking propensity as one of the factors that can influence entrepreneurial motives of youth towards entrepreneurial activities. The study argued that risk taking propensity differs in one individual to another. Gelderen et al. (2005) carried out a research on 517 nascent entrepreneurs; the results revealed the importance of risk taking propensity as a predictor of getting started or abandoning the start-up effort. Risk propensity to act and desirability has a positive impact on entrepreneurial readiness of students (Marvin & Flora, 2014).

In addition, Mitchell et al. (2002) argued that individuals' belief, self-determination and confidence increase risks taking propensity towards new business start-up. A study by Hoffman et al. (2005) showed that young individuals were less risk takers because they did not have any prior working experiences but only acquire competencies through socialisation if parents are entrepreneurs and through entrepreneurship course. On the other hand, Kuratko (2005) saw young entrepreneurs as risk takers who partake in taking moderate calculated risks. Previous studies discussed the importance of entrepreneurship knowledge and ability of youth entrepreneurs to take appropriate risks to engage in entrepreneurial activities that are up to international standard (Cavusgil & Knight, 2014; Oviatt & McDougall, 2005). In essence, youth entrepreneurs are quite different from ordinary self-employment because of their educational level and expectations that youth businesses should be up to international standard.

Intrinsic Motives

Ryan and Deci (2000a) described intrinsic motives as a self-desire to engage in new activities and challenges, observe and gain knowledge and also analyse one's capability. These new activities are mainly driven through passion, interest and individuals' ability with less external pressure or rewards. Intrinsic motivation is performing an activity based on satisfaction rather than its consequences (Ryan & Deci, 2000b). Intrinsic motivation is further defined as engaging in an activity for itself, its pleasure and the satisfaction derived from participating in such activities (Vallerand, 2004). Individuals can be intrinsically motivated or moved to perform an act based on personal motives and not through external rewards or pressures.

Meanwhile, Wigfield et al. (2004) argued that intrinsically motivated students are more likely to improve their skills, which will hitherto improve their capacity towards engaging in business activities. For example, a student who attends an entrepreneurship course because it is enthralling to gain new business skills and initiatives is intrinsically motivated. McClelland (1961) argued that individuals who are given more motivation are more likely to engage in entrepreneurship activities than those who are lowly motivated. Thus, intrinsic motivation is an essential element of flexible cognitive development because it is the driving force of curiosity and free choice exploration (Oudeyer & Kaplan, 2008). In other words, the individuals' open-mindedness to achieve and challenge

themselves may influence their decisions to create their own future ventures. Intrinsic motivation has only been conceptualised in a suitable manner in the epigenetic robotics community. Therefore, there is a need for the theory to be empirically modelled. Intrinsic motives are better understood through achievement motives (Barringer & Ireland, 2015), desire for independence (Gelderen et al., 2008) and passion (Jeanne, 2007).

Achievement motivation. One of the motives of participating in entrepreneurial activities is the fact that people want to pursue their own ideas in order to achieve their personal dreams (e.g., Koellinger et al., 2007; Barringer & Ireland, 2015). Collins et al. (2000) revealed that achievement motivation has a positive and significant relationship with new venture start-up and the relationship between entrepreneurial motivation and new venture creation, which are moderated by several factors. The needs for achievement are essential motives to young individuals towards engaging in entrepreneurial activities (Nguyen & Phan, 2014). Rapid evidence of young entrepreneurs' motivation shows that achievement motives capture personal development, responsibility and learning through the challenges towards creating new business (Stephan et al., 2014).

Rasheed (2004) compared the treatment and control groups in his study. The results revealed that students receiving entrepreneurship education had higher motivation to achieve than a comparable cohort. This indicates that through

entrepreneurial education at the early age, students' need for achievement could rise towards entrepreneurial activities. Seun and Kalsom (2015b) also supported the previous study that achievement motivation has a positive and significant relationship on readiness towards new venture creation and training moderates the relationship between motivation and readiness towards new venture creation. These studies fail to differentiate the kinds of motivation that can be moderated by entrepreneurship education.

Desire for independence. The second aspect of intrinsic motive is the desire for independence (Gelderen et al., 2008). The desire for independence, which is also called autonomy, refers to the use of personal judgement on entrepreneurial behaviours rather than being moved to act through external factors (Shane, 2003). The desire to be independent occurs because individuals want to be their own boss (Barringer & Ireland, 2015). Kew et al. (2013) argued that young individuals are naturally self-starters because many youth guide their desire for independence with passion. The results further revealed that the desire for independence is as important as other motivators such as earning income where unemployment is at high level. In reality, the success factors of many young entrepreneurs were based on the desire to identify opportunity and make it a reality. This desire results from the fact that the only way individuals can achieve both personal and professional goals is to create their own

venture. It involves decisions based on an individual's personal life.

Studies have revealed that entrepreneurial activities could be a ground for the desire for independence (Shane, 2003). The central motive for creating a new venture is a desire for independence. Empirical findings revealed that the level of desire for independence in young entrepreneurs is not the same due to the level of risks involved in creating new business (Shane, 2003). Similarly, Ivanova and Gibcus (2003) supported that individuals enter into creating risky new ventures possibly due to their desire to be independent and to have autonomy (Gelderen et al., 2008) over their entrepreneurial activities.

Passion. Jeanne (2007) explained the importance of passion on business activity as an intrinsic tool. Entrepreneurial passion has greater influence on creation and sustenance of entrepreneurial activities. Entrepreneurial passion is an important motive used to sustain new venture creation because of the belief that such new ventures will affect people's lives (Barringer & Ireland, 2015). Entrepreneurial passion has a direct significant effect on new venture. It is this passion that enables young entrepreneurs to convince investors to believe in their vision. Passion cannot be exchanged with business plan but it keeps business focused.

Researchers suggest that entrepreneurial passion involves strength and courage that mobilise motivational energy (Brannback et al., 2006). Entrepreneurial passion is associated with high levels of commitment

and concentration (Vallerand et al., 2008). Passion for new business ventures is essential because new venture start-ups are highly demanding and require complete commitment (Barringer & Ireland, 2015). Jamil et al. (2014) revealed that harmonious passion is connected with positive affective spill over effects. This spill over effect is a process where individuals feel happy and amused when involved in passionate entrepreneurial activities, and feel satisfied and happier with his life. Other studies pointed out that entrepreneurial passion has direct links to entrepreneurial activities but its role and theoretical perspective is minimal (Cardon et al., 2009). Brannback et al. (2006) concluded that entrepreneurial passion could increase individuals' enhancement towards entrepreneurial activities. However, as it is essential to have passion towards sustainable new ventures, it is also important to evaluate the strength, weaknesses, opportunities and threat involved before investing in such ventures. On the basis of this discussion, the following hypothesis was developed:

H4: Intrinsic motives have positive and significant effect on readiness towards new venture creation.

Extrinsic Motive

Extrinsic motivation refers to performing an activity to attain tangible or social outcomes (Ryan & Deci, 2000b). Prior findings revealed that extrinsically motivated individuals are controlled to perform entrepreneurial task because it will lead to separate outcomes or consequences (Deci

& Ryan, 2008). Such outcomes could be the creation of new ventures. Extrinsic motives are based on rewards or enforcement (reflect external control or true self-regulation) but not on free choice. Extrinsic motivation is associated with doing an activity that can lead to desirable tangible rewards (Reinholt, 2006). When individuals are extrinsically motivated, such individuals do not perform activities out of pleasure but do so due to the infringement benefits attached to it (Vallerand, 2004). For example, a student may participate in entrepreneurship education in order to obtain a tangible reward from the bank or government fund or associated fortune such as earning profits. Some students also participate in entrepreneurship course in the university not due to free choice or passion towards becoming an entrepreneur but because it is made compulsory in some universities. These examples represent perfect examples of extrinsically motivated individuals.

Various types of extrinsic motivations were recognised by the previous study. The recent discussions on different perspectives of extrinsic motivation vary based on level of internalisation (e.g., Ryan & Deci, 2000b; Vallerand, 2004). This has resulted in different perspectives of extrinsic motivation which have yet been discussed on debates relating to organisational science (Reinholt, 2006).

Tangible rewards. One of the aspects of extrinsic motives recognised by past study is tangible rewards (Reinholt, 2006). Tangible rewards in entrepreneurial activities are

financial rewards such as bank support loans, government entrepreneurial funds, and other support funds to encourage new venture creation. Barringer and Ireland (2015) revealed that some young individuals are highly motivated toward creating their ventures in order to pursue financial rewards. Tangible rewards should not be the main aim but serve as secondary motives for creating new ventures (Barringer & Ireland, 2015). In order to achieve entrepreneurial success, Kew et al. (2013) argued some young entrepreneurs do without using financial reward (such as funding from outside source) because of the fear of outside interference on their entrepreneurial activities and motives.

Building a business based on tangible rewards shows why nine out of ten businesses fail at inception. Tangible rewards for creating new ventures are good but need to be monitored until the business is successful. This explains why most people who borrow money for new venture creation are unable to return their loan (Jeanne, 2007). For instance, giving new graduates who lack practical entrepreneurial experience/skills money to set up business without monitoring the progress of such business may lead to business failure. Tangible rewards are less detrimental on college students to start up new ventures (Deci et al., 1999) if their business progresses are properly monitored. Extrinsic motivation has higher desirable influences on individuals to start new venture creation than intrinsic motives which possess higher sustenance value. Jeanne (2007) argued that what is the

incentive for starting business? Is it money alone? However, money or tangible rewards cannot just be the motives of starting business because many entrepreneurs have created new successful ventures with positive cash flow without sanctioning money as their main motives.

Identified regulation. There are different kinds of regulations for extrinsically motivated individuals or firms. The first is external regulation which refers to regulated behaviours through external means such as obtaining incentives (Vallerand, 2004). For example, an individual might say, “I’m going early to entrepreneurship class because I don’t want the lecturer to punish me for coming late.” The second aspect is introjection regulation. In this type of extrinsic motivation, self-imposed guilt and anxiety are paramount. Thus, an individual may say, “I go for entrepreneurship course because I would feel disturbed if I miss the class. This behaviour is perceived to be part of an individual’s way of life. The third regulation is identified regulation. Through identification, the internalisation of extrinsic motivation becomes regulated. For example, an individual might say, “I choose to go for entrepreneurship course because it will help me to create my own venture after graduation.” The last aspect of extrinsic motivation is integrated regulation which is engaging in an activity in a “choiceful” manner. For example, an integrated individual might decide to go for

entrepreneurship class rather than staying out with friends so that the individual will be ready for future business set-up.

Entrepreneurship is one essential tool for adequate public policy as policy makers can use it as an economic agent to develop entrepreneurial activity and stimulate economic growth (Ribeiro-Soriano & Galindo-Martín, 2012). Jeanne (2007) pointed out that the government can use incentive approach to influence youth career decisions to take on risky business through laws by enforcing property rights or encourage competitive market environment. There are various policy measures that can influence youth entrepreneurial readiness such as tax policy, regulatory policy, and access to capital, legal protection of property rights and creating a business culture (Jeanne, 2007). In reality, the government uses taxes to create money but in other way round government can relieve taxes and introduce subsidy among new entrepreneurs in order to encourage business culture in the economy. For the purpose of this study, this research focused on identified regulation. Identified regulation has been an important discussion for encouragement or discouragement of individuals to create new ventures. For instance, if the government should invest more on entrepreneurship education and introduce friendly market policies, this would motivate individuals intending to start their venture. Stringent policies will reduce competition and increase monopolisation of resources by existing firms.

Family/friends support. Family/friend support is an important extrinsic factor towards entrepreneurial activities. Parents can influence their children's decisions on whether to become entrepreneurs or not even if the students have participated in entrepreneurship programme. Seun and Kalsom (2015a) revealed that even after engaging in various entrepreneurship courses, parents can still influence their children's decisions on their readiness to invest in new ventures. Despite the fact that some parents motivate their children to carry out such entrepreneurial activities, others may feel worry that their children are too young to succeed with the market competitiveness (Seun & Kalsom, 2015a).

Most parents have strong ties with their children. Geldhof et al. (2014) stated that young individuals see their parents as role models because of the tacit knowledge and advice they get from them that could enhance their entrepreneurial activities. This may occur if the young individuals have parents who are involved and successful in entrepreneurial activities. Souitaris et al. (2007) revealed that as the students realise the positive perception of their family and friends about them being an entrepreneur, as well as having entrepreneurial minded friends from the programme, this will increase their propensity to create their firms. Gelderen et al. (2008) argued that family's and friends' supports have positive impacts on new business start-up. This occurs due to the fact that business students may have family members or friends who

may have positive impacts on their lives. Kew et al. (2013) explained that there is no doubt that most of the young individuals are majorly influenced by their family decisions. The results further revealed that more than half of the young individuals surveyed and interviewed indicated that family influenced their decisions towards becoming entrepreneurs.

Jeanne (2007) argued that friends and family are importance sources of fund that may be needed by youth to sustain new business start-up. At the earlier stage of business, new entrepreneurs always face initial capital problems that are usually solved through family supports or friends' supports. Jeanne pointed out that the main disadvantage of taking the initial capital from friends or family is that if the business fails, the valuable family relationship may be affected. On the basis of this discussion, the following hypothesis was developed:

H5: Extrinsic motives have positive and significant effect on readiness towards new venture creation.

Sub-hypothesis

- H2a: Entrepreneurship education has positive and significant effect on intrinsic motives of participant group
- H2b: Entrepreneurship education has positive and significant effect on extrinsic motives of participant group
- H3a: Entrepreneurship education has positive and significant effect on intrinsic motives of non- participant group

H3b: Entrepreneurship education has positive and significant effect on extrinsic motives of non- participant group.

The present study

This study aims to lend supports to the role of entrepreneurship education on the relationship between Entrepreneurial Motivation and Readiness towards new venture creation. Various studies have been written on entrepreneurial motivation, there is still minimal empirical analysis to show the linkages between entrepreneurial motivation and readiness towards new venture creation, especially ones that takes into consideration both intrinsic and extrinsic motives. While previous studies have provided narrative and suggestive supports for the link that are used in this study's hypothesised model (see

Figure 1), limited studies have tried to link entrepreneurship education as a moderator on entrepreneurial motivation and readiness empirically. The research model in Figure 1 is examined through Hypotheses (H1-H5) and sub-Hypotheses (H2a-H3b) using a structural equation modelling (SEM) approach.

MATERIALS AND METHODS

Sample and Procedure

This study was part of the broad research on new venture motives. A total of 533 students out of 590 students (response rate was 90.3%) returned the questionnaire at the end of their entrepreneurship education activities. Data screening involves checking the accuracy of the data input, dealing with missing values and detecting outliers (Tabachnick & Fidell, 2007).

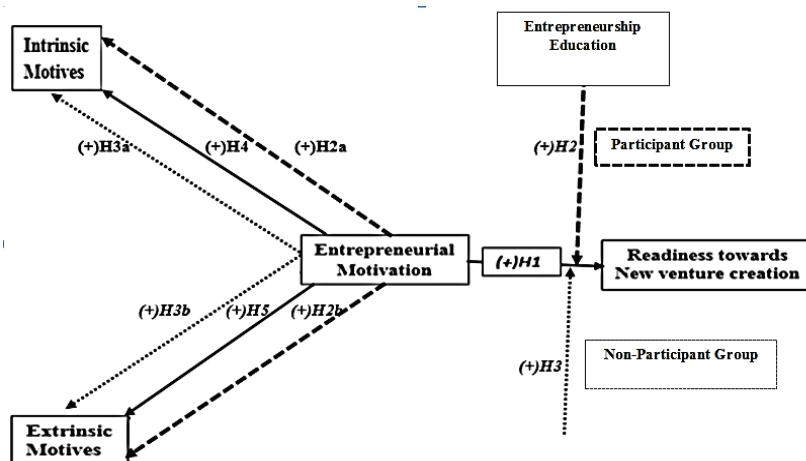


Figure 1. The research model

Notes: The moderation effect is represented by bold vertical dotted lines **H2 (H2a; H2b)** and thin dotted vertical line **H3 (H3a; H3b)**. The bold line (**H1; H4; H5**) represents the direct effects between entrepreneurial motivation and readiness towards new venture creation. **H1** combines both intrinsic motives **H4** and extrinsic motives **H5**.

After screening the data, the missing values accounted for 8.1% and the useable questionnaire was at 490 samples ((83.1%). Cohen and Cohen (1983) pointed out that the missing data value of up to 10% is not considered as large and thus, it is unlikely to be problematic. The majority were females (72%); 28% were males. A total of 40 percent of the parents have family businesses. About 12% of the students are members of entrepreneurship clubs. This study adopts the hypothetical deductive approach. The unit of analysis is the individual (students). Majority of the respondents were between 20 – 22 years old (86%) (20 years old, 32%; 21 years, 32%; 22 years old, 22%), respectively, at the time of this study. On average, the educational level is approximately at the third year ($SD = 0.91$).

This shows the level of readiness of the participants for labour market. The objectives of the study were briefly explained to the respondents. All the respondents were guaranteed on the strict confidentiality of their individual responses. All the respondents read and accepted it before administering the questionnaire to them. The method is quantitative through structural equation modelling. The study collects primary data through questionnaires. The respondents are students at Economics and Business, Science and Art faculty from Universiti Sains Islam Malaysia. These respondents participated in a compulsory Entrepreneurship course. USIM has a population of over 10,000 students. This entrepreneurship programme is a two-

semester programme in every year. The students are developed on entrepreneurship, business management, organisational behaviour, and creation of international business, while business mentors are invited to share their experiences with the students. The interested students are fully supported by the government with the necessary facilities. The programme is one of the requirements for graduation. The first-year students are not expected to partake in the programme but must do so before their graduation. The 590 questionnaires were distributed to those who had completed the two-semester programmes (300 students) and the first-year students who had not participated in the programmes (290 students). This is because this study aimed to look at the effects of the entrepreneurship education on the participant group and non-participant group. At the end of the survey, 533 students returned their questionnaires from both the participant group (290) and non-participant (243) groups. After screening the data, the useable questionnaires were those of 285 students (participant group) and 205 students (non-participant group). This figure represents a total sample size of 490. The sample size is 490, which is greater than the 370 threshold (Sekaran, 2003). The 490 students were chosen randomly regardless of their age and faculty.

Measures

Entrepreneurship Education. This was assessed through Yes/No questions to determine the actual participants of

entrepreneurship course. A sample item is: "Have you attended any of the following entrepreneurship courses?" Responses were given on a Yes/No approach.

Readiness towards new venture creation.

This was examined through four items such as career options; risk taking propensity, ability to explore and willingness to invest. Sample items are: "I have seriously considered entrepreneurship as a highly desirable career choice" "I won't start a business because it is too risky". Responses were given on a five-point Likert scale ranging from 1 ("Strongly disagree") to 5 ("Strongly agree").

Entrepreneurial motivation. This was assessed by dividing motivation into two; intrinsic and extrinsic (Ryan & Deci, 2000b). Entrepreneurial motivation was assessed by using the adapted version of Choo and Wong (2006). Responses were given on a five-point Likert scale ranging from 1 ("No motivation") to 5 ("Very high motivation").

Intrinsic motives. This was assessed through three items: achievement motive (Barringer & Ireland, 2015), desire for independence (Gelderen et al., 2008) and entrepreneurial passion (Jeanne, 2007). Sample items are: "I am passionate with strong feelings to set up my firm" and "I want to be my own boss". Responses were given on a five-point Likert scale ranging from 1 ("No motivation") to 5 ("High motivation").

Extrinsic motives. This was assessed using three items: tangible rewards (Barringer & Ireland, 2015), family/friends supports (Gelderen et al., 2008; Souitaris et al., 2007) and regulations (Vallerand, 2004). A sample item is as follows: "My propensity to create firm increases as I feel family/friends support".

Strategy of Analysis

The data were analysed simultaneously through structural equation modelling approach using AMOS 21.0 software package (Arbuckle, 2012). The data analysis technique used was Maximum Likelihood Estimator (MLE). This study used Zainudin's (2014) approaches to evaluate moderating effects. In order to test moderating analysis, it is common to analyse the direct effect and the moderating effects. Therefore, this study tested these two path models.

Direct effect model. This model assumes the direct relationship between Entrepreneurial motivation and Readiness New Venture Creation. The sub-constructs such as intrinsic or extrinsic motives and Readiness New Venture Creation were also examined.

Moderating effect model. Moderation takes place when the independent variable and the moderating variable have mutual effects on the variance of dependent variable than that explained by the direct effect (Cohen & Cohen, 1983). This moderator variable of this study was measured using Zainudin's (2014) approach. According

to Zainudin (2014), it is very complicated to run the model with latent constructs through interactions terms because it could result to distortion of standard error or cause problems with model convergence. Multi-group CFA has been suggested as an appropriate alternatives where the data are divided into two based on the objectives of the study and the path of interest is constraint to 1 (Zainudin, 2014). The divided data were run separately. The results of the constraint and unconstraint model were compared to test whether moderation had occurred. The moderating effect was examined by testing the constrained and unconstrained path of the constructs. The difference in the Chi-Square value between the constrained and the unconstrained model (Zainudin, 2014) were examined. If the value ($\Delta\chi^2$) differs by more than 3.84, then the moderation occurs in that path. Full moderation occurs if the other path of interest is significant.

In order to assess model fitness, the study uses maximum likelihood estimator. A three factor solution between “Entrepreneurial Motivation” and “Readiness New Venture Creation” was estimated in a CFA using a maximum likelihood estimator. The study used the following fitness index: Root Mean Square of Error Approximation (RMSEA<0.08; Browne & Cudeck, 1993); Goodness-of-Fit Index (GFI>0.90; Jöreskog & Sörbom, 1984.); Adjusted goodness of fit index (AGFI>0.90; Fan et al., 1999); Comparative fit index (CFI>0.90; Bentler, 1990); Tucker-Lewis Index (TLI>0.90; Bentler and Bonett, 1980); Normed Fit Index (NFI>0.90, Bollen, 1989) and Chi

square/degree of freedom ($\chi^2/df < 5.0$; Marsh and Hocevar (1985). Since sample size is sensitive, the use of relative fitness index is therefore recommended (Bentler, 1990). Thus, the fitness index is considered as acceptable if the conditions stated are met. The findings revealed low factor loading less than 0.85 thresholds (Zainudin, 2014). The fitness index (see Table 2) shows that the required level of fitness has been achieved (e.g., RMSEA 0.08; CFI 0.95, AGFI 0.92); $\chi^2/df = 3.273$ NFI = 0.94 TLI = 0.93; $p < 0.001$).

RESULTS

Description

Means, standard deviations, correlations and internal consistencies were computed for all the study variables (see Table 1).

All the significant relationships between the variables were correlated. Moreover, as shown in Table 1, internal consistencies of the scores on all scales meet the required 0.70 criterion (Nunnally & Bernstein, 1994). All the exogenous and endogenous correlations presented in Table 1 are statistically significant at $p < 0.001$, except for the correlation of the control variable (age, education and gender). All the values are less than the 0.85 threshold (Zainudin, 2014). The Cronbach's alpha values of all the items are very high and well above 0.8. The Bartlett test of sphericity and Kaiser-Meyer-Olkin (KMO) was measured to ensure significance and sampling adequacy. Both tests resulted in a good outcome. The Bartlett test of sphericity was found to be significant at $p < 0.00$, χ^2 ($n=490$). The

Table 1
Means, standard deviation, Cronbach's Alpha (in parentheses), and Correlations among the study variables (n = 490)

Variables	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Achievement motives	4.39	0.67	(0.83)												
2. Desire for Independence	4.13	0.74	0.66**	(0.83)											
3. Entrepreneurial Passion	4.03	0.78	0.62**	0.53**	(0.83)										
4. Tangible Rewards	3.74	0.73	0.39**	0.45**	0.42**	(0.82)									
5. Family/Friends Supports	3.50	0.76	0.26**	0.34**	0.35**	0.51**	(0.83)								
6. Identified Regulations	3.59	0.88	0.34**	0.44**	0.38**	0.44**	0.57**	(0.82)							
7. Career options	3.22	0.88	0.12**	0.15**	0.19**	0.27**	0.40**	0.34**	(0.84)						
8. Risk taking	3.30	0.79	0.08**	0.11*	0.12*	0.23**	0.38**	0.32**	0.39**	0.84)					
9. Ability to Explore	3.48	0.83	0.24**	0.22**	0.28**	0.28**	0.40**	0.36**	0.51**	0.55**	(0.82)				
10. Willingness to invest	3.59	0.93	0.25**	0.24**	0.29**	0.25**	0.40**	0.35**	0.41**	0.42**	0.66**	(0.83)			
11. Gender (1= female)	-	-	-0.06	-0.03	-0.05	-0.01	0.01	0.09*	0.05	-0.03	0.01	0.04	-		
12. Age	20.97	1.19	-0.11*	-0.08	-0.06	-0.03	-0.07	-0.08	-0.07	-0.05	-0.03	-0.02	0.01	-	
13. Education	2.78	0.91	-0.03	-0.06	-0.07	0.01	-0.01	0.03	0.04	0.00	-0.06	-0.07	-0.02	0.08	-
14. Parents Have Family Business (1 = Yes)	0.41	0.49													
15. Entrepreneurship Club Members (1 = Yes)	0.10	0.31													
16. Attended Entrepreneurship Course (1 = Yes)	0.85	0.35													

Note: n=490 ; *p < 0.05; **p< 0.01 M = Mean; SD = Standard Deviation; Reliabilities (Cronbach Alpha) are on bold diagonal

KMO with a value of 0.835 was above the adequate sampling value of 0.6 (Tabachnick & Fidell, 2007). In the assessment of normality of the data, the skewness and kurtosis range from -0.721 to 0.156 and -0.812 to 0.243, respectively. This shows that the data are normally distributed since the absolute values are well below 1.0 (Tabachnick & Fidell, 2007). Therefore, the theory that entrepreneurial motivation consists of intrinsic and extrinsic motives is well supported. The modification index was determined to check the redundancy items. All the values of the M.I. were less than the 15 threshold (Zainudin, 2014).

Testing the model

As shown in Table 2, the proposed Model (M1) index fits very well, thereby meeting the necessary stated criteria. All the latent variables were found to be significant and are within the expected direction. The correlations of the variables between Readiness towards New Venture Creation and independent constructs (entrepreneurial motivation, intrinsic motive; intrinsic motives) behaved as expected. Therefore, the direct effect path of *H1* ($\gamma = 0.70^{**}$) was supported. In addition, the paths from entrepreneurial motivation to both intrinsic motives *H4* ($\gamma = 0.63^{**}$) and extrinsic motives *H5* ($\gamma = 0.93^{**}$) were significant and supported.

In order to test the moderation effect of entrepreneurship education, the study compared the effects on the participant group and non-participant group. Therefore, M2 (participant group) and M3 (non-

participant group) represent (see Table 2). The results showed that the inclusion of entrepreneurship education moderated the participant group. The path improves the model fit ($\Delta\chi^2 (1) = 4.01^{**}$). Therefore, *H2* is supported. Consistent with this analysis, the paths from Entrepreneurial motivation to both intrinsic motives *H2a* ($\gamma = 0.73^{**}$) and extrinsic motives *Hs2b* ($\gamma = 0.95^{**}$) were also significant. This result shows that partial moderation occurs among the participant group since the path of interest is significant for *H2*. As for the non-participant group, the results showed that the inclusion of entrepreneurship education as a moderator (see Table 2) did not improve the model fit ($\Delta\chi^2 (1) = 0.95$, *ns*). Therefore, *H3* is not supported. As a result, the paths from Entrepreneurial motivation to both intrinsic motives *H3a* ($\gamma = 0.57$, *ns*) and extrinsic motives *H3b* ($\gamma = 0.79$, *ns*) were not significant. This result depicts that no moderation occurs among the non-participant group. All structural paths are shown in Figure 2.

DISCUSSION

The purpose of the study is to explore the crucial motives towards youth entrepreneurship among the participants and non-participants of entrepreneurship programme in the tertiary institution. Specifically, the study hypothesised that entrepreneurial motivation constitutes both intrinsic motives and extrinsic motives that have positive effects on their readiness towards new venture creation. It was also assumed that entrepreneurship education

Table 2
Goodness of Fit indices of Model

χ^2	df	RMSEA	GFI	AGFI	CFI	TLI	NFI	χ^2/df	Model Comparison $\Delta\chi^2$	Δdf	Decision Rule ($\Delta\chi^2 > 3.84$)
M1 : Full Hypothesis Model	125.68	0.08	0.95	0.92	0.95	0.93	0.94	3.93	-	-	-
M2_u : Partial Moderator Model 1 (Participant group)	105.77	0.07	0.95	0.92	0.96	0.94	0.94	3.31	$M2_c - M2_u = \Delta\chi^2$ $109.78 - 105.77 = 4.01^{**}$	1	Supported
M2_c : Partial Moderator Model 1 (Participant group)	109.78	0.08	0.95	0.92	0.95	0.94	0.94	3.33			
M3_u : Partial Moderator Model 2 (Non-Participant group)	69.38	0.13	0.86	0.75	0.86	0.80	0.78	2.17	$M3_c - M3_u = \Delta\chi^2$ $70.33 - 69.38 = 0.95, ns$	1	Not Supported
M3_c : Partial Moderator Model 2 (Non-Participant group)	70.33	0.13	0.85	0.75	0.86	0.81	0.77	2.13			

Notes: p<0.001 u=unconstrained c=constrained

moderated the relationship between entrepreneurial motivation of both the participant group and non-participant group and the significant effects on both intrinsic and extrinsic motives. Our analyses supported all the hypotheses, except for that of the moderating effect of non-participant group, which was found to be non-significant. In particular, entrepreneurship education plays a significant moderating role on the relationship between entrepreneurial motivation and readiness towards new venture creation of the participants.

Therefore, this paper contributes to literature on motives of starting business among youth. This study lends support to the roles of intrinsic and extrinsic motives on readiness towards new business start-up (e.g., Vallerand, 2004; Wigfield et al., 2004; Choo & Wong, 2006). In essence, this study's results revealed that entrepreneurial motivation is an important factor on readiness towards new venture creation. In other words, students who are both intrinsically and extrinsically motivated will produce higher result on new business start-up. In addition, this study contributes to the new venture model through the introduction of entrepreneurship education as a moderator. Entrepreneurship education has been used empirically rather than a suggestive method as used in the previous studies (Ormrod, 2003; Whyte, 2007).

The idea to further developed entrepreneurial motivation model with individual perspective is partly based on the incentive theory and cognitive theory (Deci et al., 1999), which indicate

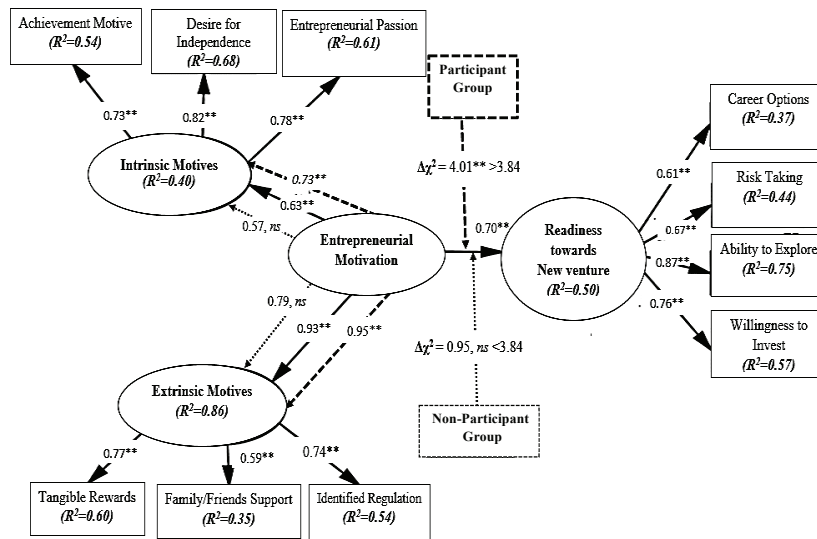


Figure 2. Standardised Path Coefficient of the Partial Moderation Model

that incentives can influence individual decisions towards carrying out a particular activity. This is shown in this study that individuals who are motivated extrinsically (tangible rewards, family/friend supports or supportive regulation) or/and intrinsically (achievement motives, desire for independence or entrepreneurial passion) are more likely to be ready to start their own venture. The study shows how intrinsic and extrinsic motives can be the main drivers in encouraging students towards new venture creation. Thus, it seems important to improve youth's motivation level if an economy wants to utilise their potentials towards entrepreneurial activity.

The main contribution of this study is the development of a new model to measure entrepreneurial motives in relation to readiness towards new venture creation. The study shows that students can be given

tangible rewards to motivate them into creating their ventures. Tangible rewards have higher impact on students' readiness but this needs to be highly controlled or monitored so that the business will not fail at inception or along the line. Tangible rewards were found to affect passion, desire for independence and achievement motive of the non-trained students than trained students. This is consistent with the result of Deci et al. (1999) that tangible rewards are less detrimental on college students if their business progress is properly monitored. Achievement motives as seen in this result have higher impacts on creation and sustenance of the business. As extrinsic motives are very important, intrinsic motives cannot be neglected because the sustenance of the firm is paramount.

The study shows the importance of entrepreneurship education on students'

career decisions. This result is consistent with that of some previous studies which indicated that trained students are highly motivated towards new venture start-up (e.g., Henderson & Robertson, 2000; Gelderen et al., 2008) because they feel that acquired skills and knowledge will influence their new venture start up in future journey. Another study also supports this result that knowledge and skills acquired through entrepreneurship education have long impacts in students' career decisions (Collins et al., 2004).

The important role of parents/friends in youth's life has been shown in the past. Parents have the power to influence students' career decisions to create successful venture. This result shows that if youth have the full support from their family and friends, a productive new venture will be achieved. This result is consistent with some previous studies (e.g., Soutaris et al, 2007; Gelderen et al., 2008). In addition, this study shows that achievement and desire for independence and family supports are highly valued. This is consistent with the analysis of Gelderen et al. (2008) that independence (autonomy) and family supports are highly valued among the students, and these may result in positive entrepreneurial readiness.

The implication of this is that entrepreneurship education should be tailored based on students' passion and desire to achieve as such a productive new venture will be ascertained. This will not place their readiness on a solid foundation but it will certainly increase their desire to take such risk to invest in new business start-

up in future. Every region in an economy has a role to play in terms of motivating the youth when any of them take the entrepreneurship initiatives to set up new business. Most of the youth of the world today are where they are due to the contribution of their societies towards their success. Any economy that invests in more productive youth will attain more productive growth and development. Every region has area of comparative advantage compared to others; productive individuals can take advantages of these market niche to introduce new business or new product into the competitive market or re-invent the existing product into a new look. This study has contributed and established entrepreneurship education that covers the moulding and translating youth intrinsic values, especially passion, into creating and sustaining new venture. This study also encourages constant development of students who crave entrepreneurial venturing. The government role cannot be overemphasised. Any economy that wants development should think towards utilising youth talents. The government can support the youth entrepreneurs by implementing suitable policy such as tax evasion for starter, subsidy and serve as guarantor of new business start-ups for business loans. In addition, the government can also regulate the market in order to encourage competitiveness and allow easy entry and exit.

This study employed quantitative methods. Further research should employ triangulation to test the importance of extrinsic and intrinsic motives on readiness

towards new venture creation. The study could not obtain a longitudinal study which could have yielded richer insights. It represents an attempt to contribute to organisational science debates on different motives of creating new venture and what motivates or influences individual decisions to venture into entrepreneurial activities. It is envisaged that this study will be valuable for future research in the field of entrepreneurship.

CONCLUSION

The study demonstrates the crucial determinant that motivates youth's readiness towards new business start-up. This study concludes that entrepreneurs who have participated in entrepreneurship course in the university are more motivated towards new venture creation than non-participants. The model of this study depicts that intrinsic and extrinsic motives are both crucial on students' career decisions. This is because the positive and significant role of entrepreneurship education as a moderator shows that entrepreneurs can be developed and entrepreneurship course increases their intrinsic and extrinsic motives as entrepreneurs are put into career journey. It is not the aim of this study to differentiate the two motives but it is to ensure how both motives can be properly managed in order to ensure a successful new business venture.

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Development of an Office Building Sustainability Assessment Framework for Malaysia

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ABSTRACT

This paper presents a study aimed at developing a building performance assessment framework relevant to emerging/developing countries that allows evaluations on whether, and to what extent, sustainability is addressed in office building developments. Instead of simply adopting an existing building performance assessment framework, a framework developed through original work involving various relevant stakeholders in Malaysian building industry is presented. The process adopted a mixed-methods approach, particularly using exploratory sequential design i.e. a qualitative followed by a quantitative phase. The goal of the qualitative phase was to discover essential performance criteria through 1) literature review; 2) in-depth interviews; and 3) focus groups discussion. The performance criteria identified from the qualitative phase were brought into the quantitative phase via a questionnaire survey for the purpose of assigning their weighting levels. The tentative assessment framework was then presented to local experts for validation, and finally the Validated Comprehensive Malaysian Office Assessment (MyOBSA) framework is proposed. The framework covers all aspects of sustainability, thus allowing sustainability to be assessed in all phases of building developments, from pre-design to operational stages. This study demonstrates that any emerging/developing country shall be able to develop its own building sustainability assessment framework by taking into account relevant priorities of that country.

Keywords: Building performance assessment systems, emerging/developing countries, Malaysia, mixed-methods, office, sustainable building, sustainable development

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INTRODUCTION

In responding to the need to reduce the environmental impact of new and older buildings and promote sustainable construction, a plethora of building performance assessment systems (BPASs) and tools have been developed. Many such BPASs are in the form of rating systems that measure how well or poorly a building is performing or is likely to perform against a declared set of criteria. Well-known rating systems in developed countries include BREEAM¹ (UK), LEED² (US), Green Star³ (Australia), Green Mark⁴ (Singapore), and CASBEE⁵ (Japan).

Many BPASs in the developing/emerging⁶ countries, including Malaysia such as Green Building Index (GBI) rating systems (2017) reflect those of developed countries. A comparative review conducted by Shari and Soebarto (2015) on nine existing BPASs from developed and emerging/developing countries (including Malaysia's GBI⁷ rating system) revealed that most of them are inadequate for addressing the three pillars of sustainability (environmental protection, human well-being enhancement

and economic development) as well as many non-environmental priorities in emerging/developing countries. This is despite the fact that there are differences in priorities between developed and emerging/developing countries in implementing sustainable development and construction (UN, 1992; Du Plessis, 2002).

The significance of the problem has prompted research into the development of an appropriate assessment framework that enables sustainability to be addressed and incorporated in office building developments, relevant to emerging/developing countries, and this study focuses on the Malaysian context. A BPAS encompassing all the three pillars are of paramount importance to the Malaysian context but the question is: what would be the nature and form of an assessment framework relevant to Malaysia, taking into account possible shortcomings in its implementation such as unavailability of data? This is the overarching question of this research.

The authors argue that the Malaysian Office Building Sustainability Assessment (MyOBSA) framework developed in this study can better serve the needs of various stakeholders in decision-makings in the building and construction processes throughout the life cycle of their projects (from pre-design to operational stages). It does not only take into account the quantifiable factors of environmental issues, but also and equally the qualitative factors of social and economic issues. The framework is effectively a checklist that provides an assessment to measure performance using

¹<http://www.breeam.com/>

²<http://www.usgbc.org/leed>

³<http://new.gbca.org.au/green-star/>

⁴https://www.bca.gov.sg/green_mark/

⁵<http://www.ibec.or.jp/CASBEE/english/>

⁶According to Dow Jones Indexes, emerging countries (such as Malaysia) are countries that have not yet reached advanced or developed status but have outpaced their developing counterparts.

⁷<http://new.greenbuildingindex.org/>

a point scoring system. Points are achieved when established criteria and the level of compliance are fulfilled.

While one might wish to question the need to develop another building assessment framework, this paper argues that this need is not unusual. Countries such as Hong Kong, North America and Australia have two or more BPASs coexisting within the same market. Inevitably, debates have emerged either favouring the coexistence of systems or vice versa. On the positive side, Cole (2006, p.367-8) agreed on three points: 1) multiple systems in practice in the same country can act as a driver for innovation; 2) a single system is difficult, if not impossible, to address many conflicting goals and cater different stakeholder interest; and 3) a single system stagnates intellectual debate and creates a condition of market 'lock-in', particularly when the present system focuses on green issues rather than addressing broader considerations of sustainability; thereby constraining those who wish to extend the scope.

On the contrary, multiple systems might also confuse the market by sending mixed messages, requiring design professionals to be familiar with multiple assessment systems (Cole, 2006). This however can be avoided if an alternative system is introduced timely i.e. when the green building market has matured, primarily because by this time, green building community have started to become more cohesive and their differences of opinions began to become apparent (Cole, 2006). As such, this study hypothesised that as the building industry in Malaysia

has become familiar with environmental issues, relevant industry players are ready for a more sophisticated inclusion of sustainability principles within the system. The alternative MyOBSA framework developed in this study is differentiated in such a way that it offers a qualitatively different scope.

This study is significant as it contributes to the development of a new model or approach appropriate for emerging/developing countries. Emerging/developing countries will ultimately have an appropriate basis relevant to their countries to create sustainable construction industries, alongside efforts in developed countries to achieve global changes necessary for the future.

The aim of this paper is to describe the MyOBSA framework that was developed based on the specific requirements identified in Shari and Soebarto (2015). It can be regarded as the final research outcome of the first author's previous research activities in the area (see Shari, 2011). In particular the paper seeks to highlight the rationale behind different choices made during each stage of the framework development process. Once the developed MyOBSA framework is described, the paper then concludes by setting out a few recommendations for improvement and future research.

METHODS

Since sustainability and the framework are context specific, this study adopted a mixed-methods approach, particularly using the exploratory sequential design

i.e. a qualitative followed by a quantitative phase. The intent of exploratory design is to use the results of the qualitative method to develop the second qualitative method (Creswell & Plano Clark, 2011). In other words, exploratory design serves “to generalize qualitative findings based on a few individuals from the first phase to a larger sample gathered during the second [quantitative] phase” (Creswell & Plano Clark, 2011, p.86). Specifically, data collection and analysis methods engaged in this study were conducted sequentially in four phases.

Phase 1 is the qualitative phase where the goal is to identify the most essential assessment criteria or indicators to be included in the MyOBSA framework. There is currently no sufficient data on the perception of building stakeholders about sustainable development and sustainable office buildings in Malaysia. A qualitative study is deemed to be a preferable approach to generate the essential data for analysis. This phase included 1) wide-ranging literature review; 2) in-depth, semi structured, open-ended interviews; and 3) focus groups discussion. In this phase, the literature review findings were synthesized to reveal the relevant assessment criteria (Shari & Soebarto, 2015), which were further refined in the second and third stages conducted with experts from various backgrounds of the Malaysian construction industry (Shari & Soebarto, 2012a, 2013).

The criteria identified and refined in the qualitative phase were then brought into Phase 2 (quantitative phase) for the purpose

of assigning their weighting or importance levels. This phase involved a cross-sectional questionnaire survey in which more than 200 local building stakeholders participated. The qualitative and quantitative strands were then mixed or integrated in Phase 3 after both sets of data had been collected and analysed to propose the performance benchmark⁸ for each criterion. The proposed benchmarks were then brought into the process of validation by local experts to examine their reliability in the current practice. Finally, in Phase 4, the proposed assessment framework, which includes criteria, weightings, and benchmarks, was applied on a local case study building to test its applicability (Shari & Soebarto, 2012b); hence, forming the basis for further refining the framework empirically and identifying any criteria with missing input data.

The overall flow steps of the research and the research questions used in each phase of the development process are presented in Figure 1. Further explanation of this figure and the summary of results from each phase are outlined next.

⁸A benchmark is a standard, or a set of standards, used as a point of reference for evaluating performance or level of quality. For example, one of the criteria/indicators under ‘Local People and Employment’ (one of the sub-issues under ‘Social’ Issue) is ‘Use Experienced Local Design Teams’. The benchmark for this criterion is “At least 80% of design teams appointed for the project are local companies who have had good track records in designing similar type of project”.

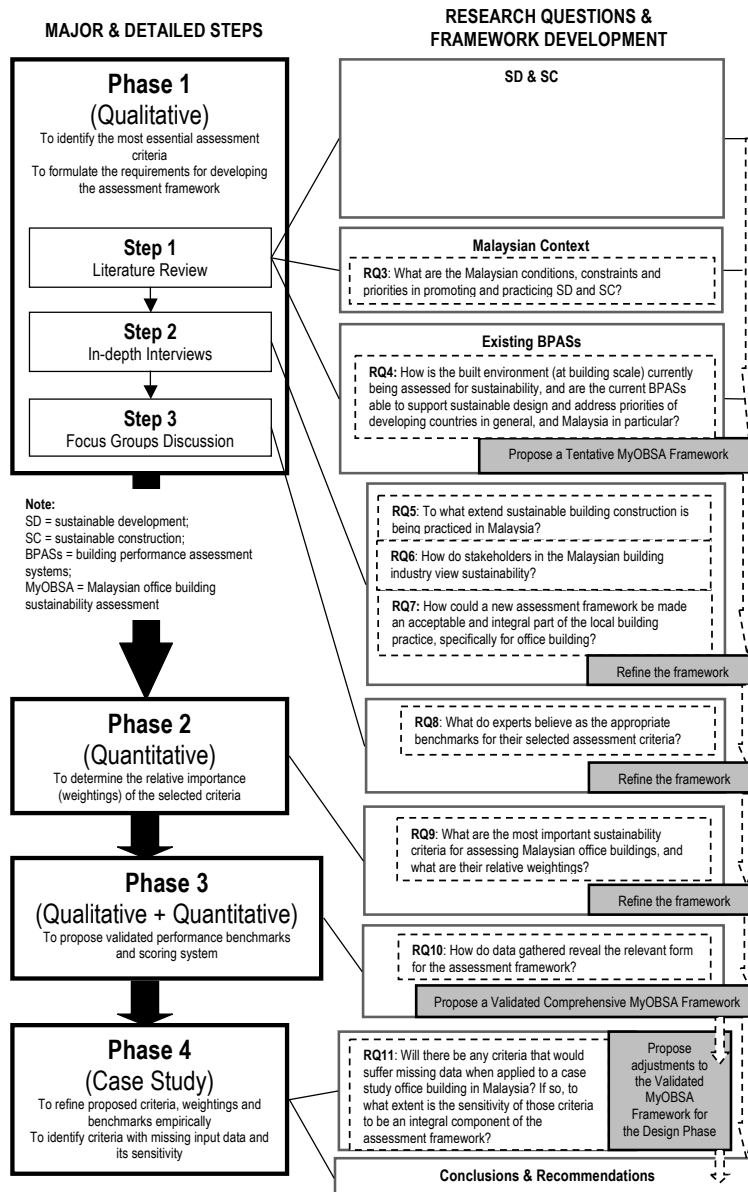


Figure 1. The overall flow steps of the research

RESEARCH PHASES AND RESULTS

Phase 1: Results from the Qualitative Phase

During the first stage, literature was reviewed to build a theoretical foundation

for the research. The synthesis of overall findings is reported in Shari and Soebarto (2015). There were 102 assessment criteria identified at this stage and these were presented in a form of *Tentative MyOBSA*

framework. A summary of this framework is presented in Table 1 (the finally selected assessment criteria under each sub-issue are shown in the discussion section).

Table 1
Summary of the Tentative Malaysian Office Building Sustainability Assessment (MyOBSA) Framework

Sub-Issues	No. of criteria
S: Social	
EDU: Education & Awareness	5
COH: Support for Social Cohesion	5
ACC: Accessibility	5
INC: Inclusiveness of Opportunities	3
HUM: Human Health & Well-being	14
CUL: Cultural & Heritage Aspects	3
LOC: Local People & Employment	6
Sub-Total	41
Environmental	
ECO: Land Use & Impacts on Ecology	6
SRM: Supports Resource Management	5
AIR: Emissions to Air	7
LAN: Emissions to Land/ Solid Waste	7
EWA: Emissions to Water	4
ADJ: Impacts on Adjacent Properties	4
ENE: Non-Renewable Energy Consumption	10
WAT: Potable Water Consumption	6
Sub-Total	49
Economic	
TBL: Triple Bottom Line Accounting	5
EEF: Efficiency, Effectiveness & Flexibility	7
Sub-Total	12
Grand Total	102

Following this step, in-depth, semi-structured, open-ended interviews were conducted to explore the extent of sustainable development practices in Malaysia, different views of sustainability among building stakeholders, and their primary concerns in pursuing sustainable office building development. The purpose of this stage is to define gaps that need to be bridged to promote sustainable building development and assessment in Malaysia. A total of 50 commercial building stakeholders practicing in Kuala Lumpur, Selangor and Putrajaya were purposely selected as participants. Invitations were sent via email, with 30 stakeholders agreed to be interviewed, consisting of 12 consultants, five developers/owners, three builders, four facility managers, and six regulators/policy makers. The purposive sampling, particularly judgement sampling, was used to provide the means to investigate a specialized population of stakeholders who have experienced in the relevant field for more than ten years. A sample size of 20 to 30 is deemed adequate to enable internal generalization in a qualitative study (Patton, 2015).

The data from the interviews were then analysed using content analysis. This is a process of identifying, coding, categorizing, classifying and labelling the primary patterns in the data (Patton, 2015), performed on individual cases and across cases. The qualitative results of this stage are reported in Shari and Soebarto (2012a, 2013). The results revealed that out of 102 criteria identified earlier, 65 criteria were

confirmed, four refined and the remaining 33 were not cited by the interviewees. However, the interviewees suggested 13 new criteria which were then added, resulting in a total of 115 criteria (i.e. $65+4+33+13$). The findings at this stage formed the basis of fine-tuning the tentative framework.

Subsequently, the framework was further refined through focus groups discussion. Focus groups are small groups of people, who possess certain characteristics, and who meet to provide data of a qualitative nature in a focused discussion (Krueger & Casey, 2015). Focus groups can be used to inform the development of questionnaires and interviews or later in a sequential mixed methods research study to help researchers better understand and interpret information and findings resulting from the earlier use of other data collection methods (Tashakkori and Teddlie, 2010).

Thirty-eight people participated in the focus group, consisting of 15 government officials/policy makers/regulators, nine academicians, seven design consultants, three contractors, two property developers, one project manager and one building materials supplier. They were experts in fields related to the built environment and knowledgeable in sustainable development in general and/or sustainable building in particular. Six focus groups were used, mainly based on six sustainability areas identified in the research which are (1) site planning and management (2) energy efficiency and system management, (3) indoor and outdoor environmental quality, (4) materials and solid wastes, (5) water

efficiency and liquid waste, and (6) social and economic issues. Each group consisted individuals with similar expertise but from different professions.

Each focus group was asked to seek through consensus the essential criteria to be included in the MyOBSA framework by retaining, adding, omitting or modifying criteria identified in the framework developed. Whatever decision was made, participants were reminded to consider the following questions: 1) Should the criteria be included? Or is it relevant enough? 2) Should the text be modified?; 3) What might be the best indicator of performance?; and 4) Can the data for assessment be obtained at reasonable cost and effort? The groups were also asked to propose the minimum performance benchmarks or targets for the criteria derived above which are considered important and relevant to the local context.

Out of 115 criteria brought into the focus groups discussion (based on refinements made to the tentative framework), 106 criteria were agreed upon, while seven refined and two omitted. The results also discovered an additional seven new criteria, giving a total of 120 (i.e. $107+6+7$) deemed appropriate to be brought into the next phase of development.

Phase 2: Results from the Quantitative Phase

The goal of the quantitative phase was to determine the relative importance (or weightings) of the criteria, identified in the qualitative phase of the study. As Creswell and Plano Clark (2011) noted, exploratory

sequential design is appropriate to be used to generalize qualitative findings to different samples.

The quantitative data was collected via a questionnaire survey, using a self-developed and pilot-tested instrument. The questionnaire form consisted of four parts: 1) background; 2) sustainability awareness; 3) sustainability preferences; and 4) expectations of MyOBSA systems; with the third part consisted of the core survey items. These items were performance criteria, grouped under seventeen sustainability sub-issues which were rated using four-point Likert-type scales where a score of “1” represents “Not important”; “2” represents “Less important”; “3” represents “Important”; and “4” represents “Very important”.

The target population for this phase of the study included various groups of stakeholders within Kuala Lumpur, Selangor and Putrajaya, namely: 1) Corporate Members of the Malaysian Institute of Architects (PAM); 2) members of the Institute of Engineers Malaysia (IEM); 3) members of the Malaysian Institute of Planners (MIP); 4) company members of the Real Estate and Housing Developers' Association Malaysia (REHDA); 5) policy makers/regulators (from agencies/departments/sectors of five federal ministries identified as relevant to the study); and 6) other relevant construction industry players. Because the purpose of this quantitative phase was to arrive at broad generalizations of the population, different participants were selected in the quantitative follow-up stage. Furthermore,

various stakeholder groups' participation is important to reduce the risk of bias.

A “systematic sample” with a random start (Bryman, 2008, p.172) was adopted to draw a sample from each sampling frame. This way, every *n*th element in the total list was chosen for inclusion in the sample after the first element is selected randomly within the first interval. On the other hand, no sampling method was employed for government agency employees since all identified members were sampled. The study adopted a mixed-mode data collection via group administration, mail and hand-delivery (later pick-up) methods.

Of the total 1000 questionnaires that were distributed, only 203 valid samples were received. Of which were 59 architects (29.1% of the total), 60 engineers (29.5%), 26 planners (12.8%), 20 developers/owners (9.8%), 13 policy makers/regulators (6.4%), and 25 others (12.3%). Accordingly, the final response rate was an acceptable 20.4% according to Akintoye (2000) who argued that the normal response rate in the construction industry for postal questionnaire is 20-30%. This seemed to be true in the Malaysian context judging from Othman et al. (2015), Al-Tmeemy (2011), Abdul-Aziz and Wong (2010), Shehu et al. (2014) and Majid et al. (2011) who obtained 24.4%, 22.8%, 19%, 15.7% and 6.8% respectively. In selecting the most important criteria suggested by respondents, it is considered reasonable that selection is based on their mean values after taking into account their respective standard deviation (SD). Since the questionnaire incorporated

a 4-point Likert scale, the mid-point is then 2.5. In other words, the criteria that should be included in the MyOBSA framework must have a minimum mean of 2.5 or above, after taking into account their respective SD:

$$\text{Mean} - \text{SD} \geq 2.5 \text{ (rounded to 1 decimal point)} \quad [1]$$

Subsequently, the eligible criteria as well as all Issues and Sub-issues are assigned with their weighting value which is the relative importance index (RII) constructed reflecting their level of importance using the formula (Kumaraswamy & Chan, 1998; Muhwezi, et al., 2014; Somiah, et al., 2015; Tam, et al., 2002; Tam, et al., 2007):

$$\text{RII} = \frac{\sum w}{AN} \quad [2]$$

where w is the weighting given to each issue, sub-issue or criterion by the respondent, ranging from 1 to 4 in which “1” is ‘not important’ and “4” is ‘very important’; A = the highest weighting, in this study $A = 4$; N the total number of samples; and RII the relative important index $0 \leq \text{RII} \leq 1$. Put differently, RII is calculated by dividing the mean of the weightings assigned by the respondents with the highest weighting i.e. 4.

However, since minimum means (mean minus the SD) were used as the basis of ranking the issues and sub-issues, as well as selecting the most important criteria, in addition to determining the RII of each issue, sub-issue and criteria. By using mean values, the resulted RII values were then transformed into three important levels: high (H) ($0.8 \leq \text{RII} \leq 1$), medium (M) (0.5

Table 2

Descriptive statistics of the importance of criteria under the AIR Sub-Issue ($N_{\text{all}} = 203$) – Example of how the criteria for “Emissions to Air” were selected

AIR: Emissions to Air						
Criteria	N	Min	Max	Mean	SD	Min. Mean (Mean – SD)
GHG gas emissions from building operation	203	2	4	3.50	.59	2.9
Pedestrian access to basic services	203	1	4	3.34	.65	2.7
Connection to public transportation network	202	1	4	3.29	.70	2.6
Proximity to public transport stops	203	1	4	3.09	.71	2.4
Air pollution from site workers' accommodation	202	1	4	3.11	.80	2.3
Proximity to residential zones	201	1	4	2.85	.72	2.1
Bicycles and/or bicycle parking spaces	203	1	4	2.80	.85	2.0
Minimum allowable parking spaces	200	1	4	2.68	.83	1.8
Maximum motorcycle parking spaces	203	1	4	2.53	.89	1.6
Valid N (listwise)	197					

Note: 1 = Not important and can be omitted; 2 = Less important and may be omitted; 3 = Important and should be assessed; 4 = Very important and must be assessed; Shaded = Selected for the MOBSA framework (Mean - SD ≥ 2.5)

$\leq \text{RII} \leq 0.8$), and low (L) ($0 \leq \text{RII} \leq 0.5$) (Tam, et al., 2007). Since minimum means were used instead, the three important levels adopted are: high (H) ($0.7 \leq \text{RII} \leq 1$), medium (M) ($0.5 \leq \text{RII} \leq 0.7$), and low (L) ($0 \leq \text{RII} \leq 0.5$). Examples of deciding which criteria to be included or omitted in the framework are presented in Table 2, 3 and 4, representing one of the sub-issues under ‘Environmental’, ‘Social’ and ‘Economic’ issues respectively.

Table 3

Descriptive statistics of the importance of criteria under the LOC Sub-Issue ($N_{all} = 203$) – Example of how the criteria for “Local People and Employment” were selected

LOC: Local People and Employment						
Criteria	N	Min	Max	Mean	SD	Min. Mean (Mean – SD)
Training opportunities for local people	199	1	4	3.49	0.64	2.9*
Locally produced materials	199	1	4	3.32	0.66	2.7*
Linkage to local service providers	198	1	4	3.28	0.59	2.7*
Experienced local design teams	199	1	4	3.29	0.74	2.5*
Experienced local contractors	199	1	4	3.22	0.73	2.5*
Local labour	199	1	4	3.07	0.76	2.3
Valid N (listwise)	198					

Note: 1 = Not important and can be omitted; 2 = Less important and may be omitted; 3 = Important and should be assessed; 4 = Very important and must be assessed; * = Selected for the MOBSA framework (Mean - SD ≥ 2.5)

Table 4

Descriptive statistics of the importance of criteria under the TBL Sub-Issue ($N_{all} = 203$) – Example of how the criteria for “Triple Bottom Line Accounting” were selected

TBL: Triple Bottom Line Accounting – Planet, People, Profit						
Criteria	N	Min	Max	Mean	SD	Min. Mean (Mean – SD)
Practice of referring to EIA report	201	2	4	3.42	0.61	2.8*
Assess quality of workmanship	198	2	4	3.39	0.61	2.8*
Consider both capital and long-term operation costs	200	1	4	3.37	0.60	2.8*
Conduct Triple Bottom Line	200	1	4	3.28	0.64	2.6*
Conduct Design Risk Analysis	200	2	4	3.26	0.67	2.6*
Payback period	202	1	4	3.12	0.71	2.4
Rate of occupancy and occupancy turnover	201	1	4	3.10	0.67	2.4
Valid N (listwise)	193					

Note: 1 = Not important and can be omitted; 2 = Less important and may be omitted; 3 = Important and should be assessed; 4 = Very important and must be assessed; * = Selected for the MOBSA framework (Mean - SD ≥ 2.5)

What needs to be highlighted here is that ‘Social’ and ‘Environmental’ issues were weighted as “High” (RII of 0.73 and 0.75 respectively), while ‘Economic’ issue was rated as “Medium” (RII of 0.60). This shows that stakeholders of this study considered all three aspects important for the framework. From 120 criteria identified in, the qualitative phase, only 88 were eligible to be tested and validated because they recorded a higher mean value than assigned by the study.

Phase 3: Integration of Qualitative and Quantitative Results

Both qualitative and quantitative results were integrated to propose performance benchmarks for all selected criteria. Typically, BPASs use performance benchmarks as the basis to measure and indicate how well a case study building is performing, or likely to perform. Therefore, each benchmark is normally assigned with a number of points in order for the overall performance score of a case study building to be calculated.

Benchmarks can be derived theoretically, empirically and by expert opinion. According to Hyde et al. (2007), validity and robustness of the approaches to defining benchmarks are of paramount importance. He asserted that ‘triangulation’ methodology by using a combination of data sources should be used to derive information for creating valid benchmarks. This study attempts to use a combination of approaches. The performance benchmarks proposed by the experts in the focus groups

were used. Most of the context-specific benchmarks proposed by the focus groups were immediately adopted while others were further refined based on literature and interview data (i.e. theoretically and by expert opinion). References or adaptations from foreign sources were treated with caution.

The results were subsequently presented to nine experts for validation, comprising three architects, three government officials, one engineer, one facility manager, and one contractor. They were asked to examine the reliability of the criteria benchmarks for current practice. Consequently, the resulted modifications were presented as the *Validated Comprehensive MyOBSA framework*, now only consisting of 86 criteria which were subsequently integrated with a scoring system – proposed based on their important level derived in the quantitative phase – to enable its application in real life.

The calculation of weighting value of each issue, however, does not solely depend on its important level derived in the quantitative phase, due to the fact that the weighting values differ slightly from results obtained from the qualitative phase. It should be noted that the results from both data collections indicate that ‘Environmental’ and ‘Social’ issues are deemed to be slightly more important than ‘Economic’ issues. Results are shown in Table 5. With regard to the sub-issues, their weightings were assigned using the same scale system used to reflect the important level of each criterion; for example, sub-

Table 5
Proposed weightings for sustainability Issues of the MyOBSA Framework

Sustainability Issues	Code	Mean		Average Mean	Proposed Weightings ^c	Important Level ^d
		Interview (Phase 1) ^a	Questionnaire (Phase 2) ^b			
Social	S	3.7	3.5	3.6	34.3%	H
Environmental	EN	3.6	3.6	3.6	34.3%	H
Economic	EC	3.5	3.1	3.3	31.4%	M
Total				10.5	100%	

Note.

^aN_{all} = 30

^bN_{all} = 203

^{ab}1 = Not important; 2 = Moderately important; 3 = Important; 4 = Very important

^cProposed weighting value for each Issue is calculated as the average mean value of that Issue divided by the total average mean values of all Issues multiplied by 100. For example, the proposed weighting value for "Social" Issue was calculated as $(3.6/10.5) \times 100 = 34.3\%$

^dThe important level of each Issue is brought here from the Stage-3 MyOBSA framework. H = high and M = medium

issue with high important level is assigned with 3 points, medium with 2 points, and low with 1 point. Results are shown in Table 6.

Phase 4: Results from the Case Study

Finally, the *Validated Comprehensive MyOBSA Framework* was applied on an environmentally-certified local case study building project (Shari & Soebarto, 2012b); hence, forming the basis to further refine the criteria, benchmarks and weightings empirically. The purpose of this application is to demonstrate the framework's appropriateness to the local context, given the potential risk of lack of input data or difficulties in obtaining them to complete the assessment. This is due to the fact that poor data acquisition can erode the rigour of the benchmarking process (Hyde, et al., 2007). Therefore, it was anticipated that the whole processes involved in proposing appropriate

local performance benchmarks would improve the robustness of the framework, if adopted in reality.

It is important to highlight that the *Validated Comprehensive MyOBSA Framework* consists of four smaller frameworks that were formulated to be applicable for a specific phase of assessment: 1) *MyOBSA for the Pre-Design Phase*; 2) *MyOBSA for the Design Phase*; 3) *MyOBSA for the Construction and Commissioning Phase*; and 4) *MyOBSA for the Operation Phase*. For the purposes of demonstrating the proposed framework, this study focused only on the *MyOBSA Framework for the Design Phase*, which contains the majority of the criteria in the *Validated Comprehensive MyOBSA Framework*. The framework was applied by doing an assessment of the project using archival data available at the end of the design stage, including tender/

Table 6
Proposed weightings for sustainability Sub-Issues of the MyOBSA Framework

Sub-Issues	Important Level ^a	Scale	Proposed Weightings ^b	Net Weightings ^c
S: Social			34.3%	
EDU: Education & Awareness	H	3	18.2%	6.24%
COH: Support for Social Cohesion	M	2	12.1%	4.15%
ACC: Accessibility	H	3	18.2%	6.24%
INC: Inclusiveness of Opportunities	M	2	12.1%	4.15%
HUM: Human Health & Well-being	H	3	18.2%	6.24%
CUL: Cultural & Heritage Aspects	M/L	1.5	9.1%	3.12%
LOC: Local People & Employment	M	2	12.1%	4.15%
Total EDU+COH+ACC+INC+HUM+CUL+LOC	-	16.5	100%	34.3%
EN: Environmental			34.3%	
ECO: Land Use & Impacts on Ecology	H	3	15%	5.15%
SRM: Supports Resource Management	M	2	10%	3.43%
AIR: Emissions to Air	H	3	15%	5.15%
LAN: Emissions to Land/ Solid Waste	H	3	15%	5.15%
EWA: Emissions to Water	H	3	15%	5.15%
ADJ: Impacts on Adjacent Properties	M	2	10%	3.43%
ENE: Non-Renewable Energy Consumption	M	2	10%	3.43%
WAT: Potable Water Consumption	M	2	10%	3.43%
Total ECO+ SRM+AIR+LAN+EWA	-	20	100%	34.3%
EC: Economic			31.4%	
TBL: Triple Bottom Line Accounting	M	2	40%	12.56%
EEF: Efficiency, Effectiveness & Flexibility	H	3	60%	18.84%
Total TBL+EEF	-	5	100%	31.4%
Innovation	N.A.		N.A.	N.A.

Note:

^aThe important level of each sub-issue is brought here from the Stage-3 MyOBSA framework. H = high; M = medium; L = low.

^bProposed weighting value for each Sub-Issue is calculated as the scale value of that Sub-Issue divided by the total scale values of all Sub-Issues within an Issue multiplied by 100. For example, the proposed weighting value for EDU Sub-Issue was calculated as $(3/16.5) \times 100 = 18.2\%$. Weightings should be adjusted to ensure that the total weighting of all active/applicable Sub-Issues within each Issue is always 100%.

^cNet weighting value for each Sub-Issue is calculated as the proposed weighting of that Sub-Issue multiply by the proposed weighting of the relevant Issue of which the Sub-Issue is fall under. For example, the net weighting value for EDU Sub-Issue was calculated as $18.2\% \times 34.3\% = 6.24\%$.

contract documents, and reports related to the building design. Inputs from four key project stakeholders were sought and

any difficulties in obtaining input data to complete the assessment were identified.

For fassessing the qualitative criteria such as management, process, and

communication, the stakeholders were requested to select the appropriate points that should be awarded for the respective criteria being investigated. In this manner performance criteria and benchmarks that needed adjustment could be identified. In addition, they also received a few quantitative criteria assessed and scored by the researcher for verifications and comments.

Overall, it was found that all the criteria within the framework are most likely to be assessable and realisable with limited risk of data availability and completing the assessment, with an exception of “Increase use of materials that have less environmental impact in producing them”. Currently, the development of local and comprehensive data on materials and their environmental impact in Malaysia is at its infancy; however, based on the sensitivity analysis it was found that this criterion is unlikely to be a crucial component of the MyOBSA framework, at least for the time being.

DISCUSSION: THE VALIDATED COMPREHENSIVE MYOBSA FRAMEWORK

Table 7 shows the *Validated Comprehensive MyOBSA framework* consisting of issues, sub-issues, applicable criteria by phase of assessment, and their spatial scale. Due to the length of this framework, performance benchmarks of each criterion have not been included here. For the complete version of the *Validated Comprehensive MyOBSA Framework* or individual *MyOBSA Framework for the Pre-Design,*

Design, Construction & Commissioning, and *Operation Phases*, refer to Shari (2011). The nature and form of the framework is discussed below based on its fulfilment of five main requirements identified in Shari and Soebarto (2015).

Requirement 1: Embracing Sustainability Concept and Addressing Priorities of Emerging/Developing Countries

Overall, the framework evaluates stakeholders' decisions in the building and construction processes in relation to the complex concept of sustainability by taking into account the interrelationship of environmental (indicated in terms of environmental loadings or impacts during the building life cycle), social (indicated in terms of building's interaction with sustainability concerns on community-level) and economic (indicated by monetary flows connected to the building during its life cycle) aspects of sustainable development. It is structured hierarchically in three levels, with the higher level logically derived from the lower ones: 3 sustainability issues (i.e. 'Environment', 'Social' and 'Economic'), 17 sub-issues and 86 criteria (a mixture of quantitative and qualitative types).

By having a broad scope of assessment, the framework is able to address non-environmental priorities of emerging/developing countries. These priorities are: 1) to promote participation among stakeholders, and enhance their knowledge and awareness in supporting sustainability throughout the life cycle of their project;

Table 7

Validated comprehensive MyOBSA framework (without performance benchmarks) – Applicable criteria by phase of assessment and their spatial scale

Social Sub-Issue	Spatial Scale	Criteria	Applicable criteria by phase			
			P-Dsn	Dsn	C&C	Ops
Education & Awareness	O	Awareness of building occupants				■
	O	Readiness & competency of design team	■	■		
	O	Skills & knowledge of maintenance & operation staff		■	■	■
	O	Skills among construction workers		■	■	
Support for Social Cohesion	O	Inter-disciplinary work	■	■		
	C	Support active streetscape	■	■		■
	B	Space planning for maximum social interaction	■	■		■
	O	Participation of affected community	■		■	
Accessibility	O	Participation of users	■	■		
	B	Personal safety & security	■	■	■	■
	B	Maintenance access for building facades	■	■		■
	B	Access to communication technology	■	■		■
	B	Maintenance access for building services installations	■	■		■
	C	Access to nearby services	■	■		
Inclusiveness of Opportunities	B	Universal access	■	■		■
	B	Facilities for users to perform religious obligations	■	■		■
	B	Facilities for users with children	■	■		■
Human Health & Well-being	B	Avoid construction accidents		■	■	■
	B	Level & quality of fresh air	■	■		■
	B	Openings & cross ventilation	■	■		■
	B	Noise level & acoustic performance	■	■		■
	B	Illumination level & quality of artificial lighting	■	■		■
	B	Prohibit tobacco smoking	■	■	■	■
	B	Low/zero pollutants cleaning & maintenance	■		■	■
	B	Interior finish materials with low/zero off-gassing	■	■		■
	B	Air movement for thermal comfort	■	■		■
	B	Glare conditions	■	■		■
	B	Building flush-out	■	■	■	■

Table 7 (*continue*)

Cultural & Heritage Aspects Local People & Employment	B	Areas/rooms which generate pollutants & odour	■	■		■
	B	Monitoring of occupants' satisfaction with IEQ	■			■
	B	Heritage significance of the building or adjoining/nearby heritage buildings	■	■	■	■
	C	Training opportunities for unskilled local people			■	
	C	Locally available materials & products	■	■		
	C	Local service providers				■
	C	Experienced local design teams		■		
	C	Experienced local contractors		■	■	
Environmental Sub-Issue	Spatial Scale	Criterion	Applicable criteria by phase			
			P-Dsn	Dsn	C&C	Ops
Land Use & Impacts on Ecology	S	Damage to soil, water bodies, and flora & fauna	■	■	■	
	S	Landscape spaces on the site	■	■		■
	S	Ecological value of natural landscape	■	■		■
Supports Resource Management	C	Risk of flooding	■	■		
	G	Materials that have less environmental impact**	■	■		
	B	Building design for maximum durability	■	■		
	B	Bio-based products & materials	■	■	■	■
	B	Materials that can be recovered or recycled	■	■		
	B	Products & materials with recycled content	■	■	■	■
	C	Access to basic services & connection to public transportation network	■	■		■
Emissions to Air	S	Handling & storage of hazardous wastes on site	■	■		■
	B	Construction waste management programme	■	■	■	
	B	Spaces for collection of recyclables	■	■	■	■
	B	Recycling of office recyclables	■	■		■
	S	Pollution from site workers' accommodation	■		■	
	B	Standardized & prefabricated components	■	■	■	

Table 7 (continue)

Emissions to Water	C	Stormwater management strategies	■	■	■	
	C	Pollution from site workers' accommodation	■		■	
	S	On-site wastewater treatment systems	■	■		■
Impacts on Adjacent Properties	C	Noise & vibration generated during construction	■	■	■	
Non-Renewable Energy Consumption	B	Energy efficient light fixtures & office appliances	■	■		■
	B	Efficient ventilation & air-conditioning systems	■	■		
	B	Passive cooling strategies	■	■		
	B	Integrated lighting concept	■	■		■
	B	Fossil fuel energy consumption for operations	■	■		■
	B	Size of building systems control zones	■	■		■
	B	Automatic lighting control systems	■	■		■
	B	Energy sub-metering system	■	■		■
	B	Personal control of the thermal comfort systems	■	■		■
	B	Water meters	■	■		■
Potable Water Consumption	S	Harvest rainwater	■	■	■	■
	B	Water efficient plumbing fixtures & appliances	■	■		■
	S	Potable water for landscaping irrigation	■	■		■
	B	Potable water for cooling system	■	■		■
	B	Water meters	■	■		■
Economic Sub-Issue	Spatial Scale	Criterion	Applicable criteria by phase			
			P-Dsn	Dsn	C&C	Ops
Triple Bottom Line Accounting	C	Referring to EIA report	■	■		
	B	Quality of workmanship			■	
	B	Capital cost & long-term operational costs	■	■		
	O	Triple Bottom Line	■	■		
	O	New & untested sustainable products & technologies	■	■		
Efficiency, Effectiveness & Flexibility	B	Long-term maintenance management plan	■	■		■
	B	Building management control system	■	■		■
	O	Comprehensive building records	■	■	■	■
	B	Spatial flexibility	■	■		

Table 7 (*continue*)

	B	Building services systems with maximum flexibility	■	■		
	B	Comprehensive commissioning	■	■	■	■
	B	Structural and core layout with maximum adaptability	■	■		
	B	Floor-to-floor height for high level of functionality	■	■		
	B	Directly functional area to total floor area ratio	■	■		
		Criterion				
Innovation	O	Innovative strategies and technologies		■	■	■
	O	Exceeding MOBSA benchmarks		■	■	■

Note:

Assessment Phase: P-Dsn = Pre-design phase; Dsn = Design phase; C&C = Construction & Commissioning phase; Ops = Operations phase

Spatial Scale:

G = Global level: *Impacts on resources specifically identified to be global;*

C = Community and regional level: *Impacts on the neighbourhood, community and region;*

S = Site level: *Site-specific attributes;*

B = Building level: *Certain construction techniques, attributes of buildings, or types of building materials;* and

O = Other: *Criteria that do not fit the above.*

2) to increase participation of affected community in development process; 3) to improve human health and well-being; 4) to improve efficiency, safety of processes and quality of products; 5) to ensure affordability; 6) to ensure social equity and cohesion; and 7) to utilize semi-skilled labour. On top of these, the framework also incorporates environmental priorities of emerging/developing countries such as: 1) reducing energy consumption and air pollution; 2) promoting solid waste reduction, recycling and safe disposal; and 3) improving access to public transportation.

Requirement 2: Acknowledging the Local Context

The first aspect of the framework that acknowledges the local context is its selected performance criteria. For example, among the selected performance criteria that reflect Malaysian priorities are: 1) efficient use of resources; 2) controlled and planned development; 3) use local materials; 4) reduce work accidents; and 5) consider both capital cost along with operational costs. The framework also excludes certain criteria that are currently too difficult to assess either due to local conditions and constraints (e.g.

provide minimum allowable parking spaces, and use black water treatment systems) or the unavailability of relevant data to complete the assessment (i.e. embodied energy of building components/materials).

The second aspect of the framework that reflects the local context is the proposed weightings. Based on the research findings, all the 3 sustainability issues ('Environment', 'Social' and 'Economic') were given almost equal weightings, meaning that in the study, the stakeholders value each of these issues as important as the others. This result is in tandem with the local conditions argued in Shari and Soebarto (2015): the necessary balance between the socio-economic and ecological systems to avoid further environmental damage has not yet been reached in the country.

Requirement 3: Linking Across Varying Spatial Scales

The spatial scale at which a criterion is assessed defines the spatial boundary separating outcomes that will and will not be considered. For example, an assessment criterion may have an impact at a building, site, on the community or even region and world as a whole. Out of 86 criteria within the MyOBSA framework, 16% assess aspects at the scale broader than the site level i.e. global and community levels, 70% assess aspects at site and building levels, and the remaining 14% are related to administrative and communication/process. It is worth noting that the percentage of 16% criteria at the community/regional and global levels is significantly higher than the

percentage in the Singapore's Green Mark (4%), China's Three Star System (8%), and Malaysia's GBI (11%) and comparable with other BPASs reviewed in Shari and Soebarto (2015).

Requirement 4: Addressing all Building Lifecycles and Incorporating Both Potential and Actual Performance Assessments

Although the application of the framework as shown in this paper only focuses on the design stage, in principle the issues are relevant to all phases of a life cycle of a building, including pre-design, design, construction and commissioning, and operation phases. This in turn informs the anticipated stakeholders for each of them.

Appropriate benchmarks are also available for each criterion to suit its applicable phase(s) of assessment. For instance, for pre-design phase assessment, evidence is required to show that the required performance is included in the client's project brief. Whilst, for design phase, evidence is required to show that the design conforms to or exceed the criterion's benchmarks. For operation phase assessment however, evidence is required to show that the building has actually performed as was intended.

This way, the framework assesses both potential performance (i.e. design-based criteria such as potential energy consumption) and actual performance (performance-based criteria such as actual energy consumption and post occupancy evaluation). As highlighted by Hyde et

al. (2007, p.558), “it is important that benchmarking becomes more strategic, that is, based on a number of sources of information drawn from both design and operation conditions” and “the method of validating performance is a crucial indicator of rigour, since it establishes the credibility of the standard” (Hyde, et al., 2007, p.554).

Requirement 5: To Involve Participation of Local Building Stakeholders

As evidenced in the methodology, stakeholders’ participation through communication, dialogue, commitment and cooperation was taken into consideration in all phases of the study to ensure the MyOBSA framework is accepted by the market and supported by industry.

Notes About the Study

Although the research has generally achieved the specific objective stated in the introduction, it nevertheless had its limitations. Firstly, the size of the sample was limited to 203; hence, it is acknowledged that the final selected criteria or indicators might be different if the sample size was different or larger covering larger demographic areas. Further, the sample size obtained for the qualitative study is only adequate to enable internal generalization i.e. 30; hence, findings may not be employed to make inferences on other construction industry stakeholders not included in the study.

Secondly, the survey is confined to two

out of three federal territories (i.e. Kuala Lumpur and Putrajaya) and one out of thirteen states (i.e. Selangor) in Malaysia. Despite the fact that Malaysia has no different climatic zones, certain parts of the country are drier or wetter than others depending on the months of the year. Other variations include nature, socio-economic background and priorities, and technical achievements. Therefore, the weightings developed in this survey are possibly applicable to states or cities that are similar to the investigated ones. Otherwise, further research needs to be conducted to generate appropriate weightings for other states or cities. Further, the results of the weighting exercise are inevitably subjective and are time-dependent; hence, will require regular updating.

Thirdly, the research is confined to office building projects. However, the findings from this study can be considered as a guide to assess and develop sustainable building criteria for other building typologies in the Malaysian context.

Fourthly, this paper only shows the applicability of the criteria relevant to the design phase of assessment. This means, performance benchmarks defined for criteria relevant to other phases of assessment may require adjustments due to data unavailability or difficulties in obtaining them to complete the assessment.

Finally, it is considered a building industry’s prerogative to determine the different levels of “rating” to be awarded and the minimum score that should be achieved for each rating level of MyOBSA;

hence, assigning different levels of “rating” is beyond the scope of this study. It is also worth pointing out that these aspects are not standardized among existing BPASSs. For instance, Green Mark sets as high as 90 out of 100 for its “Platinum” rating; whereas Malaysia GBI and UK BREEAM settle on slightly lower minimum score of 86 for “Platinum” and 85 for “Outstanding” ratings respectively. Interestingly, other BPASSs that agree on even lower minimum scores than aforementioned are LEED-US (80 for “Platinum” rating) and Australia Green Star (75 for “6-Stars” rating).

CONCLUSION AND RECOMENDATIONS

This paper has presented the development of appropriate assessment framework that enables sustainability to be addressed and incorporated in office building development in emerging/developing countries such as Malaysia. . The MyOBSA framework was presented, discussed, refined, and finally verified and tested in the research using a real-life case study office building. The multiple stages involved in deriving the final MyOBSA framework in general, or the appropriate performance criteria and benchmarks in particular, have improved the robustness of the MyOBSA framework. The key point is that the framework and key performance criteria identified in this study will improve the understanding of practitioners by promoting comparisons, discussions, and learning. Also, the developed framework is found to be able to

consider different levels of information and to structure all relevant issues in an ordered manner, helping decision makers handle the multiplicity of the issues embodied in the concept of sustainability.

It is anticipated that in the future, the performance standards of office buildings in Malaysia would rise (more buildings become ‘greener’ or the baseline improves); therefore, over time, regulations would be updated, sustainable technologies, local capabilities and understanding of issues would evolve, and sustainable building performance may be improved. In fact, it should be noted that the proposed benchmarks in this study are by no means definitive or conclusive. If this framework were to be adopted, it is recommended for the performance benchmarks defined in the MyOBSA framework to be gradually revisited or updated over time. As many of the benchmarks are context dependent, they should also be adjusted if adopted in different areas or regions. Adjustments should also be made to weightings and scoring in response to changing priorities. Nevertheless, the weightings developed in this study can provide valuable references and be useful at least in two ways: 1) as a reference when applying weighting system in any BPAS in Malaysia; and 2) as a guide for the Malaysia specific sustainable building researchers and practices to focus on the more important issues.

Assessment criteria included in the *Validated Comprehensive MyOBSA Framework* must be extended as and when

the severity of certain issues become more acute and of political and public concern. This process will not only facilitate the necessary integration of issues, perspectives and views in building assessment but also facilitate participation and transfer of knowledge among stakeholders. Above all, it is recommended that further research be conducted to develop a Malaysia-specific building sustainability assessment framework for other building types such as schools and campuses (as well as a country-specific building sustainability assessment framework in other developing or emerging countries), by adopting the processes and experience resulting from developing this MyOBSA framework.

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Supply Chain Management Practices: A Study of Freight Forwarders in Nepal

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ABSTRACT

The aim of this research aim was to study supply chain management practices among 25 selected freight forwarding companies in Nepal; the focus was on their competitive advantage. Questionnaires were sent to the sample companies and the response rate was 76% though only 64% of the completed questionnaires was usable. Statistical analysis performed were reliability tests, descriptive statistics, correlation and multiple regression. All of the statements used in this paper had Cronbach alpha scores of >0.7 , indicating their reliability. Among the 16 respondents, 25% were CEOs and Directors while the rest managers. In this study, three hypotheses were tested and all null hypothesis were rejected which implied supply chain management (SCM) practices had significant impact on supply chain responsiveness and they created competitive advantage to the firm. This study found that customer relationship as the most significant variable (36.5%) in determining supply chain responsiveness while trust and commitment were significant (34%) in determining competitive advantage. Operation system responsiveness and logistics process responsiveness were significant (86%) in determining competitive advantage. Effect of supply chain management practices were analysed and it was concluded that they were important in creating effective supply chain responsiveness and competitive advantage to the firm.

Keywords: Backward regression, Cronbach's Alpha, Freight companies, Nepal, Supply chain management

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INTRODUCTION

Supply chain management has become the focus of companies to offer value added services to their customers. The principle of supply chain activity is based on: receiving input from suppliers, add

value, and deliver to customers (Li, Ragu-Nathan, Ragu-Nathan, & Rao, 2006). The main objective of the supply chain activity is to maximise overall value of the firm by proper deployment and utilisation of its resources. Supply chain management is new source of competitive advantage, integrating all functional activities from purchasing, manufacturing, operations, distribution and transportation in a unified manner. The key is to link all the partners in the chain, integrate them and coordinates all of these activities into a seamless process. The partners are carriers, third-party companies, vendors, information systems providers in addition to the departments within the organisation.

Freight forwarding companies operate in a challenging business environment which has become more global, technology equipped and customer focused, whereby quick response, quality products and services (Yango & Burnus, 2003) is the name of the game. Firms consider cost and quality service as basic market entrant, while responsiveness and timely delivery are winners (Narasimhan & Das, 1999a). Sabath (1998) argues that supply chains need to be responsive to cope with volatile demand. In this unpredictable business environment and customer demand, the supply chain management need act and respond quickly when disruption occurs.

Earlier studies have focused on supply chain integration (Forthlich & Westbrook, 2001) to show to show the management's flexibility and speed in response. These

scholars have studied supply chain management practices in relation to supply chain responsiveness, the scope t as well as essential components of supply chain management in this increasingly competitive business world.

According to Nepal Freight Forwarders Association (NEFFA), a national association of freight forwarders of Nepal established in 1998, there are 118 freight companies listed as general members while 7 companies as associate members to date.

LITERATURE REVIEW

The main goal of this research is to study the effect of supply chain management practices. The following was the focus: (1) supply chain management practices that comprise trust and commitment among partners, relationship with customers, level of information sharing (2) supply chain responsiveness that include operations system responsiveness and logistics process responsiveness (3) competitive advantage of the firm.

Supply Chain Management

It is defined as the set of activities undertaken for the effective management of its supply chain. This study focuses on three components of supply chain management as discussed below.

Trust and commitment. Trust and commitment relate to support and cordial behaviour among the supply chain members. "Trust is a favourable attitude that exists

when one supply chain member has confidence in other supply chain members” (Anderson & Narus, 1990). Trust helps in proper coordination between the partners and for the flow of information. Bianchi and Saleh (2010) stated that trust and commitment are essential for enhancing performance of companies in developing countries. Conflicts of interest are likely to occur when one supply chain member gets more benefits compared with other members from an existing risk and reward sharing process (Cachon & Lariviere, 2005). Arshinder, Kanda, & Deshmukh (2006) state that conflicts in relation to vision and goals of supply chain members result in the individual profit maximisation.

Customer relationship. Customer relationship is defined as “the entire array of practices that are employed for the purposes of managing customer complaints, building long-term relationships with customers, and improving customer satisfaction” (Li et al., 2006). Good customer relationship creates strong advantage for the firm (Day, 2000). The growing trend of mass customisation and personalised service attention is making customer relationship a very important factor for corporate survival (Wines, 1996). Good relationship with supply chain members, including customers, are of utmost importance for successful implementation of SCM programmes.

Information sharing. Information sharing refers to “the extent to which critical and proprietary information is communicated

to one’s supply chain partner” (Li et al., 2006). Information can vary from strategic to tactical in nature and could be relevant to logistics, demand forecast, market and proprietary information among others. Information sharing needs to be reliable and credible with response to adequacy, accuracy and timeliness. While information sharing is important, the significance of its impact on supply chain management depends on what, when and how the information is shared and with whom (Holmberg, 2000). To better respond to market change quicker and understand the final consumer needs, the supply chain partners together can work as a single entity as they exchange information regularly. (Stein & Sweat, 1998).

In recent times, uncertainties have become a concern in supply chain which leads in increasing inventory and inappropriate demand forecast.

Supply Chain Responsiveness (SCR)

Supply chain responsiveness is defined as the supply chain efficiency and effectiveness which can address volatile customer demand. In this present competitive world, organisation and the supply chains should be more flexible and responsive (Gould, 1997; Narasimhan & Das, 1999b). Responsiveness consists of both flexibility and speed. Prater, Biehl, and Smith, (2001) observe that speedy delivery and flexibility are directly related to supply chain responsiveness.

Operations system responsiveness (OSR).

Operations system responsiveness is defined as the ability of a firm’s operations system to

address volatile customer demand (Thatte, Rao, & Ragu-Nathan, 2013). Operations system consists of two parts: production operations and service operations. Service operations at each node should be reliable and timely to satisfy customer demand (Lummus, Duclos, & Vokurka, 2003). Operations system would be considered efficient if there is cost reduction and no resources are wasted on non-value added activities (Naylor, Naim, & Berry, 1999). Anderson and Narus (1990) identified responsive operation as the major component of successful supply chain strategy that create firm's value. Measures used to operationalise the OSR constructs are; responds swiftly in labelling, packaging and documentation, reconfigures process to address demand change, responds rapidly to changes in shipment, effectively expedites emergency orders, adjusts capacity and reallocation of employees.

Logistics process responsiveness (LPR).

Logistics process responsiveness is the firm's ability in warehouse management, distribution, and transportation to address volatile customer demand. Logistics management deals with packaging, warehousing, transportation, shipping, order tracking and delivery. "The responsiveness in the logistic processes is a vital component in the success of a responsive supply chain strategy" (Fawcett, 1992). This study has focused on the distribution channel of the freight industries. Fuller, O'Conner, and Rawlinson (1993) suggest in creating customer value, firm's logistics system plays

an important role. Logistics flexibility and speed in supply chain creates value for firm's customers to serve distinct customer needs (Lummus et al., 2003). Responsiveness is to build flexibility and swift response which comprises the following : accommodate and respond to volatile demand, adjust warehouse capacity, handle a wide range of products, vary transportation carriers and the ability to customize products. All of these done swiftly create a competitive advantage for the firm.

Competitive Advantage

Competitive advantage is defined as the "capability of an organization to create a defensible position over its competitors" (Li et al., 2006). It is the ability of a firm to differentiate itself from its competitors and is an outcome of critical management decisions (Tracey, Vonderembse & Lim, 1999). According to Porter (1991), firms need to be either low cost or offer unique service/product that is valued by its customers (Porter, 1991). Wheelwright (1978) suggests price, quality, dependability and delivery as some of the competitive advantage of a firm. Koufteros, Vonderembse and Doll (1997) describe five dimensions of competitive capabilities: competitive pricing, premium pricing, value-to-customer, quality and dependable delivery. Based on literature review, the following eight competitive dimensions were explored in this study.

Price/cost. Price is quantity of payment or compensation given by one party to

another in return for goods or services. To be competitive, an organisation should have the ability to compete on price.

Delivery dependability. It means keeping speed, delivery promises and dependability which are two halves of delivery performance. In order to be competitive, an organisation should have to provide on time the type and volume of product required by customer(s).

Flexibility. The ability of a system to adjust according to the need and time. In order to be competitive, an organisation should have ability to respond promptly and swiftly.

Safety. Safety is the control of recognised hazards in order to achieve an acceptance level of risk. Thus, the organization should have the ability to deliver shipment with no breakage and lost.

Insurance. It is a means of protection from financial loss. It is primarily used to

hedge against uncertain loss, the risk of a contingent and provides a form of risk management. An organisation should have good insurance policies to be competitive in the market.

Packaging. It is the process and material used so the goods are packed safely and minimise shipping cost.

Labelling. It is the details of item in the shipping container, country of origin, correct weight, port of entry details and any details that are required in the language of the destination country.

Documentation. Necessary papers/documents needed for the shipment consists of Bill of Lading (BoL), Commercial invoice, Certificate of Origin (CoD), Inspection certificate, Shipper Export Declaration (SED) and export packing list.

The following is the research framework has been for this study.

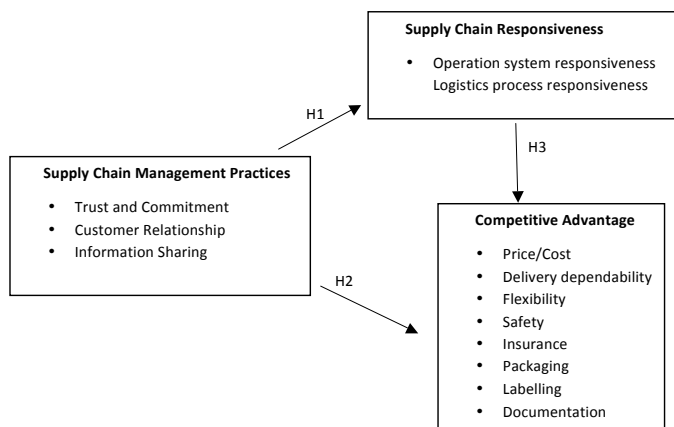


Figure 1. Research framework for the study

The following hypotheses are tested:

H1: There is significant relationship between supply chain management practices and supply chain responsiveness.

H2: There is significant relationship between supply chain management practices and competitive advantage.

H3: There is significant relationship between supply chain responsiveness and competitive advantage.

METHODS

Questionnaire was used for data collection and it was administered to a total sample of 25 practitioners from different freight companies located in Kathmandu. Respondents are classified by their job title and job functions. For data collection, one of the non-probabilistic sampling technique, convenience sampling, was used.

Convenience sampling was appropriate for this research because this technique is the best way to reach the respondents and also due to resource constraints – time and money. Close end questionnaires were designed based on Five Point Likert Scale to indicate 1 (not at all), 2 (to a small extent), 3 (to a moderate extent), 4 (to a considerable extent) and 5 (to a great extent).

RESULTS AND DISCUSSION

Items measuring the factors have been explained in the questionnaire and Cronbach's Alpha was conducted for reliability test. All the items have over 0.7 scores which are considered reliable (Nunnally, 1978). Since 14 items in the questionnaire have Cronbach's Alpha > 0.7, the statement measuring the factors are considered reliable. Four items are identified for trust and commitment (Trus_com), five for customer relationship (Cus_rel) and again five for information sharing (Inf_sha).. These items explain the independent factors.

Table 1
Reliability test for independent factors

Factors	Items in the questionnaire explaining the factors	Cronbach's Alpha
Trus_com	<i>We develop trust among partners along with our business cooperation</i>	0.774
	<i>We work out in cooperation with government regarding export policies</i>	
	<i>We have mutual understanding within our employees</i>	
	<i>We are fully committed in our service delivery</i>	
Cus_rel	<i>We facilitate customer's ability to seek assistance from us</i>	0.747
	<i>We frequently determine future customer expectations</i>	
	<i>We frequently measure and evaluate customer satisfaction</i>	
	<i>We frequently interact with customers to set reliability, responsiveness and other standards for us</i>	

Table 1 (*continue*)

Inf_sha	<i>We periodically evaluate the importance of our relationship with our customers</i>	0.760
	<i>We share information between trading partners in advance</i>	
	<i>We share information about the events which effect on other partners</i>	
	<i>We share proprietary information among us</i>	
	<i>For business planning we share proprietary information to each other</i>	
	<i>We trading partners keep us fully informed about issues that affect our business</i>	
	<i>We share information about the events which effect on other partners</i>	
	<i>We share proprietary information among us</i>	
	<i>For business planning we share proprietary information to each other</i>	
	<i>We trading partners keep us fully informed about issues that affect our business</i>	

Similarly, reliability test was conducted for the items explaining dependent factors. Six items were identified for operations system responsiveness (OSR), five for logistics process responsiveness (LPR) and

twelve for competitive advantage (CA). All the factors have Cronbach's alpha >0.7 , and thus, items measuring the factors are considered reliable.

Table 2
Reliability test for dependent factors

Factors	Items in the questionnaire explaining the factors	Cronbach's Alpha
OSR	<i>responds swiftly in packaging, labelling and documentation as customers need</i>	0.897
	<i>reconfigures process to address volatile demand</i>	
	<i>responds rapidly to shipment volume changes</i>	
	<i>effectively expedites emergency customer orders</i>	
	<i>adjusts capacity to address demand changes</i>	
	<i>reallocate people in customer need</i>	
LPR	<i>Rapidly accommodates special and non-routine customer requests</i>	0.913
	<i>Rapidly varies transportation carriers to volatile demand</i>	
	<i>Quickly adjusts warehouse capacity to volatile demand</i>	
	<i>Swift act to unexpected demand change</i>	
	<i>Effectively delivers expedited shipments</i>	
CA	<i>We offer competitive prices</i>	0.919
	<i>We are able to offer prices as low or lower than our competitors</i>	
	<i>We are able to delivery shipment on time</i>	
	<i>We offer short delivery time than our competitors</i>	

Table 2 (continue)

<i>We can address the changes in shipment volume</i>
<i>We deliver shipment safely</i>
<i>We use online tracking for the safety and proper delivery</i>
<i>Provide assistance to the customers on how to package theirs products for export</i>
<i>We provide suggestions on packaging for goods safety and minimum shipping cost</i>
<i>We assist customers in providing the correct labeling</i>
<i>Documentation is important for the shipment of an item overseas</i>
<i>Assist customers in preparing Bill of lading (BoL), commercial invoice, certificate of origin (CoD), inspection certificate, shipper's export declaration, export packing list.</i>

Descriptive Analysis

Table 3 shows mean scale close to maximum value. This indicates that there is positive

attitude of respondents towards the considered factors.

Table 3
Descriptive test for the factors

Variables	Factors	N of items	Min	Max	Mean	S.D
SCM	Trus_com	4	10	20	16.06	2.97
	Cus_rel	5	14	25	18.94	3.49
	Inf_sha	5	12	25	19.13	3.2
SCR	OSR	6	13	30	22.94	4.91
	LPR	5	10	25	19.69	4.35
CA	CA	12	31	60	51.06	7.11

Correlation Analysis

Table 4 shows the value of correlation between supply chain management (SCM) and supply chain responsiveness is (SCR) 0.594, which indicate moderate level of correlation. The significance p-value of correlation between these two variables is 0.015 (<0.05). Therefore, there is significant relationship between supply chain management practices and supply chain responsiveness. Likewise,

the value of correlation between supply chain management (SCM) and competitive advantage (CA) is 0.554, which indicates moderate level of correlation. The significance p-value of correlation between these two variables is 0.026 (<0.05). Therefore, there is significant relationship between supply chain management practices and competitive advantage. Similarly, the value of correlation between supply chain responsiveness (SCR) and competitive

advantage (CA) is 0.936, which indicate high degree of correlation. The significance p-value of correlation between these two

variables is 0 (<0.01). Therefore, there is significant relationship between supply chain responsiveness and competitive advantage.

Table 4
Correlations between the variables

		SCM	SCR	CA
SCM	Pearson Correlation	1	.594*	.554*
	Sig. (2-tailed)		.015	.026
	N	16	16	16
SCR	Pearson Correlation	.594*	1	.936**
	Sig. (2-tailed)	.015		.000
	N	16	16	16
CA	Pearson Correlation	.554*	.936**	1
	Sig. (2-tailed)	.026	.000	
	N	16	16	16

*Correlation is significant at the 0.05 level (2-tailed)

**Correlation is significant at the 0.01 level (2-tailed).

Regression Analysis

Backward regression for SCR with SCM. A stepwise regression model was developed to find the best combination of predictors for supply chain responsiveness (SCR)

Table 5
Model summary^d

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.694 ^a	.481	.351	7.12362
2	.673 ^b	.453	.369	7.02500
3	.638 ^c	.407	.365	7.05095

a. Predictors: (Constant), Inf_sha, Trus_com, Cus_rel

b. Predictors: (Constant), Trus_com, Cus_rel

c. Predictors: (Constant), Cus_rel

d. Dependent Variable: SCR

Table 6
Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	12.512	12.149		1.030	.323
	Trus_com	1.117	.939	.376	1.189	.257
	Cus_rel	1.241	.828	.490	1.499	.160
	Inf_sha	-.592	.739	-.214	-.802	.438
2	(Constant)	8.085	10.671		.758	.462
	Trus_com	.948	.903	.319	1.051	.313
	Cus_rel	1.020	.769	.402	1.325	.208
3	(Constant)	12.022	10.028		1.199	.251
	Cus_rel	1.616	.521	.638	3.100	.008

a. Dependent Variable: SCR

among the three Independent Variables, namely trust and commitment, customer relationship and information sharing. Three step (model) showed with customer relationship (Cus_rel) in determining SCR

with adjusted R²=36.5% and a significant F=9.609, p<0.05. Information sharing and trust and commitment do not appear to be of any importance.

Table 7
ANOVA^a

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	564.798	3	188.266	3.710	.043 ^b
	Residual	608.952	12	50.746		
	Total	1173.750	15			
2	Regression	532.193	2	266.096	5.392	.020 ^c
	Residual	641.557	13	49.351		
	Total	1173.750	15			
3	Regression	477.727	1	477.727	9.609	.008 ^d
	Residual	696.023	14	49.716		
	Total	1173.750	15			

a. Dependent Variable: SCR

b. Predictors: (Constant), Inf_sha, Trus_com, Cus_rel

c. Predictors: (Constant), Trus_com, Cus_rel

d. Predictors: (Constant), Cus_rel

Backward regression for CA with SCM.

A stepwise regression model was developed to find the best combination of predictors for competitive advantage (CA) among the three Independent variables, namely trust and commitment, customer relationship and information sharing. Three step (model) showed trust and commitment (Trus_com) in determining competitive advantage with adjusted R²=34% and a significant F=8.743, p<0.05. Information sharing and Customer relationship do not appear to be of any importance.

Table 8
Model Summary^d

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.691 ^a	.478	.347	5.74621
2	.653 ^b	.427	.338	5.78616
3	.620 ^c	.384	.340	5.77673

a. Predictors: (Constant), Inf_sha, Trus_com, Cus_rel

b. Predictors: (Constant), Trus_com, Cus_rel

c. Predictors: (Constant), Trus_com

d. Dependent Variable: CA

Table 9
Coefficients^a

	Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	28.991	9.800		2.958	.012
	Trus_com	1.130	.758	.473	1.492	.162
	Cus_rel	.861	.668	.423	1.290	.221
	Inf_sha	-.648	.596	-.292	-1.087	.298
2	(Constant)	24.150	8.789		2.748	.017
	Trus_com	.946	.743	.396	1.272	.226
	Cus_rel	.619	.634	.304	.977	.346
3	(Constant)	27.267	8.176		3.335	.005
	Trus_com	1.481	.501	.620	2.957	.010

a. Dependent Variable: CA

Table 10
ANOVA^a

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	362.710	3	120.903	3.662	.044 ^b
	Residual	396.227	12	33.019		
	Total	758.938	15			
2	Regression	323.702	2	161.851	4.834	.027 ^c
	Residual	435.236	13	33.480		
	Total	758.938	15			
3	Regression	291.749	1	291.749	8.743	.010 ^d
	Residual	467.189	14	33.371		
	Total	758.938	15			

a. Dependent Variable: CA

b. Predictors: (Constant), Inf_sha, Trus_com, Cus_rel

c. Predictors: (Constant), Trus_com, Cus_rel

d. Predictors: (Constant), Trus_com

Backward regression for CA with SCR.

A stepwise regression model was developed to find the best combination of predictors for competitive advantage (CA) among the two variables, namely, operations system responsiveness (OSR) and logistics

process responsiveness (LPR). One step (model) showed with operations system responsiveness (OSR) and logistics process responsiveness (LPR) in determining competitive advantage with adjusted $R^2=86\%$ and a significant $F=47.183$, $p<0.01$.

Table 11
Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.938 ^a	.879	.860	2.65870

a. Predictors: (Constant), LPR, OSR

b. Dependent Variable: CA

Table 12
Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	19.044	3.376		5.641	.000
	OSR	.620	.249	.428	2.488	.027
	LPR	.904	.281	.552	3.213	.007

a. Dependent Variable: CA

Table 13
ANOVA^a

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	667.044	2	333.522	47.183	.000 ^b
	Residual	91.893	13	7.069		
	Total	758.938	15			

a. Dependent Variable: CA

b. Predictors: (Constant), LPR, OSR

Model Adequacy Test

Each model is developed under the fulfilment of assumptions. In this paper, three regression models as mention above under heading 7.1, 7.2 and 7.3 have been tested.

Adequacy test for SCR with SCM. Looking at the normal probability plot and histogram of the “backward regression for SCR with

SCM” as shown in Figure 2, the assumptions of normality was found to be satisfactory. Similarly, in analysing the scatter plot “backward regression for SCR with SCM” of regression standardised residual and regression standardised predicted value, there has been uniform distribution of scatters around 0, which indicated linearity and homoscedasticity and independence of the residual have been satisfied.

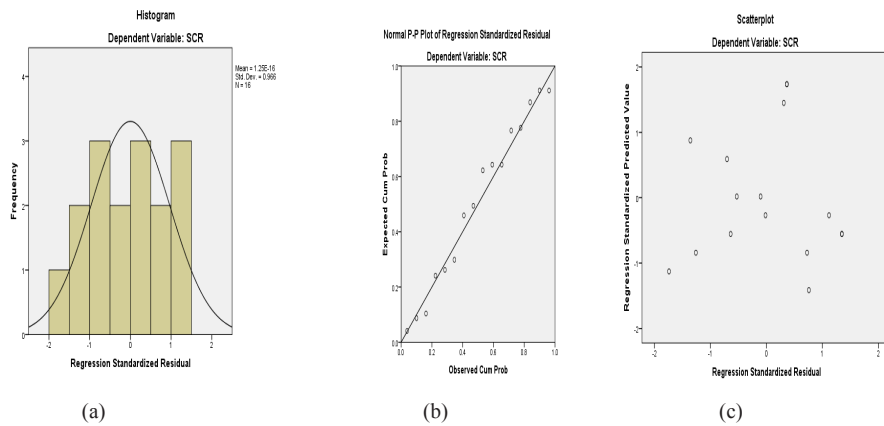


Figure 2. Results of Model Adequacy Test for SCR with SCM (a) Histogram of backward regression for SCR with SCM (b) Normal Probability plot of backward regression for SCR with SCM (c) Scatter Plot of backward regression for SCR with SCM

Adequacy test for CA with SCM.

Looking at the normal probability plot and histogram of the “backward regression for CA with SCM” as shown in Figure 3, the assumptions of normality is found to be satisfied. Similarly in analysing the scatter plot “backward regression for CA with

SCM” regression standardized residual and regression standardized predicted value there has been uniform distribution of scatters around 0, which indicated linearity and homoscedasticity and independence of the residual has been satisfied.

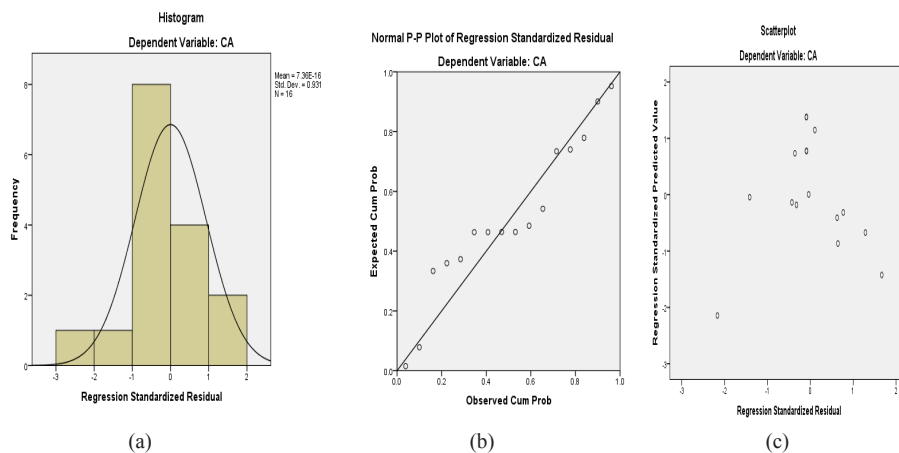


Figure 3. Results of Model Adequacy Test for CA with SCM (a) Histogram of backward regression for CA with SCM (b) Normal Probability plot of backward regression for CA with SCM (c) Scatter Plot of backward regression for CA with SCM

Adequacy test for CA with SCR. Looking at the normal probability plot and histogram of the “backward regression for CA with SCR” as shown in Figure 4, the assumptions of normality was found to be satisfied. Similarly, in analysing the scatter plot “backward regression for CA with SCR”

of regression standardised residual and regression standardized predicted value there has been uniform distribution of scatters around 0, which indicated linearity and homoscedasticity and independence of the residual have been satisfied.

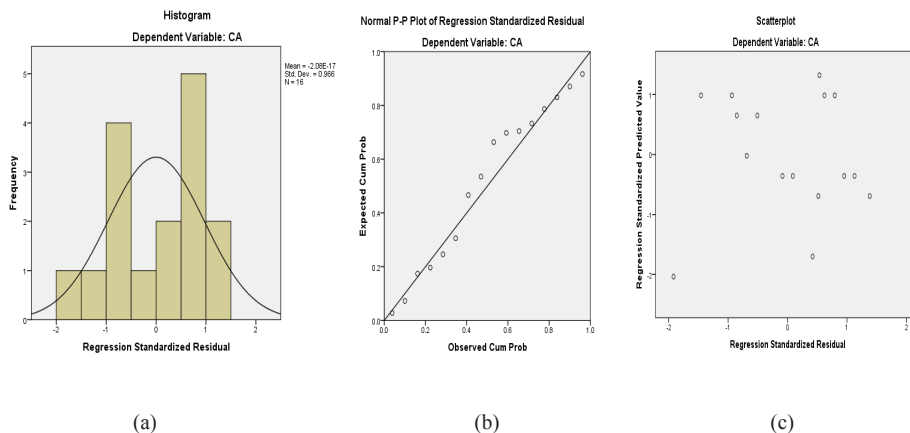


Figure 4. Results of Model Adequacy Test for CA with SCR (a) Histogram of backward regression for CA with SCR (b) Normal Probability plot of backward regression for CA with SCR (c) Scatter Plot of backward regression for CA with SCR

CONCLUSION

In Nepal, supply chain management is an emerging concept, therefore, studies on this are limited. Literature review has shown number of factors affect SCM such as trust and commitment, customer relationship and information sharing. Effect of supply chain management practices were analysed and it was concluded that they were important in creating effective supply chain responsiveness and competitive advantage to the firm.

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Factors Influencing the Digital Business Strategy

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ABSTRACT

As the interplay of information technology with businesses evolve, it becomes increasingly important to understand the factors that influence the strategies that businesses adopt, especially in the realm of Digital Technologies. While the concept of digital technologies started with four pillars, namely Social Media, Mobility, Analytics and Cloud, it has expanded to include the revolutions taking place in the Internet of Things, Machine Learning, Augmented Reality, Artificial Intelligence and Cognitive Technologies. While the authors do not attempt to analyse each of these technologies individually, this paper aims to identify and understand the factors (technological and non-technological) which could impact the Digital Business Strategy (DBS) of an organisation. It reviews research papers, articles and examines opinions and views of selected organisations on this topic. This is in order to provide a comprehensive picture that would likely to appeal to academicians and practitioners.

Keywords: Capabilities and culture, digital business strategy, digital technologies, five forces model, influencing factors

INTRODUCTION

Information technology, in particular digital technology, has always influenced how organisations manage themselves

and compete in the marketplace. The term 'Digital Business Strategy' has different meaning to different people and organisations. Researchers and practitioners agree that the digital business strategy is neither about only technology nor about only other business elements. As would become clear in the literature review section, organisations gain competitive advantages through technology adoption and such adoptions are influenced by the industry. Researchers have created

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models which can assist an organisation in adopting a digital business strategy and the advantages that can be derived from such comprehensive approaches. Attempts have been made to view digital business strategy in light of the acclaimed Five Forces model propounded by Michael Porter. Researchers have shown the pitfalls that lie in the digital journey of an organisation.

While reviewing the multifarious elements of the digital business strategy, the authors have attempted to consolidate all the aspects to serve as a comprehensive reference material.

The Digital Business Strategy

Depending on its appetite and the environmental realities, an organisation may decide to adopt additional initiatives or take up large scale transformational/disruptive approaches. A “bolt-on” digital strategy means that the company is simply opening new digital channels to give customers additional ways to connect to the company. Alternatively, a full-scale “digital transformation” strategy entails redesigning the entire business model to take advantage of digital opportunities (“digital transformation of business,”). In the latter case, organisations transform themselves completely (at times reinvent) to exploit the opportunities that are offered by Digital Technologies. Digital strategies are invariably top-driven. Senior leaders as well as other employees are seen as ‘Digitally Fluent’ which means that they are not necessarily technologists but they do understand how these technologies

will impact the future of the organisation. Leaders will have the responsibility to decide whether the organisation will tread on the path of bolt-on or digital transformation.

McKinsey suggests that digital business strategists need to focus on three questions to identify the right strategy:

1. Where are the most interesting digital opportunities and threats?
2. How quickly and on what scale is the digital disruption likely to occur?
3. What are the best ways to embrace these opportunities proactively and to reallocate resources away from the biggest threats?

Answering these questions is not easy. The first question necessitates a sound understanding of the available and emerging technologies and the opportunities and threats these are likely to present (refer Figure 1) in the short, medium and long terms. Organisations will have to assess the degree of disruption such technological evolutions would create and when they are likely to occur. It is quite easy for an organisation (even an industry) to be caught off-guard while carrying out this assessment. An example of this is the sudden decline in the usage of short messaging service (SMS) of telecommunications companies which had had a sizable contribution from their SMS technology but which eroded once the instant messaging over the top (OTT) services was introduced. The telecommunications industry failed in assessing the impact of this new technological development. Only

after the organization has taken cognisance of such technological advancements would it be able to draw up a comprehensive response which could either be tactical, strategic or a combination of both. 'Digital Business Strategy: Toward A Next Generation Of Insights' (Bharadwaj, Sawy, Pavlou, & Venkatraman, 2013) addresses the scope, speed, scale and sources of value creation for a digital strategy. Scope deals with extent of integration between IT and business strategies, how the strategy exploits the existing ecosystem, products and services; Speed deals with how quickly the organisation is able to put the digital capabilities to use; Scale addresses the width and the depth of the strategy by enumerating

the stakeholders that are involved; Sources of value creation aims at measuring the effectiveness of strategy by capturing the areas of business benefits.

Once the right strategy has been developed, the organisation needs to develop the right capabilities to execute that strategy. A study by Mckinsey found that the highest performing organisations had built capabilities around:

1. Data powered decision making
2. Connectivity between brands and customers
3. Process automation
4. Two Speed IT

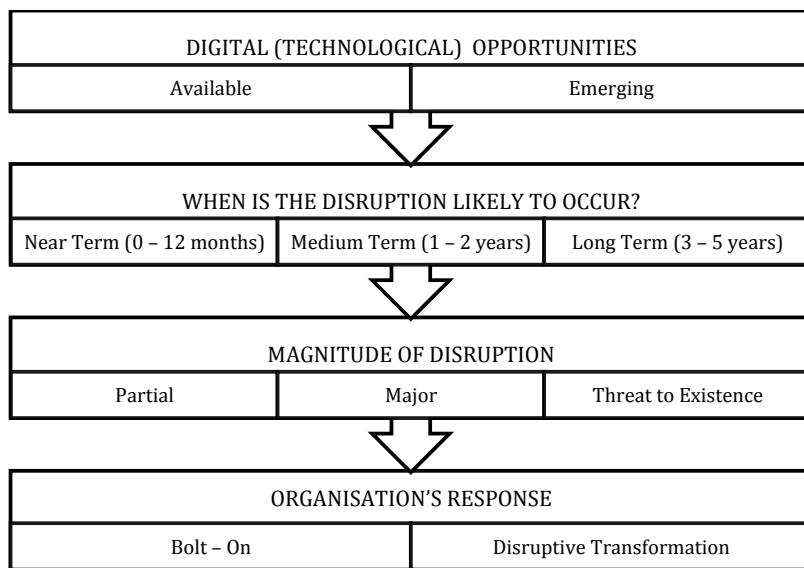


Figure 1. Questions to ask before arriving at digital business strategy

The article 'How DBS Bank Pursued a Digital Business Strategy' (Soh, 2016) showed how DBS Bank adopted a digital

business strategy in response to the threats and opportunities that it faced. This paper recommends that organisations build

capabilities in the areas of *Leadership*, *Digital Operations*, *Customer Needs* and *Innovation* (refer Figure 2) in order to pursue a successful digital business strategy.

The DBS Bank realised that the pursuit of a digital business strategy is neither a project, nor the responsibility of any specific department but a core philosophy that pervades the entire organisation. DBS' digital journey also emphasises on the need to have a scalable and agile digital infrastructure which allows the organisation to be responsive to the needs of its customer. Along with the need for technology agility comes need to have processes which facilitate swift operations. This is a corroboration of the point nos. 3 and 4 brought out by Mckinsey.

Digital strategy also needs to leverage on the abundant data that is being created by DBS' digital platforms for better customer experiences. DBS launched various products as an outcome of the insights from such data analytics and focus on customer experience. This is exactly what Mckinsey had suggested through point nos. 1 and 2.

In short, DBS' endeavours in the digital strategy highlighted the need for continuous exploration of the dynamic digital landscape. Developments in the FinTech space are posing serious threats to the existing financial institutions. Additionally, developments in the smartphones technology have had disastrous effects on organisations which could not see it coming and arrogantly clung on to their existing offerings. New organisations across the globe have gained prominence and the incumbent stalwarts

have faded into history within a period of two to three years. In both cases, disrupters are the organisations that were not in either of these industries.

In their article 'Digital Business Strategies and the Duality of IT'(Mithas, Agarwal, & Courtney, 2012), the authors emphasise the critical role technology plays in defining the digital business strategy of an organisation. Information Technology can enable both disruption and sustained innovation in addition to providing opportunities to reshape the market/industry at a fundamental level. Coupled with these two facets are the dimensions of technology offering sources of competitive advantage, helping in reduction of transaction costs and creating uncertainties. Practitioners need to decide the role they want the technology to play in the digital strategy of their organisation.

According to Mckinsey, finally, it's the culture (refer Figure 2) of the organisation that decides the degree of success the organisation is likely to have in its journey of digital business strategy. Although organisational culture is a 'soft' element and many a times overlooked by organisations in their enthusiasm to embark upon the digital journey, it has the power to make or break their digital business strategy (Kiron & Buckley, 2015). Key components of organisational culture are:

1. Cooperation and collaboration:

An organisation's digital initiative calls for a culture in which functions and teams are willing to cooperate and collaborate with each

other. Since no individual, team or function is likely to have complete knowledge, it is important that the organisation's culture nurtures sharing and collaboration. The team members would be able to draw upon individual capabilities and emerge successful. A culture which would create competitive situations among them would risk the success of the initiative.

2. The freedom to take risks:

Individuals associated with the digital journey should be free from 'fear of failure'. Due to new technologies, digital initiatives have a greater probability of failing compared with tried and tested options. Members of the organisation should be encouraged to take risks so that digital innovation is promoted.

3. A willingness to experiment:

Certain components of a digital journey would be pioneering and may not have been tried elsewhere. Organisations which experiment are usually able to make path breaking progress vis-à-vis their competitors. Thus, in order to gain a competitive advantage, the organisation should foster a culture which encourages experiments and trials.

4. The ability to learn from failures as well as successes:

A successful organisation is one which learns from its successes and failures. Since the very nature of digital journey is fraught with challenges, there are bound to be wins and losses. An organisation which takes both in its stride and improves on the basis of such lessons is the one that wins in the marketplace.

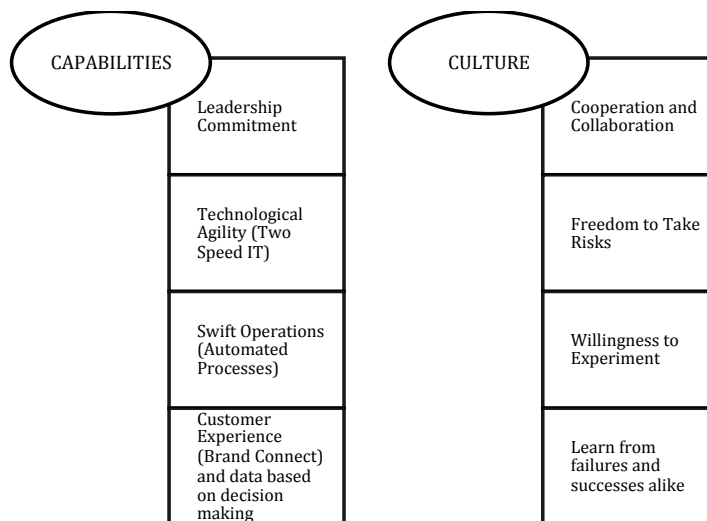


Figure 2. Capabilities and culture for success of Digital Business Strategy

The section below discusses Michael Porter's Five Forces Framework in the context of digital technologies.

METHODS

Michael Porter's Five Forces Strategic Framework

The five forces are:

1. The threat of substitute products or services
2. The threat of established rivals
3. The threat of new entrants
4. The bargaining power of suppliers
5. The bargaining power of customers

These five forces in the context of overall business strategy are important. As highlighted previously, disruptions take place easily in the technological space. The SMS and erstwhile 'feature phones' (mobile phones with keypads and small screens) have lost ground to instant messaging and smart phones. Another emerging threat (although not in the very near term) is from companies which offer mobile applications based taxi services. With the availability of ride hailing apps, consumers may be forced to rethink the need to own cars. If a self-driven taxi (being experimented by Uber) becomes a success, customers may not need to own cars. While the automobile companies will continue to exist (to sell cars to the taxi company), their sales could plunge significantly.

An established organisation has the resources and capabilities to invest in disruptive digital technologies but face the

prospects of competition from their rivals. ; for instance, a pizza company providing options on the e-commerce platforms or exploring options to deliver through drones could create a completely different model which can affect the prospects of other organisations.

The telecommunications industry in India faces significant threat from Voice over Long Term Evolution (VOLTE) technology which is a form of VoIP (Voice over IP). This has become possible only because of the digital ecosystem that has evolved around mobile telephony. This development has the potential to redefine the way telecommunications operators charge their customers.

Availability of online portals and social media has provided the bargaining power to customers and suppliers. While suppliers are no longer dependent on just a handful of customers in a limited geographical area, the latter now have the power to greatly influence how they are serviced by organisations.

A digital business strategist needs to weigh in all these factors while charting out the digital journey for his/her organisation.

RESULTS

Effect of Competition on Digital Business Strategy

Since competition from rival organisations is considered key threat, Porter and Heppelmann in their article titled "How Smart, Connected Products Are Transforming Competition" in Harvard Business Review discussed the ways in

which organisations compete for customers (E-magazine, n.d.). Smart and connected products are forcing decision makers to confront a new set of strategic choices about everything from how to create value to how to structure relationships with business partners. Smart and connected products are those in which the computing power is embedded in the product itself. They consist of the following:

1. Physical Components: Mechanical and electrical parts of the product, e.g., engines, batteries
2. Smart Components: sensors, microprocessors, embedded operating system etc. For example, antilock braking system
3. Connectivity Components: ports, antennae and protocols that allow communication in the product.

In their research paper ‘How A Firm’s Competitive Environment And Digital Strategic Posture Influence Digital Business Strategy’ (Mithas, Tafti, & Mitchell, 2013), the authors discuss how an organisation’s industry and environment impact its digital business strategy. The authors focus on the digital strategic posture of an organisation which is defined as the difference in firm’s IT activity relative to the industry average of the competitors. An organisation with lower investments in IT compared with the industry average has a low digital strategic posture and vice versa. Such strategic posture creates either divergent or convergent pressure on the organisation’s digital business strategy. This paper argues

the case of IT being central to the digital business strategy contrasted to the view that IT is a function level strategy that should be aligned to the overall business strategy. Authors define the environment as ‘Industry Turbulence’, ‘Industry Concentration’ and ‘Industry Growth’. In a turbulent industry, competition results from innovations or by the entry of new players who have the potential to dislodge the incumbent organisation. A concentrated industry is characterised by fewer organisations which have similar knowledge and are able to imitate each other. When the growth in the industry is high, competition among the incumbents tends to be less intense and while entrants take up some market share the performance of incumbents is superior.

Findings indicate that greater industry turbulence has a divergent impact on the strategic posture of the organisation. It means that in a highly turbulent industry, organisations tend to outdo their competition in terms of the investments they make in technology. When the industry concentration is high, organisations tend to converge to the industry norm while deciding on the technology related investments. In a high growth industry, organisations tend to converge towards the industry norm and do not differentiate much since the demand is growing and there is not much incentive to make significantly different investments.

Value Offerings of the Digital Business Strategy

‘Assessing Value Creation and Value Capture in Digital Business Ecosystems’

(Sharma, Pereira, Ramasubbu, Tan, & Tschang, 2010), suggests a framework which can be used to assess the value created through the digital business strategy. This is coupled with the caveats highlighted by Grover and Kohli to arrive at the value assessment. The acronym for framework is ADVISOR:

- *Adoption by customers:* It refers to the maturity level of the customers and whether or not the digital offerings being contemplated upon by the organisation will be embraced by the customers. Myntra, one of the large e-retailers in the India, had decided to withdraw its website based platform with a view that all customers would purchase only through mobile applications. To their disappointment, they realised that not all customers have moved to 'mobile only' platform and the company suffered a drop in profit in the process.
- *Disruptive innovation:* disruptive innovation takes place when an organisation decides to cannibalise its own products or services in favour of new offerings which are likely to be game changers. Not many examples exist in which the existing companies would have taken such a disruptive approach. Most disruptions happen outside the organisation when a new player enters, in turn forcing the existing organisations to toe the line.
- *Value proposition:* Aims at understanding the reasons why customers would be willing to pay a certain price. Value proposition tries to arrive at the 'price – perceived value' equilibrium. Customers subscribe to Netflix vis-à-vis spending in the movie hall as they perceive value in it.
- *Interface:* The ease of use, convenience, look and feel, intuitiveness etc. make a customer's experience pleasurable or frustrating. Amazon knows this all too well and ensures that its website and mobile application interfaces leave a lasting impression on the customers, pulling them again and again.
- *Service Platform:* This relates to the digital infrastructure (network, hardware, software) that has been set up by an organisation to provide a delightful experience to the customers.
- *Organizing model:* This element relates to the eco system outside of the organisation. How the organisation's partners will develop their own processes and digital capabilities in delivering the goods and services to the end customer will define the value being delivered throughout the chain. This is a critical element and highlights the fact that a digital strategy is not about actions within the organisation but also outside of it.

- *Revenue or cost sharing:* Any enterprise with economic interests in mind would always keep an eye on the revenue and cost elements. Same goes for the digital strategy deployment. Any digital strategy will have to be weighed against the costs it is likely to bring in which should be, in turn, be covered by the additional revenue that it is likely to generate. Most of the brick and mortar companies which are

creating a presence in the online world weigh the incremental costs versus the incremental revenue.

DISCUSSION

Word of Caution

In the essay ‘Revealing Your Hand: Caveats in Implementing Digital Business Strategy’ (Grover & Kohli, 2013), the authors reveal the organisation’s digital strategy to the outside world and have sounded caution. Organisations tend to implement a set of

Table 1
Framework of Digital Business Strategy Factors

Organization’s Environment	Factors	Nuances	DBS Continuum	Visibility to competition
Technological	Opportunities	Whether a given digital technology is already available for deployment or is it still emerging	Bolt On	Multiple Small, short term initiatives that weave in the overall long term digital strategy. Can be easily replicated by competition
	How quickly is the disruption likely to take place	How soon would this technological disruption be felt by the organization; within the next 12 months, 1 to 2 years, or 3 to 5 years	Scope Scale	
	Magnitude of disruption	Whether the impact of technology be only to only one area of the organization, multiple areas or can it become a threat to organizations existence	Speed	
	Technological Designs and Platforms	Design of customer interfaces (ease of use, convenience, look and feel), robustness of technology infrastructure	Sources Of Value Creation	
Internal	Capabilities	Commitment of leadership, swift digital operations, data based decisions, customer experience and agility in technology deliveries		Large, ‘Big Bang’ Initiatives which may be difficult for the competition to replicate
	Culture	Cooperation and collaboration, freedom to experiment and take risks and derive learning from failures and successes	Disruptive Transformation	

Table 1 (*continue*)

External	Economic Model	Cost – Benefit analysis of the digital technology deployment	Proprietary vs. open innovation
	Industry/ Competition	Whether is industry is turbulent, concentrated or growing and is the competitions' digital investments are in line or ahead of the industry	
	Suppliers	Are the suppliers using digital opportunities effectively to improve their bargaining position or are they able to explore new customers thereby reducing dependencies	
	Customers	Are the customers in a position to influence the services and products; are they no longer dependent on only few organizations to cater to their needs; are they more aware of the options	
	Entrants	Are the new entrants bringing in more effective usage of digital platforms thereby disrupting the industry equilibrium	
	Substitutes	Are the existing services and products under threat due to available or emerging substitutes	

small and short term digital initiatives which weave into the long-term strategy of the organisation. These small initiatives are visible to the competition, quickly replicated and the organisation runs the risk of revealing its long term digital strategy in the process. Authors sensitise the practitioners in assessing the spectrum of what is proprietary innovation and what is open. Practitioners can use the framework on software, process and information in arriving at the value that they derive by level of visibility of the digital initiatives. This framework can facilitate the organisation in

managing the visibility which can erode the value that the competitors derive by playing on its own terms.

Framework of Digital Business Strategy Factors

Table 1 looks at some digital initiatives in a Digital Business Strategy. With all the factors consolidated in a structured framework, any organisation willing to undertake a digital journey and is drawing out a strategy for the same can have a comprehensive view and avoid the pitfalls that come due to oversight.

CONCLUSION

In conclusion, there are diverse elements which contribute to a successful Digital Business Strategy. The elements refer to both internal and external in addition to the technological developments. A practitioner may choose to act on some and be passive about others. However, it is wise to study all the elements carefully before making a decision.

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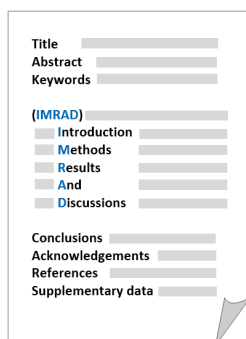
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