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HUMANITIES AND SOCIAL SCIENCES RESEARCH

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Journal of Humanities and Social Sciences Research
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About the Journal

Overview

Horizon Journal of Humanities and Social Sciences Research (JHSSR) is an open-access journal published by BP Services, independently owned, dependent upon donations and run on a non-profit basis for the benefit of the world-wide social science community. It neither accepts nor commissions third party content. It is an open-access online scientific journal which is free of charge. It publishes the scientific outputs.

Recognized internationally as a 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.

JHSSR is currently a **bi-annual** (*July* 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.

Aim and scope

Horizon Journal of Humanities and Social Sciences Research 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.

JHSSR is a principal outlet for scholarly articles. The journal provides a unique forum for theoretical debates and empirical analyses that move away from narrow disciplinary focus. It is committed to comparative research and articles that speak to cases beyond the traditional concerns of area and single-country studies. JHSSR strongly encourages transdisciplinary analysis of contemporary and historical social change particularly in Asia, or beyond by offering a meeting space for international scholars across the social sciences, including anthropology, cultural studies, economics, geography, history, political science, psychology, and sociology.

Scope of the journal includes HUMANITIES– Field of Languages, Linguistics, Literature, Translation, modern Languages, Education, Philosophy, Humanistic Theories and Practices. SOCIAL SCIENCES– Archaeology, Anthropology, Economics, Geography, History, Law, psychology Political Sciences, sociology, dance, music, sport, Graphic Design, Technology Management, public policy, Arts and Cultures, and Accounting.

History and Background

A premier journal in its field, JHSSR was established in 2019, and has been in circulation since then. Horizon is an open access scholarly journal that currently publishes *semi-annually*. The journal uses a stringent double-blind peer-review process and follows code of conduct stipulated by the Committee on Publication Ethics (COPE).

It primarily publishes for dissemination of academic research meant for scholars and scientists worldwide. It publishes on non-profitable basis and does not have any income from subscription or other sources. The journal does not impose any publication or page fee on authors intending to publish in Horizon journals. It aims to achieve its SCOPUS status within 2 years of publication.

JHSSR is distributed worldwide to more than 1000 institutions via *e-alerts*, in addition to authors upon request. To provide expert evaluation of the various segments of the broad spectrum of Humanities and Social Sciences research, the editorial office is assisted by scholars who serve as Associate Editors, editorial board members, Emeritus editors and international advisory board members, and ad hoc reviewers chosen for their expertise. They provide constructive evaluation and fair and rapid editorial processing. The frequency of citations to articles published in JHSSR by scientists, students, and others increases each year.

To facilitate review, the Editor-in-Chief and the Chief Executive Editor previews all submitted manuscripts and independently or in consultation with an Associate Editor, decides if a manuscript is appropriate for review by members of JHSSR's editorial board and/or ad hoc reviewers. Manuscripts outside of the scope of JHSSR or those articles in poor English are returned without the delay of a full review, generally within a week of submission.

Authors may contact the Chief Executive Editor in advance to inquire about the potential suitability of their research topic for review.

Manuscript submissions and inquiries are encouraged. Manuscript style and formatting are described in the "**Instructions to Authors**". Manuscript submissions should be made using JHSSR online manuscript submission

system, or manuscripts should be mailed through email to the Chief Executive Editor. Direct inquiries to CEE.horizon@gmail.com

Goal

Our goal is to bring the highest quality research to the widest possible audience. Our objective is "**Today's research, tomorrow's impact**".

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 3-4 months.

Editorial and International Advisory Board

The editorial and the advisory board of the Horizon has a presence of an international base of renowned scholars from various disciplines of research with diverse geographical background.

Our editorial team is engaged with **universities in 35 countries across the world** including **Australia, Bangladesh, Canada, Fiji, Finland, Germany, India, Iran, Jordon, Lithuania, Malaysia, Morocco, Nepal, Netherlands, New Zealand, Nigeria, Pakistan, Philippines, Portugal, Saudi Arabia, South Africa, Sweden, Taiwan, Thailand, Turkey, United Kingdom, USA,** and **Vietnam**.

Abstracting and indexing of *Horizon*

As is the case with any new journal, indexing in all prestigious relevant databases takes some time.

The Horizon Journal of Humanities and Social Sciences Research (Online ISSN 2682-9096) is a *high-quality, peer-reviewed* academic journal in its field.

Horizon JHSSR is a Gold Open Access journal and indexed in major academic databases to maximize article discoverability and citation. The journal follows best practices on publication ethics outlined in the COPE Code of Conduct. Editors work to ensure timely decisions after initial submission, as well as prompt publication online if a manuscript is accepted for publication.

Upon publication, articles are immediately and freely available to the public. The final version of articles can immediately be posted to an institutional repository or to the author's own website as long as the article includes a link back to the original article posted on JHSSR. All published articles are licensed under a Creative Commons Attribution 4.0 International License.

The journal has been indexed and abstracted in: CrossRef, Directory of Open Access Journals (DOAJ), Excellence for Research in Australia (ERA), Google Scholar, EBSCOhost, ProQuest, The journal has been listed in: CiteFactor, Cornel University Library, CrossCheck, DRJI, Journalseek, openaccessarticles.com, Open Access Library, Rubrig, Scirus, Ulrichs. In addition, the journal has been archived in: Academia.edu, National Library of Malaysia.

The journal editors and the publisher are doing their best for this journal to be included in the top abstracting and indexing databases; however, for the journal to be indexed in any indexing body is beyond the Journal's direct control. Nevertheless, the journal ensures that the papers published are of high quality. The publisher from time to time recommends the journal to the indexing and abstracting bodies.

The authors must also ensure that the manuscripts they submit to Horizon are of top quality and are innovative.

Citing journal articles

The abbreviation for *Horizon* Journal of Humanities and Social Sciences Research is *Horizon J. Hum. Soc. Sci. Res.*

Publication policy

Horizon publishes original work and its policy prohibits an author from submitting the same manuscript for concurrent consideration by two or more publications, and is not under concurrent consideration elsewhere at the time of submitting it to Horizon. It prohibits as well publication of any manuscript that has already been published either in whole or substantial part elsewhere in any language. It also does not permit publication of manuscript that has been published **in full** in Proceedings.

Originality

The author must ensure that when a manuscript is submitted to Horizon, the manuscript is an original work. The author should check the manuscript for any possible plagiarism using any software such as **TurnItIn**, **i-Thenticate** or any other similar program before submitting the manuscripts to the Horizon journal.

All submitted manuscripts must be in the Journal's acceptable **similarity index range**:

< 30%– PASS; **30-40%–** RESUBMIT MS; **> 40%**– REJECT.

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Code of Conduct

The Horizon Journals takes seriously the responsibility of all of its journal publications to reflect the highest in publication ethics. Thus all journals and journal editors abide by the Journal's codes of ethics. Refer to Horizon's **Code of Conduct** for full details at the Journal's web link https://horizon-jhssr.com/code-of-conduct.php

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In case of any queries, contact the Journal's Editorial office via email to info@horizon-jhssr.com

Article Processing Charges (APC)— Open Access Journal

Open access publishing proposes a relatively new model for scholarly journal publishing that provides immediate, worldwide, barrier-free access to the full-text of all published articles. Open access allows all interested readers to view, download, print, and redistribute any article without a subscription, enabling far greater distribution of an author's work than the traditional subscription-based publishing model. Many authors in a variety of fields have begun to realize the benefits that open access publishing can provide in terms of increasing the impact of their work world-wide.

Horizon **does not impose** any submission fees, publication fees or page charges for those intending to publish their research in this journal. However, as Horizon is an open access journal, in norms with all open access journals, the journal has imposed an Article Processing Charge (APC). To publish in Horizon, authors are required to pay an APC of USD250 per article. A waiver to this available for academics with a heavily subsidized fee of USD100 per accepted manuscript.

In addition, this journal offers discount on Article Processing Charges to authors based in any of the countries which were classified by the World Bank as Low-income economies or Lower-middle-income economies. All requests can be sent directly to the journal's Chief Executive Editor.

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In an open access model, the publication costs of an article are paid from an author's research budget, or by their supporting institution, in the form of Article Processing Charges. These Article Processing Charges replace subscription charges and allow publishers to make the full-text of every published article freely available to all interested readers. In addition, authors who publish in Horizon open access journals retain the copyright of their work, which is released under a "Creative Commons Attribution License," enabling the unrestricted use, distribution, and reproduction of an article in any medium, provided that the original work is properly cited.

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 Horizon journals have an e-ISSN.

Horizon Journal of Humanities and Social Sciences Research: **e-ISSN 2682-9096**.

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 4-5 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. Requests for changes to authorship must be directed to the journal's chief executive editor. Changes in authorship will only be permitted where valid reasons are provided and all authors are in agreement with the change. Post-publication changes to authorship will typically be made via a published correction and authors may be charged for this additional service.

One author will need to be identified as the corresponding author, with their email address normally displayed in the article. Authors' affiliations are the affiliations where the research was conducted. If any of the named co-authors moves affiliation during the peer-review process, the new affiliation can be given as a footnote. Please note that no changes to affiliation can be made after your paper is accepted.

Manuscript preparation

Refer to Horizon's **INSTRUCTIONS TO AUTHORS** at the back of this journal or visit
https://horizon-jhssr.com/manuscript-prepparation.php

A well-formatted manuscript follows all journal instruction. All elements of the manuscript are printed in English with 1-inch margins at top, bottom, and sides. Right margins are unjustified. Horizon journals accept manuscript submissions which uses any consistent text—Format-free Submission! This saves you time and ensures you can focus on your priority: the research.

However, citations/references must be formatted by you as per APA format.

Checklist for Manuscript Submission

- Cover letter
- Declaration form
- Referral form
- Manuscript structure

(Title, Author details and affiliation, Abstract, Keywords, etc. using the **IMRAD** style).

Each submission must fulfil the following criteria and documents listed below must be submitted along with the manuscript for intended publication.

1) Cover letter

Your cover letter should be complete and make a strong pitch. The cover letter should include all these details:

- Author(s): Full contact details (email, institutional address, telephone number, etc.) of all authors listed including who the corresponding author will be [full name(s) written as First Name then Last Name]. Understand the differences between lead author and co-author(s). Lead-author: who has done most of the research and writing; Co-author: Has collaborated with the lead author and contributed some parts.
- A brief explanation of your article's relevance and impact.
- Disclosure of whether you have published this study previously elsewhere or if it is in consideration by another journal.
- Disclosure of any commercial or financial relationship that may be viewed as any potential conflict of interest.
- A brief statement explaining why the journal should publish your study. (Refer to sample available at https://horizon-jhssr.com/download.php).

2) Declaration form

Do not forget to complete the declaration form and submit it along with your manuscript. Sign the declaration that your manuscript is original, you have NOT published this study previously elsewhere in any language and is not under concurrent consideration elsewhere at the time of submitting it to Horizon.

3) Referral form

The authors are strongly recommended to complete the "Reviewers Suggestion" form along with the manuscript during submission. Authors should suggest up to 3 names of potential reviewers experts in the subject area of the manuscript, and are not the co-authors listed in the manuscript submitted. The suggested reviewers may be from any part of the world. The journal is not, however, bound by these suggestions.

4) Language and flow

A well-written manuscript has greater chances of acceptance. Some tips:

- Avoid long, complicated sentences; keep it simple. Your sentences should be understandable.
- Your ideas should flow smoothly.
- Use correct terminology, avoid excessive jargon and grandiose language.
- Make sure there are no grammatical mistakes.
- It is highly recommended to approach an editing service for help with polishing your manuscript. The journal has a long-term proven affiliation with a good certified editor at Beyond Proofreading Services PLC.

You may contact Dr. Brown at Beyond Proofreading PLC, beyondproofreading@gmail.com at your own discretion.

Language Accuracy

Horizon **emphasizes** on the linguistic accuracy of every manuscript published. Articles must be in **English** and they must be competently written and argued in clear and concise grammatical English. Contributors are strongly advised to have the manuscript checked by a colleague with ample experience in writing English manuscripts or a competent English language editor.

Author(s) **should provide a certificate** confirming that their manuscripts have been adequately edited. A proof from a certified editing service should be submitted together with the cover letter at the time of submitting a manuscript to Horizon**.**

All editing costs must be borne by the author(s). This step, taken by authors before submission, will greatly facilitate reviewing, and thus publication if the content is acceptable.

Refer to Horizon's **MANUSCRIPT FORMAT GUIDE** at https://horizon-jhssr.com/online-submission.php

Editorial process

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

Horizon follows a **double-blind peer-review** process. Authors are encouraged to suggest names of at least three potential reviewers at the time of submission of their manuscript to Horizon using the **Referral form**. The editors are not, however, bound by these suggestions.

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.

The Review process

What happens to a manuscript once it is submitted to *Horizon*? 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. Linguistically hopeless manuscripts will be rejected straightaway (e.g., when the language is so poor that one cannot be sure of what the authors really mean).

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 external specialists in the subject matter represented by the article. The chief executive editor requests 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.

SUBMISSION OF MANUSCRIPTS

Owing to the volume of manuscripts we receive, we must insist that all submissions be made electronically using the **online submission system™**, a web-based portal. For more information, go to our web page and click "**Online Submission**".

Please do **not** submit manuscripts to the Editor-in-Chief or to any other office directly. All submissions or queries must be directed to the **Chief Executive Editor** via email to CEE.horizon@gmail.com

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Do not raise the bar unnecessarily by exaggerating requirements for successful publication, but rather encourage young researchers to try and experiment. Researchers can raise their ambition level through gained experience.

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Contents

FOREWORD

Welcome to the **First Issue of 2020** of the Journal of Horizon Journal of Humanities and Social Sciences Research (JHSSR).

JHSSR is an academic, interdisciplinary, and peer-reviewed GOLD open-access publication, published rapidly by BP Services. The journal is independently owned, dependent upon donations and run on ***not-for-profit*** basis for the benefit of the world-wide social science community.

This issue features 12 articles, including a Book Review, the author of the book titled, "**The Future of Social Work: Seven Pillars of Practice**", (SAGE, 2018) is the Dean Emeritus, School of Social Work, Louisiana State University. www.Brijmohan.org

Of the remaining articles, there is each a Review, Concept and a Short Communication paper. The rest eight are original articles from various authors that come across from different countries, namely **Australia, Bangladesh, Indonesia, Malaysia, Pakistan, Russia, South Africa, Thailand**, and **USA**.

I believe this issue would be intriguing, thought-provoking and useful in reaching new milestones. I would be grateful if you recommend the journal to your peers and students to make this endeavor more meaningful.

Being capable of publishing in peer-reviewed journals is commonly seen as an indicator of proper scientific research. It is the duty of a researcher to publish his results for the scientific community. Research can be seen as a product that must be sold to the target audience in the form of an article. In other words, research results do not exist before they are successfully published. The key people for getting one's article accepted for publication in a journal are usually the Editor-in-Chief, editor, and reviewers. After publication, a well-written article will attract readers, eventually resulting in a scientific impact defined by whether other scientists will cite the article.

In some cases, people raise the bar unnecessarily by exaggerating requirements for a successful publication. This may be either an intentional attempt to bring the game to a higher level, or merely unintentional. Unfortunately, it is difficult to improve the level before understanding the publishing process in the first place. Writing scientific journal articles is learned through writing and publishing attempts when constructive feedback is available. It may occasionally be possible to enter the big league of very high-level journals directly, but only with adequate levels of support and feedback. In other cases, it is possible to publish in increasingly better journals once gaining experience through more moderate publication mediums. A researcher can raise their ambition level through gained experience. Hence, it is equally important for any researcher to begin their publishing with new or young journals provided they are of good standing.

Learning to write journal articles is, however, not a black and white issue where there are absolute rights and wrongs. Being constructive is more important than seeking out flaws in the message. Young researchers should utilize several sources while building their know-how regarding scientific writing.

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

I would also like to express 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 assistance of the journal's editorial office in Texas is fully appreciated.

Horizon JHSSR is currently accepting manuscripts for upcoming issues based on original qualitative or quantitative research that opens new areas of inquiry and investigation.

The editors hope that the authors publishing in this journal can support the noble cause of Horizon in reaching its goals.

Chief Executive Editor
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BOOK REVIEW

The Future of Social Work: Seven Pillars of Practice

Book Author: Brij Mohan

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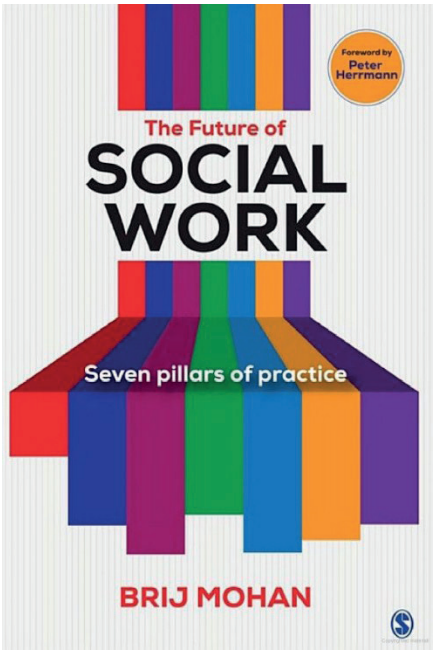

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The Future of Social Work: Seven Pillars of Practice by Brij Mohan. New Delhi: Sage Publishing; ISBN (ISBN 978-93-528-0625-6 (HB); pp. 146. $59.99;L 47.99; Rs 995/-

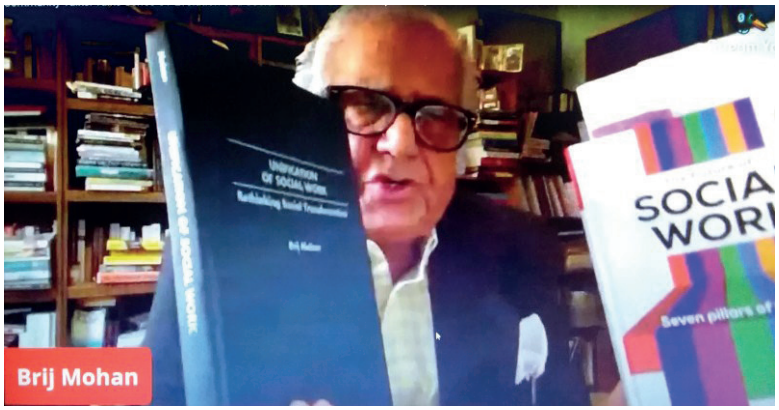
Introduction

"The goal of social work should be the end of itself," Dr. Brij Mohan contends. This aphorism makes him a messiah and heretic at the same time. Dr. Mohan is a prolific intellectual whose volumes of writings have nearly launched an international movement to "think critically and act globally." In a digitally revolutionized world, neither "social" nor "work" will remain the same.

Dr. Brij Mohan is a protégé of the late Professor Saiyid Zafar Hasan who in his own right may be called a legendary pioneer. Dr. Mohan's mentor modernized social work education, policy and research in most of the social work schools in India. When he went to the United States of America, Dr. Mohan followed his footprints. Since 1975, Mr. Brij has been teaching, speaking, and publishing in the United States where modern social work evolved as a profession. Born, educated, and trained in India, his emergence as a "Social Work Pioneer" (1995, NASW) in the US, is an achievement that merits a Presidential national award from the Government of India. Mahatma Gandhi Kashi Vidyapith recognized this prodigious contribution and honored him with a Doctor of Letters (*honoris causa*) in 1994.

Strengths of the Book

This bio-professional background is duly contextualized to signify the importance of the book under review.



SW's evolution as a profession is a cross-fertilization of some valued tenets of the Enlightenment. As science and reason broke down the walls of ignorance and superstitions, traditional cultures began to question the age-old dogmas and institutions that bred social misery. Along with came the revolt of the learned, angst and anger of the enlightened and innovative visions of an intellectual. This book is a precise narrative of the triumphs and tribulations of a professional who has studied social and personal issues – ranging from domestic violence and child above to poverty and xenophobia – in the world's most advanced nation. Brij Mohan, with uncanny courage and sociological imagination, unravels this paradox.

The book contains ten chapters and an illuminating Foreword by Peter Herrmann. It seems to embody the opus of Brij's interdisciplinary philosophical thrusts that seek to legitimize social work practice. Since he has been a professor all his life, his indelible insight into curriculum designs, administrative issues, labyrinths of campus politics, and the politics of funded research loom large in the shadows of SW's future – the heart of this book. His erudite critique, thoughtful analyses, and masterfully narrated experiences are assets to a profession which is still growing in search of an identity.

Conclusion

"Social Work should be a candle rather than a mirror," he concludes. This is most relevant where professional culture seeks to "clientize" victims of poverty and injustice. Social Workers don't have "clients" like insurance agents and dentists. They have human beings ravaged by social problems. SW's inherent problem has been – and continues to be – that it mimics medicine, law, and engineering without comprehending the nature of its professional mission. Both India and the West are ill-served by a therapeutic culture. Doubtless, this book is riveting and analytical; it's innovative and provocative; diagnostic and futuristic. Social work educators and policy makers cannot afford to ignore the basic formulations proffered in this compelling monograph.

Reviewer

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REVIEW

The Brain: Saboteur or Success Partner? Exploring the Role of Neuroscience in the Workplace

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ABSTRACT

The World Economic Forum's Future of Jobs Report has identified Cognitive Flexibility as one of the top ten skills for organizations to thrive in the Fourth Industrial Revolution (Industry 4.0), which is the ability to let go of an old way of thinking and adopt a new way of thinking; the ability to fluidly unlearn and relearn, to survive and thrive in an uncertain environment. Identifying cognitive flexibility as a key workplace skill displays the importance of integrating neuroscience into the practical applications of the corporate world. This article explores this integration and its evolution, the importance that employees, leaders and teams understand how the human brain functions, how it impacts how they perform in the workplace, how their brain is wired differently from the people they work with, how they can train their brains to partner in their success and how organizations today can nurture a brain-diverse workplace.

Keywords: Neuroscience, Neuroplasticity, Neurogenesis, Brain Diversity, Colored Brain, Industry 4.0, Brain-Based Learning, Brain at Work.

The Evolution of Neuroscience

Up till as recent as 30 years ago, neuroscientists were able to research the human brain only once it was damaged or upon death of its owner, and not when it was whole and working. Today, thanks to the advancement in neuroscience technology, we have neuroimaging facilities like the functional magnetic resonance imaging (fMRI) that allow neuroscientists to observe brain activity during specific tasks or emotional states. This is important because without neuroimaging facilities, we understood the brain differently, and sometimes, inaccurately.

One of the biggest debates in neuroscience is the adult neurogenesis debate (Snyder, 2019), which has seen conflicting neuroscience research on the brain's ability to generate new neurons or brain cells. We thought that the human brain stopped producing neurons at the young age of two, but now know that the brain is capable of neurogenesis well into adulthood. A research done on London cab drivers (Maguire, 2011) found that they had larger hippocampus compared with other people. London cab drivers go through an extensive learning process known as "The Knowledge", which tests them on their knowledge of more than 25,000 streets and 30,000 points of interest, and this three to four-year process literally enlarges the hippocampus region of the brain. An important finding in this research is that it contradicts the fact that neurogenesis does not happen in the adult brain, which also explained neuroplasticity, or the plasticity of the brain – the brain can change.

Neuroscience in the Workplace

Neuroscience and its related fields are having a major impact within and beyond the walls of research, seeping its way into the corporate world, where it is being used to increase bottom lines, through enhanced employee engagement, the science of achievement, increased team synergy, better and more impactful leadership, and general organizational wellbeing.

Neuroplasticity, for one, which is the ability of the brain to continuously change and reorganize itself by forming new neural connections, has attracted the interest

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of more than just neuroscientists. Today, organizations are curious to know how neuroplasticity can benefit the workplace, and cognitive training is quickly gaining traction across industries. The World Economic Forum (World Economic Forum, 2016) has identified for the first time, cognitive flexibility as one of the top ten skills needed by the workforce in 2020 and beyond for the Fourth Industrial Revolution or Industry 4.0. A similar report published by the Institute for the Future at the University of Phoenix Research Institute (UPRI) (Davies, 2011) identified cognitive load management as one of the necessary skills to survive in the 2020 workplace. Both reports highlighting the pruning of the brain as an essential skill, reveals how important a time it is for the integration and proper assimilation of neuroscience into workplaces.

Institutions of higher learning, like the Massachusetts Institute of Technology, MIT (Massachusets Institute of Technology, 2019) are now offering neuroscience-related subjects for business courses, because of the inevitable benefits of how heightened awareness of the working of the brain can impact the way we think, lead and do business. Neuroleadership (Rock, 2010), a coined term that is making waves within organizations, and which provides knowledge on how to apply neuroscience within leadership practices, change management and employee engagement, is another clear indication of how the global workforce is embracing neuroscience in the workplace. Even PhD students in neuroscience are starting to branch out into more careers within the industry rather than within academia (Akil, et al., 2016).

The Focus of Neuroscience-Based Learning at Work: The Primary Aims of the Brain

In the corporate scope of neuroscience and how it can help enhance human performance through awareness of the functioning of the brain, the focus of most brain-based learning initiatives have been on the field of neuroplasticity, or how to rewire the brain, through the strengthening or weakening of neural pathways in the brain. Every time there is a new learning, the brain forms pathways between neurons, or brain cells, through synapses. When the learning is repeated, the neural pathways strengthen, and without realizing it, this learning sticks –we see this when we learn to drive a car. What may have seemed difficult, awkward or fearful at first, would seem very much easier and natural (Kalina Christoff, 2016) as we continue to do it. Just as the neural pathways strengthen when the learning or action is repeated, they weaken when the learning is not repeated. This shows that any habit or thought pattern can be changed within a person by actively training the brain to rewire.

When teaching employees about neuroplasticity, they must first understand the brain. Most people would have some prior knowledge about the brain, but a foundation or refresher is necessary, to ensure that brain-based learning in the workplace has a higher stickability factor. The two biggest elements of the brain that are constantly highlighted in corporate brain-based learning initiatives, are that the brain is extremely efficient and that it is wired to keep us safe.

In its primary function to be efficient, the brain manages almost 99 percent of its processing of sensory inputs in an automated manner (Wilson, 2004), which means, that most of the 11 million bits of input that comes in through our sensory organs per second, goes into non-conscious, automated processing which we are not aware of. The result is that most of our responses are automated, or on automatic pilot (auto-pilot). The brain needs to stay efficient because consciously processing every bit of data is time and energy-consuming, and so, it relies a lot on heuristics or mental shortcuts, also known as experience-dependent neuroplasticity. What we have experienced before gets stored in our brain through neural pathways, and the brain accesses these memories when dealing with a similar stimuli or trigger. Someone who has been bitten by a dog when he was a child, would most probably be still afraid of dogs as an adult, because the brain has made an association very early on based on the painful experience, that “dogs” equal “pain”, and that mental association has created a fear of dogs by default. The downside of the brain’s need to be efficient, it that this creates biases within humans, and these biases impact how we work with others and how we see our world. By default, if left unaware on how the brain functions, humans will continue living with and allowing these biases to pilot our lives, which usually lead to unideal outcomes, especially when living amongst society. Some examples of biases that have impacted us include Implicit Bias (Asamoah, 2019), where we unconsciously hold a set of deeply ingrained beliefs about a social group, and Negativity Bias (Ito, Larsen, Smith, & Cacioppo, 1998), where we tend to remember more of our negative experiences than positive ones.

Negativity bias can also be seen in the brain’s other primary aim, which is to keep us safe, where it has developed more networks to manage threats than it has to manage rewards (Gordon, Palmer, Liu, Rekshan, & DeVarney, 2013). To ensure that we are safe, the brain is on a continuous mode of pattern recognition so it can effectively and quickly detect threats, and because it thrives on accurate predictions, the brain hates ambiguity (Ruyle, 2016). Uncertainty registers in the brain as

an error, as something that must be fixed so one can feel that comfort again – and that is why organizations understand the importance of proper change management initiatives when introducing a new change in the workplace.

How the Brain Can Sabotage the Working Individual

In non-threatening, non-ambiguous scenarios, the prefrontal cortex (PFC), the executive region of the brain, is in charge, allowing us to think rationally and logically – but when the brain detects a threat, the amygdala, which is the emotional region of the brain, takes over and the PFC goes offline, giving full control of the amygdala, an event called the Amygdala Hijack. When this happens, we go on "fight or flight" mode, ready to address the perceived threat.

What we experience is an increase in heart rate, the mouth going dry, becoming sweaty – all symptoms of stress and anxiety. This definitely helped our ancestors survive real life threatening situations like the risks of being mauled by a saber-tooth tiger while hunting for lunch, but the brain cannot tell the difference in intensity levels of threats, and treats them all the same way.

So, an angry-sounding e-mail from the boss might be perceived as a threat by the brain, along with some of these other workplace-scenarios:

- Not being considered for a promotion
- Having a subordinate constantly come late for your Monday morning meetings
- Working for a leader who looks like your very mean high-school teacher
- Experiencing high levels of anxiety when presenting to senior leaders
- Getting agitated when people are not on time for meetings, or when meetings run later than was informed
- Feeling anxious when confronted with an angry customer
- Given an assignment that seems unworthy

The brain under threat is a very mentally taxing condition. The threat response uses high levels of oxygen and glucose, diverting it from other parts of the brain, including parts that are responsible to keep us productive, like the working memory function that is responsible for our ability to think analytically, to have creative insights and to solve problems – and these can lead to unproductive professional relationships, poor performance even by high achievers, low morale and engagement and decreased overall productivity.

The brain under threat can impact one's psychological safety, which is the ability to speak one's mind without the fear of making a mistake, and because an attack to one's psychological safety can have a deeper and longer-lasting impact on the brain as a physical punch to the face (Eisenberger, 2012), creating a psychologically-safe environment at work is of great importance.

The practicality of understanding these two primary brain functions especially in how they impact on how we function in the workplace is pivotal, because when the brain detects that it is under threat, it can unintentionally sabotage how we perform in the workplace and relate, react and respond to our colleagues, subordinates and leaders.

In a Workplace Stress and Anxiety Disorders Survey, 56 percent of employees surveyed claimed that stress and anxiety most often impact their workplace performance; 51 percent said that it impacted their relationship with co-workers and peers, 51 percent said that it impacted their quality of work, and 43 percent admitted that it affected their relationship with their superiors (Anxiety and Depression Association of America, 2006). Anxiety can have a negative impact on how we think, lead and make decisions at work, and it doesn't help that anxiety is one of the leading causes of mental health issues globally (Ritchie & Roser, 2018).

Workplaces can use knowledge and awareness of how the brain functions to produce a more psychologically-safe environment for employees, leaders and teams. A two-year study on team performance at Google revealed that the highest performing teams are those which practice psychological safety (Rozovsky, 2015).

Accepting the Brain-Diverse Workplace

Organizations who can understand how the brain functions and how it dislikes uncertainty and ambiguity, can help nurture an environment that helps the brain be rewired to become every employee's partner of success. Here are some ideas on what can be done within workplaces to understand, embrace, and nurture the Brain-Diverse workplace (Sivalingam, 2019).

Increasing awareness of how we are wired differently

A new research to better understand how the brain seeks to gain clarity amidst ambiguity (Carmazzi, 2018) reveals four genetic ambiguity relief processes– which are the chaotic, linear, relational, and intuitive processing, which

make the four colors of the Colored Brain concept. Having awareness that every individual in one's team might be wired differently, in the brain's attempt to seek clarity, can enhance our ability to better understand the people we work with and reduce misconceptions that one is trying to be difficult, when in actuality, they are responding to their brain's need for clarity. For example, we might be working for a leader who gets annoyed when a meeting runs late. It may seem like he is being difficult, but once we know that he is a Red-Brainer, whose brain needs to process information in a linear manner to gain clarity, we will be able to understand that he prefers an environment with structure; and in future, we can enhance our communication methods with him in case a meeting runs late again. Awareness has been identified by many studies, as a key element which affects an organization's bottom line (Korn/Ferry International, 2013) (MIT Sloan Management Review, 2012) – and for good reason. Awareness helps us become better leaders, more tolerant employees, and better team players.

Taking ownership over how to manage the brain at work

The entire organization should take ownership over the awareness and understanding that we are all working in a brain-diverse workplace, or that we are all a part of some brain-diverse society. Every employee should take ownership of how their brain functions and how it is wired differently from their team mates and leader. Every leader should take ownership to educate their team about the brain-diverse environment they are a part of, and how they can best work together. Every CEO, senior leader, business owner, and societal leader should take ownership to nurture a positive psychologically-safe brain diversity-friendly working environment. Every policy maker and governance officer should take ownership to develop guidelines, helping the organization better understand how they can train their brains to become a success partner instead of a saboteur. A research done reveals that 91 percent of managers agree that what they do as a manager affects the wellbeing of their staff (Mercer Marsh Benefits, 2017), which is a very promising start.

Interrupt work routines

Research has shown that short interruptions at work can improve focus (University of Illinois at Urbana-Champaign, 2011). The brain gradually stops focusing on a sensory stimulus over time if it remains constant, and that can cause an attentional shift to something else, causing them to lose focus on a task.

Another good way to boost focus is by taking "transcendence" breaks, where one simply detaches themselves from any external stimuli, through initiatives like having time-off for reflection, like that practiced by consulting firm BrightHouse, which offers its employees five days a year to reflect and simply free-associate (Waytz & Mason, 2013).

Studies on the effects of mindfulness and meditation in the workplace have shown positive outcomes as well, with one revealing how ten minutes of meditation can help people with anxiety have more focus (University of Waterloo, 2017), and another revealing how the amygdala is less activated after eight weeks of mindfulness training (Desbordes, Shapero, & Powell, 2018).

Conclusion

There are great benefits in the integration of neuroscience, including neuroplasticity and cognitive pruning into the corporate world, especially through awareness of how the brain works, how it is wired differently, how it impacts workplace performance and relationships, and how to rewire it to become a success partner and not a saboteur in workplace success. There have been great efforts to integrate the two thus far, with hopes that more research keeps being generated and seen applied in the practicality of organizations leading toward2` Industry 4.0.

Competing Interests

No potential conflict of interest was reported by the author(s).

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CONCEPT

Reflective Leadership in Crisis

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ABSTRACT

Business leadership styles are always scrutiny during global epidemic or economic recession days, with due consideration to its applicability and experience. Corporate leaders usually search for new leadership styles to keep the members trust on them as well as business entity. 'Reflective leadership' is one of the cognitive leadership styles, which can be practiced by the corporate leaders during crisis period. An attempt has made to elaborate reflective leadership style in this white paper, which is based on several interviews conducted at senior level corporate leaders. The paper scrutinized the concept 'reflective leadership' to explore the requirements for reflective leadership among corporate leaders. The new generation corporate leaders may look into the requirements of such leadership style and may adopt for organizational agility and business sustenance. The study envisages theoretical implications by advancing the body of knowle4dge in the area of leadership and organisational behavior.

Keywords: *Reflection, leadership, reflective leadership, cognition, behavior.*

Introduction

Look at the world around. What is happening? Except 'change', we could see, nothing is permanent. Corporate climate had to bow their spine towards severe uncertainties. Culture and belief system have lost its relevance. Ever changing demand from external and internal organizational environment has necessitated the corporate restructuring. Majority business operating models are forced to re-negotiate with 'changing business volatility'. Inevitability of technology acceptance for business suitability and resilience is well learned. Meeting the customer expectations in the crisis period turned to be a phenomenal task to corporate leaders. In this juncture, traditional leadership styles are redundant and corporate leaders started looking for immunity, where there is no leadership vaccine available. Evidently the reflexes of the past have lost its charm. Though it is not a full panacea, to a certain extent during the crisis period corporate leaders may invest some time for 'reflexive leadership'.

Literature Review

Who are reflective leaders?

The term was defined by several authors. Some of them consider the reflection as stepping back from the immediate environment and look at the situational factors intuitively. The leader must engage in the process of captivating exchange of thoughts with himself or herself and with other people. He/she must adopt double loop viz., a process of looking at the crisis individually and collectively about perspectives, values, experiences, beliefs and the future, in order to explore a clarity for a change in action.

Reflection has the root in research mindset. It is a cognitive process. During the uncertainties he/she experiences several complexities, mental difficulties, discomforts, and state of distrust. The leaders will be feeling an acute disappointment with the radical departure from ever loving,

experienced based decision-making process and look at the possibilities for examining, expounding and finding the most preferable ways of handling crisis and eliminates uncertainties. Henceforth, we need to understand that reflection is a mental process has its root from a problem or complicated situation, that necessities critical thinking and analytical abilities. While some other scholars believed that reflection is closely related to action and personal experience. The reflective practitioner engages in thinking along with the effect of action. There are two types of reflection here. Reflection 'in action' and reflection 'on action'.

Reflection 'in action' is conscious thinking and amendments while on the job. While, reflection 'on action' is the reflection done after experiencing the action. The leaders search the element of achievement based on the judgement he/she has made. A reflective conversation has its association with on-the-spot surfacing, criticizing, restructuring, and testing of intuitive understanding of experienced phenomena. Being aware of one's rational is vital to contribute up-to-date and reasonable decisions, while working with other members. An important aspect a leader consciously touch in reflective thinking is touching the feelings, thoughts and behaviors of other people in the management as well as accomplishment of change objectives.

> *Reflective thinking is thus an essential need of corporate leaders during uncertainties and crisis. A need of empathetic observations and reflections on one's own 'understanding for a change' as well as the "external change imperatives" are must in reflective leadership.*

Reflective thinking is not only an internal process but an external one promoting improved critical thinking skills together with self-understanding as an essential way of inner work, which emerges in the energy for employing in outer work. This type of thinking is required for understanding what it means to be significant for oneself and in one's organization or practice. An attitude towards object-oriented learning (ORL) is the perfect environment for reflective thinking. Biases, preconceived notions and subjective evaluations of the experience, will be reflectively evaluated by a reflective leader exploring all 'imperfections to achieve perfections' in crisis. Here the leader exhibits the competence to disrupt by dwelling out existing knowledge through 'the questioning of assumptions and perceptions' to make room for new insights.

Methodology

This particular paper followed qualitative research method narratives integrated into the form of a white paper. Narrative is one of many qualitative methodologies that can be taken into consideration to bearing mind the collection and analysis of information and reporting observations. The model analysed varied leadership models available in the current management literature and analysed its suitability in crisis management time. It is evaluated that such traditional leadership models are to be augmented with reflective thinking and reflective leadership traits. The paper tried to explore the leadership factors which are closely knit with the crisis management period, instigating the importance of 'reflections' among the business leaders and its requirement in handling the change management.

Discussion

Reflective leadership requirements: Speed and precision

The fourth Industrial Revolution may have less welcome consequences with the social, political, cultural, and economic upheavals (Nakayama, 2019). With the advent of any uncertainty impact or inevitable change, a reflective leader should look at "what matters most and make decisions with confidence". During the crisis stage when the leader exposes the crisis condition for external and external reflections, there will be the likelihood for priorities, clashes and emotional burst, which will compel to work with anxieties overflow. Focusing on few things should be the priority here, since it supports in bringing back business to a sustainable operational track. Rapid 'decisions on few things can bring back the tranquility to business rather attending all issues.

Enhancing Resilience

Resilience in addressing those challenges which brings rapid recovery, is the resultant manifestation of reflective leadership. Constant engagement to explore the vulnerabilities, critically look at with all possibilities and engage them into trial and error exercises for best possible alternatives can bring back the organization toward recovery. A shared understanding, reflections, rapid adaptation of negative feedbacks and development of a mental frame to accept all impossibilities and possibilities integrated with critical reflections, should be the interest of a reflective leader which can absorb setbacks and recuperate quickly.

Coupling and Decoupling

The most important reflection leaders must engage in the crisis is coupling the crisis factors and critically reflect the

potentials for decoupling. Major concern of any leader is 'business life sustenance'. The reflective leaders should engage in coupling process by the selection of factors that will not work anymore and isolating those factors for gradual parting. An understanding on the resources, competencies and current operating models which facilitate the reflective leader to engage in coupling. Leader should decouple certain factors carefully, which are mutually interdependent. Such segregation can bring very focused and effective decisions during crisis and change. The reflective decision is 'which systems should be switched off' and 'which ones should be put on life support'.

Delve deeper

Reflection and learning will go together in the journey of experience. A deep reflection on the existing process and operating models, which are misfit into the current, changing circumstances can bring cognitive challenges. Through collective consciousness and dwell deep, reflective leaders can transform the way of thinking as well as perspectives by extending intellectual experiences. Questions like, "why that way? Can I look at the scenario in a different way? Would it be relevant in the changing context? How can I improve further? Can I bring reflective practices for better decision making. Such way of looking at business scenarios not only brings changes in the individual belief system but also to the team members.

Sense making

Reflective practices bring sense making among the team and individuals. Looking at the pros and cons of strategic and operational decisions, with its potential contributions at the time of crisis, is a reflective leadership process. A learning with collective involvement, shapes not only 'what we think', but also 'how we interpret what we think', in a sense making leadership effort. Effective sense making needs a well prepared method and process to integrate all available information from varied sources, share it with the right members and reflect and deliberate their feedback, generate a lively depiction that everybody comprehends, evaluate possible 'futures' and probable consequences, and formulate specific decisions, that to be met individually or collectively.

Lead authoritatively

The most important aspect during a crisis is identifying a reflective leader who can authoritatively develop pathways to cross the crisis. A reflective leader should be great learner. There is no short cut in gaining awareness and the ever-valued learning experiences. How many times, with his/her past experiences, they have led the crisis situations individually or collectively, that matters in every future crisis where they will be taking the lead. If the leader does not have this capability, then the platforms of should open to any second level reflective leader or it should be done through 'collective reflections'. Authoritative leadership is the byproduct of reflective engagements in the past and successful deliveries. A reflective leader applies individual and collective reflective means to capture the end.

Calm within the storm

A proactive reflection on consequences of burn out during crisis would be a greater idea to identify better coping mechanism. Gathering all facts related to the crisis and looking at the consequences of all those parameters need, 'emotional maturity coupled with reflective thinking'. Reactive behavior is immediate and with little-to-no conscious thought, which can bring several failures. In a swiftly emerging condition, leaders need to stay abreast with the changing information, so that they can make use of their reflections properly on each scenario, segment by segment thorough sound analysis, with coupling and decoupling mechanisms to arrive at appropriate decisions. Having greater rationale and emotional clarity about pre, during and post crisis scenarios helps to lower reactivity to the stimulus causing the emotion. Controlling emotional reactions need rationale reflective leadership.

Permissive reflections and consensus

Many leaders fail during global crisis period due to their lack willingness towards 'permissive consensus'. The policies and decision followed by the organization with his/her leadership, will no longer valid in the turbulent global crisis situations. Still the leaders cling to their positional power and prefer to continue the same policies without giving permissive consent to the second line of organization, an opportunity for 'permissive reflections' to arrive at permissive consensus to carry forward the organization with fidelity and accuracy. The logic behind the 'permissive consensus' will be to facilitate reflective thinking which alter the misfit policies and facilitate collective intelligence for business agility and organizational survival.

Reflect to frame the crisis

Continuous gathering of information critical reflection on them is inevitable during the crisis period for action and performance. It's not gathering so many information's from every source. Progressive gathering of information and continuous and progressive reflections are important for effective framing of crisis for interventions. Leaders should continuously examine the crisis and classify it down to the minutes, hours, and weeks for critical reflection and intime decision making. Revisiting the original plans and making changes in the existing one, if inevitable, need to be entertained. Reflections make the leaders stay focused and take timely decision to control progressive levels of crisis.

Knowing-doing gap

From varied sources a leader will be getting several information. Knowing the crisis factors will not bring solution to the crisis. A reflective leader should fill the gap between knowing and doing. The gaps linked to resources or competencies or need of innovation etc. need to be timely reflected for fulfilling the organizational capability. Getting knowledge from all possible source of information is not the matter. With that critical information, how his/her reflections can bring proper assets, which can assist in bringing the derailed operations into an agile one, matters. Leaders must use plans, analysis, meetings, and presentations to inspire deeds, not as substitutes for action. From knowing to doing, (action phase), reflection and critical reflections on the structure, process, people and resources are to be made. (knowledge is only valuable when it is enacted).

Expect the unexpected

Every leader should have the capability to handle unexpected crisis situations. Especially in a volatile business environment, ups and downs are quite common. It is quite natural, under extreme pressure, that leaders lose the confidence on his/her experience in handling crisis, leading to unpredictability of a critical event. Proactive leadership measures are in need to set out situations where any crisis situations can be effectively managed. When the organizations are smoothly running, leaders' reflective capabilities should be utilized to develop proactive measures in handling unexpected situation. A reflective leader always looks at the 'possibilities' of how to deal with the crisis individually or collectively, rather just gathering all sources of facts and get panic in handling those situations, without reflections. When people and process go differently during crisis period, critical reflections can bring normalcy. Emotional intelligence does matters.

Drive toward actionable intelligence

Criticality of any 'leader contribution' depends on how much complex and sensitive the data he or she is going to handle in a crisis. Critical reflections can navigate the confusing data properly through intelligence. Since the sources of information can derail any futuristic decisions, the leaders should make use of critical reflections, in order to ensure the authenticity and clarity of the data. Using the intelligence pyramid, the data gathered should be segregated into potential, strategic, tactical, and operational intelligence and compared to data collected from other sources. The information obtained from consultants, prior to the crisis period and during the crisis period should be equally reflected and deliberated, either individually or collectively, assessing the proportion of risk accompanying with business lose or survival.

Accountable decision architecture

Suitable governance is vital in balancing a firm's ability to regulate the outcomes with its capacity to invent and respond to varying crisis situations. An unbending governance structure, with less elasticity in all decisions flowing up, may block effective decision making and prevents organizations from evolving. Leaders should realize that the comfort given to the system during good old days cannot be sustained during crisis period and they should critically reflect the structural change which can bring solutions to organizational capabilities. Ambidexterity and holarctic options reflectively should be investigated for change management initiatives. This makes sense where organizational design is thoroughly aligned to organizational outcomes. Decision logic and delegations should be substantiated through reflective thinking.

Network of teams

One of the important aspects during crisis handling situation is leader's strong belief towards collective intelligence, where team members share the responsibilities and deliberate and reflect critically on crisis scenarios in their lead towards collective deliverables. A reflective leader should facilitate development of network organizations where the team members can control the information flow as well as ownership. After developing the

teams, a reflective leader must move toward guaranteeing multidirectional communication, where the flow of information happens vertical, horizontal and across the functional teams. Reflective leaders should develop a central hub to back the teams for daily stand-up meetings and ensure that they are using first-order problem-solving principles. Team reflections can facilitate collective intelligence and it will provide authentic information to the leaders to have reflective decision-making during crisis.

Make smart trade-offs

When faced with crisis, leaders must be able to identify where 'tradeoffs' take place and choose how to deal with them. Initial investigation of tradeoffs is needed to make the organization capable enough to handle the crisis decisions that reflect priorities between requirements. Reflective thinking on available options and selection of best alternative need to be made for organizational survival. Here the policies which have pampered during good old days need to be critically reflected for its possible continuity, during crisis time. Care should be taken that when a leader touches the 'comfort zone' of existing staff, it will impinge on the motivation. Most important aspect here during crisis period, is not to have a 'competing business model' rather the 'operating model' which meets the 'change requirements'. Reflections are essential to priorities the selection and implementation of business models, where tradeoff smartly to be priority.

Visible impact

Any change decision during crisis period should invite thorough reflections, since the decisions and its implications have clear impact on all the stake holders. The employees lose the trust on management and it can damage the regular functional and cross functional flow of work. Outside the organization, such scenario reflects the stakeholders lack of confidence on the organization. Reflection should be more than 'intellectual thinking' since it is intermingled with practitioners' feelings and emotions and acknowledges an inter-relationship with 'action and consequences. Every decision a leader takes during crisis should get proper support from the operating level and the pros and cons should be discussed thoroughly and ensue collective consensus, wherever possible. What people is 'seeing' is more important in market. Hence, the visibility of critical reflections of the leaders and action orientations of members are to be visible and well scrutinized for its accountability among the stake holders.

Redefining risk and uncertainty

A standard risk analysis procedure will be one of the choices among the leaders to make alternate actions. However, how far such risk analysis procedures support them during the crisis is unpredictable. The possible outcome of standard risk analysis procedures needs to be subjected to reflective thinking, at individual or team level that identify change dimensions which are inevitable in managing the crisis. Ensuring commitment to a course of action, together with commitment to manage its (unknown) consequences, need the facilitation from leader's side to the members. Risk rating analysis need to be done on each process flow with the team members, which reflect group understanding, deliberations and critical thinking. Managing uncertainty during crisis period thus require redefining the critical success factor as well as the risk. Reflective leadership is a must.

Reflective learning

Deep reflective learning is a critical component in the organizational learning process. The act of reflecting-on-action enables the members to spend time exploring why the company has taken a decision on certain parameters, 'how the members acted on it, what was happening after its implementation and so on'. Before the action and after the action leaders should facilitate critical reflections of the members who were part of its planning and implementation. The intention behind reflective learning is to promote learner interdependence or collaboration between members in their action where the dialogues between them, and between them and leaders involve double loop learning. It facilitates in the future level team autonomy and team independence in handling the change process. Hence, a leader should facilitate 'reflective learning culture' as well as he/she has the ability for reflective learning.

Paternalistic sense

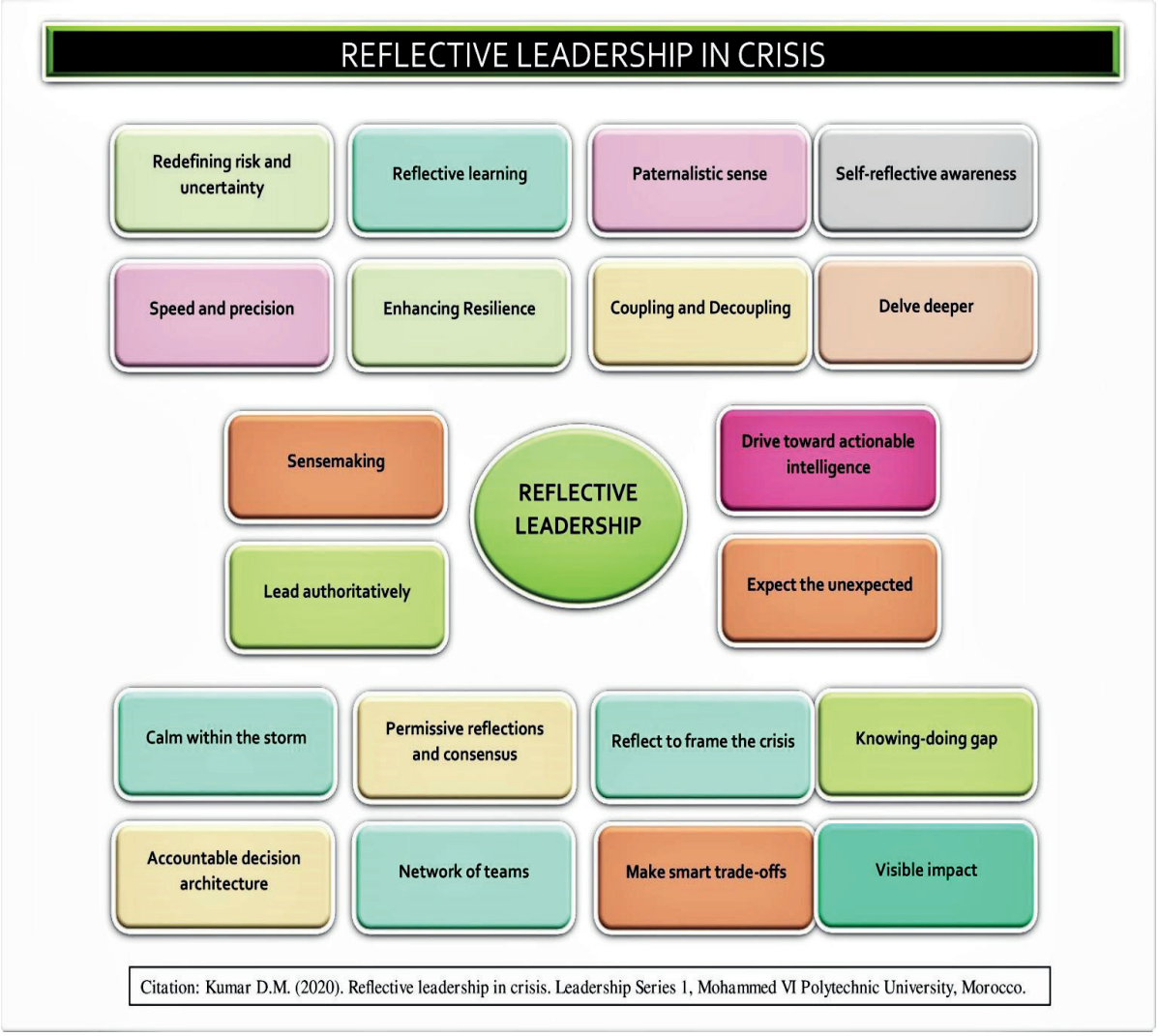
Success of any leader depends on how far they make use of reflections in understanding the need of the subordinates. A reflective interaction and understanding between leaders and subordinates will develop strong leader follower relationship and leader member exchanges. A leader's reflective style can contribute to members innovative behavior, and it will intern contributes to organizational performance. Culture of innovation is the output of a paternalistic sense. Since staying competitive in the market requires members innovative behavior, especially

during crisis period, leader's reflective appreciation and behavior towards subordinates can ensure their sustained contribution to the work. A parent should not create fear of change among the subordinates. The crisis period is more multifaceted, where information needs to be accessible to all the members in the changing business environment, which prompt the members to constantly rethink, switch directions, and constantly engage in development of continuous problem-solving strategies.

Self-reflective awareness

Self-reflective awareness is a 'meta-cognitive' ability, indicates that it includes thinking about and reflecting on one's own 'mental progressions'. The leader should reflect his/her self-reflective awareness, when they are aware of own feelings and thoughts about them. Being aware of own feelings, its weaknesses and strength can control the emotions and facilitate better interaction between a leader and the subordinates. Crisis period require more emotional control and emotional maturity. Loose talks with lack of emotional control can create loss of trust and confidence among the subordinate members. All unpleasant decisions should be communicated to them in an emotionally matured way. Making members heartfully accept the change decisions with cent percent consensus is the success of leader's self-reflective awareness, viz., thoughtful awareness of those feelings, which is the resultant manifestation of critical reflections of leaders positive and negative, own emotional discharges.

Reflective Leadership Model



Implications

The study extends theoretical implications by facilitating the advancement of the body of knowledge in the area of leadership and organisational behavior. A change in the traditional leadership styles followed by the top management is envisaged, by considering reflective leadership features. Some of the crisis like COVID19 impact or any unexpected change in the business invites the leaders of the organisation to rethink the existing business and operating models to handle the crisis with fidelity and care. Leaders should experiment Reflective Leadership Model, as a new crisis intervention leadership model, which can ensure effective organisational change and transformation.

Conclusion

The implication of this white paper is to broaden the repertoire of leadership management practice and theory rests in accepting the scope and array of concepts, their comparisons, variations and applicability. There is a need to look at varying models of corporate leadership, theories of leadership, especially during unexpected crisis events, which affect the current operating business practices and decision-making leadership styles. Trust, empathy, and reflections are the most important cognitive traits that leaders should consider getting the followers continuous support. Practicing continuous reflection during crisis period can bring better learning environment, that brings organizational agility and business sustenance.

Competing Interest Statement

All authors have read and approved the manuscript and take full responsibility for is contents. The authors have declared that no competing interest exists.

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SHORT COMMUNICATION

Future Assessment in Higher Education: Reframing Conventional Practices

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ABSTRACT

The role of universities in the era of the Fourth Industrial Revolution is changing. New demands associated with living in a highly-technological and globally-competitive world require today's students to develop non-conventional sets of competencies. In the 21st century, universities are expected to have digital-savvy students. Hence, digital technology is being used to transform assessment and to provide feedback for students' work. As such, the use of technology-enhanced assessment (TEA) is expected to increase. This article discusses the critical issues of assessment in higher education from varied perspectives. This review signifies critical synthesis of assessment corpus and envisages futuristic world of assessment. The intent is to provide practitioners with tangible alternatives to conventional assessment systems so that they are able to engage and produce more responsive learners. In the old paradigm, assessment in the classroom tends to collect cognitive data – both formative and summative – to provide an indicator of each student's achievement. In the future, digital technology could be used to individualize assessment for each student based on his or her own relevant learning trajectories. Thus, it is critical to rethink the concept of educational assessment in higher education.

Keywords: Authentic assessment, digital age, futuristic assessment, higher education, technology- enhanced assessment.

Introduction

Globalization has shaped the landscape of higher education for the past several decades. Contemporary scholars have put forward critical analyses on the impact of globalization on higher education (see for example, Altbach, 2004, 2007; 2009; 2010; Barnett & Baker, 2012; Carnoy & Rhoten, 2002; Etzkowitz, 2004; Etzkowitz et al., 1997; 1998; 2000; Giridharan & Ling, 2019; Mustapha, 2013; Nisar, 2015; Sample, 2002; Teichler, 2004; Temple, 2012). In the 21st century, an academic revolution has taken place in higher education institutions marked by transformations unprecedented in their mission, roles and scope (Altbach et al., 2009). Even at the gradual level, evolution has accelerated from geologic speed to internet speed that could make artificial intelligence at par with human intelligence (Church, 2012). Hence, new demands associated with living in a highly-technological and globally-competitive world require today's students to develop a very different set of competencies than the previous generation. In the light of the technological innovation in higher education, the assessment systems may also need to be reconceptualized to suit the new demands. This article reviews the key initiatives in improving assessment in higher education. The importance of assessment is undeniable due to its impact on an individual's future life and career. Race, Brown and Smith (2005: xi) highlighted this point:

> Nothing that we do to, or for, our students is more important than our assessment of their work and the feedback we give them on it. The results of our assessment

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> influence our students for the rest of their lives and careers – fine if we get it right, but unthinkable if we get it wrong.

Hence, the risks of assessment are evident. In general, most assessment experts agree that a single test should not be used to evaluate an individual's learning − the consensus holds concerning the need for multiple assessment instruments to be used to provide more accurate evaluation. According to Wilson and Scalise (2006), a single summative score in the form of a grade can do little to inform the mastery of a complex competency. Based on literature and discussions to understand the major challenges for assessment, the lack of trust in the system between teaching professionals and assessment experts is one of the cruxes of the problem (Bassett, 2015). In higher education, the challenge now facing the neo-pragmatic post-modern test theory is to devise assessments that, in various ways, incorporate and balance the strengths of formal and informal assessments by capitalizing on an array of conceptual, methodological, and technological deliberations (The Gordon Commission, 2013). Therefore, it is essential to reconceptualize assessment as an important part of learning systems designed to suggest relevant personalized learning. In the context of higher education, assessment is designed to inform and improve teaching and learning processes and outcomes, without ignoring the importance of accountability (The Gordon Commission, 2013). According to Shute et al. (2009), approximately 10% of the class time is spent on assessment. New requisites associated with living in a cyber-intensive world require today's students to possess an innovative mindset with new competencies especially digital capabilities. Disruptive technology and innovation have had a high impact on the existing assessment systems in higher education.

The future assessment in higher education could be influenced by research outputs and technological advancement (The Gordon Commission, 2013). A term such as technology-enhanced assessment (TEA) was coined to describe the shifting models of learning and educational assessment to adopt technological changes in higher education (Mogey, 2011; Oldfield et al., 2012; Timmis et al., 2016; Whitelock & Watt, 2008). However, the reluctance to change could be due to a number of factors: the multi-layered changes that assessment requires, restrictions within the assessment system, and an aversion to the risks that an assessment transformation would inevitably bring (Perrotta & Wright, 2010; Timmis et al., 2016; Whitelock & Watt, 2008). In addition, little research has been conducted to understand how technology-enhanced assessment could assist to shape and drive wider changes in assessment. According to Timmis et al. (2016), with the potential to increase personalization, self-regulation and peer involvement in learning, as well as to offer the opportunity to evaluate complex skills and practices, digital tool is a useful catalyst for the reframing of assessment in higher education.

Higher education is also critical to contemporary knowledge economy. Knowledge economy is basically driven by innovation (Asian Development Bank, 2014; Mustapha, 2013; 2017; Powell & Snellman, 2004). New ideas on pedagogies and assessment in higher education are based on robust R&D. E-learning and online assessment are products of ivory tower research that are being implemented in most universities. However, the accuracy and quality of assessment in universities are questionable due to the relatively high level of unemployment of university graduates in several countries. Therefore, a new model of futuristic assessment in higher education is deemed necessary. In general, the purpose of assessment is to make valid judgments about students' abilities and competencies in certain domains (Clarence, Quinn & Vorster, n.d). However, the process of seeking and interpreting the evidence of achievement determines where learners are in their learning; what their next learning goals should be and how to achieve them. Hence, it is also poised to review and discuss critically about the present and future trend of assessment. According to the Gordon Commission (2013), a reconceptualization of the epistemology of assessment – from assessment *of* education to assessment *for* education is timely. From using assessment to *evaluate* learning to using assessment to *enhance* learning. Conventional assessment is often linked to the evaluation of an individual learning. By default, conventional assessment is defined as a traditional pencil and paper test to gauge an individual knowledge and skills.

The evolution of assessment from a traditional pencil and paper test to digital assessment has witnessed the challenges in developing psychometric tools to provide accurate, valid and reliable evidence of each student's learning at multiple time points, from different learning sources, varied assessment types, and diverse learning styles (The Gordon Commission, 2013). This article also discusses various perspectives on assessment in education and their meanings; problems associated with accountability, reliability, and validity as a framework for assessment; and the notion of assessment as evidential reasoning (Gorin, nd; the Gordon Commission, 2013). Deep reflection on assessment contributes to ongoing improvement of curricula, course design, and pedagogical methods. It is also important to recognize that assessment is not just an intellectual exercise, but that it has

real effects on the lives of students (Clarence et al., n.d). The intent is to provide practitioners with tangible alternatives to conventional assessment systems that are able to engage and produce more responsive learners (Gordon et al., 2012). This article is also written to stimulate discussion and debate concerning the multiple-dimensional purposes of assessment in education; the possibilities for the improvement of teaching and learning processes and outcomes through the more creative use of measurement in education; visions of future change in the nature and practice of education; and the need for a paradigm shift. Traditionally, assessment in the classroom tends to collect cognitive data − both summative and formative − to provide an indicator of each student's achievement. In the future, digital technology could be used to reduce the testing burden and target assessment for each student based on his/her own relevant learning trajectories (Gordon et al., 2012).

Paradigm Shift in Assessment for Higher Education

The growing emphasis on accountability and transparency that characterizes the new paradigm has led to increased demands for colleges and universities to engage in outcomes assessment for accountability purposes (Secolsky & Denison, 2011). Oldfield et al. (2012: 1) assert that:

> Assessment is universally recognised as one of the most important – and powerful – elements of an educational experience. It is also seen as one of the hardest to reform. However, there is an increasingly demonstrated need for assessment reform, particularly if it is to keep up with other theoretical, cultural and technological developments affecting teaching and learning. Current assessment methods, especially the heavy emphasis and priority afforded to high-stakes summative assessment, are often described as outdated, ineffective and, at worst, damaging.

In the past, assessment of learning outcomes has traditionally been an internal matter for many universities. But now, with the shift toward more universal and internationally-oriented higher education systems, using internal assessments to yield more general information might, without some external check, trigger concerns about grade inflation (Bologna Secretariat, 2012). This is not to imply that conventional assessment of student learning is less important, but the recent trend shows the emergence of new modes of assessment is inevitable. New learning theory suggests that teachers should promote student-centered learning in higher education, characterized by innovative methods of teaching that involve students as active participants in their own learning. In universities, lecturers should provide a supportive and inspiring learning environment (Bologna Secretariat, 2012). Hence, the emphasis on student-centric learning is to reinforce the interplay between teaching and learning so as to determine effective teaching strategies and to experiment new ideas to enhance students' learning outcomes (McCombs & Miller, 2007). Research scrutiny on teaching-learning processes is prompted by the pressure on costs which call for improving efficiency of higher education's provision. In addition, the need for evidence-based research on effective learning and assessment is evident due to the accountability movement. To have an efficient assessment, Liu (2011) suggests the prominence of measurable outcomes for the evaluation of instructional effectiveness in higher education. In this context, measuring university students' learning outcomes across borders, languages, and cultures is by no means unique or isolated. In fact, it is part of a wider context of a global initiative to promote outcome-based education and assessment. Nevertheless, the over-reaching purpose of assessment in higher education is to improve teaching and learning processes and outcomes by using valid and reliable evaluation instruments. In the future, however, university lecturers as an agent of change should reframe their thinking on assessment to suit future demands (Hersh & Keeling, 2013).

According to Barr and Tagg (1995), higher education is shifting from an "instruction paradigm" – characterized by an emphasis on delivering lectures and providing students with the means to learn – toward a "learning paradigm" in which the emphasis is on the learning process of students (Tremblay et al., 2012). In the new paradigm, the main pedagogy has also been shifted to a learner-centered focus (Cornelius-White, 2007; Weimer, 2002). There is some evidence that academic staff has embraced the principles of a learning-centered philosophy in the United States and they are willing to change their practices to espouse new classroom strategies (Scott et al., 2009; Webber, 2012). Cheng (2009) laments a slower pace in implementing learner-centric reforms in universities in Asia-Pacific region because they are more focused on lecturers' management and professional development. Learner-centric paradigm is also prominent within European Union higher learning institutions, as affirmed in the Bucharest Bologna Communiqué to enhance student-centered learning in higher education, characterized by innovative methods of teaching and learning that involve students as active participants in their own learning (Bologna Secretariat, 2012).

In terms of students' evaluation, The Gordon Commission (2013) states that the current focus is on the fundamental and basic skills of reading, writing, and mathematics, and to a lesser degree on science and liberal arts. So the challenge is to go beyond these basics and consider a wider range of competencies. The Commission also suggests a more integrated approach for teaching, curriculum development, and evaluation that supports students' learning and allows students to move beyond the basics and transfers that knowledge to other contexts transcending the one in which the original knowledge was learned. Hence, the importance of collaboration and recognizing the varying social contexts in which students learn is evident. Assessment, broadly construed, is a central element of education and should be aligned to both teaching and learning goals; it is not the only tool for improving students' outcomes. In fact, in the new paradigm of Education 4.0 for higher education to be effective, universities ought to be redesigned to integrate advanced technology and connectivist philosophy in pedagogy and assessment.

Technology-enhanced assessment (TEA) could be used to measure not only what students know and are capable of doing but also their higher order thinking. TEA is the use of technology to add value to the assessment and feedback processes. Gaming, simulations and artificial intelligence (AI) are examples of new technology in assessment (Kahl, 2015). In the future, artificial intelligent robot or non-human smart assessor could be used to measure students' higher-order thinking. Nonetheless, TEA in the current literature is more focused on online assessment. However, the validity of the online assessment systems used in educational testing to measure students' competence is still questionable. The usage of mixed modes (online and paper) reflects a more realistic tool of assessment in higher education. Furthermore, security issues, limited testing time, and the need to accommodate a large number of simultaneous users have made the online test delivery systems vulnerable (Kahl, 2015). In fact, there have been instances in which online assessment has led to the development and use of lower level questions that can be scored by the existing online systems. There are some advantages and disadvantages of various assessment techniques but almost all assessment techniques have weaknesses, and there is no single assessment technique that results in a perfect assessment. Finding the right assessment method depends on the aim of the assessment in terms of skills or knowledge that needs to be evaluated.

Principles of Assessment

By default, assessment is often defined as a process of gathering data. More specifically, in higher education, assessment is a means for lecturers to collect relevant information about their teaching and their students' performance (Hanna & Dettmer, 2004). Assessing generally refers to the process of collecting critical information about an individual's knowledge, competencies and attributes, either in formal or informal learning contexts (Shute et al., 2009). Hence, a valid and reliable tool to collect such data is required. The basic functions of an assessment tool are to diagnose and to predict competencies and capabilities of an indivdual. The data provide a picture of a range of activities using varied forms of assessments such as quiz, final examination, observation, and feedback. Once these data are gathered, the lecturer can then evaluate the student's achievements. Evaluation, therefore, draws on one's judgment to determine the overall value of an individual's worth based on the assessment data. It is also a decision-making process to improve the weaknesses, gaps, or deficiencies of an individual (Hanna & Dettmer, 2004).

Since assessment is, basically, a claim about an individual's competencies, it should be treated as a process of gathering evidence to confirm or refute a particular claim. That evidence, could come from multiple sources and can be used to improve both how and what the individual is learning. The evidence might include activities ranging from simple to complex performance tasks pursued within classrooms as well as assessments external to regular classroom activities. According to the Gordon Commission (2011), the objectives of assessment fall into two general categories: first, assessment *of* learning generally involves an evaluation of a student's achievement after a period of instruction. Such assessment could be used to consider admission to a university or other opportunities, to appraise programs or to assess approaches. Second, assessment *for* learning involves a more restricted and focused appraisal of student knowledge during a shorter period. It is designed for purposes such as adjusting and improving instruction.

Table 1 shows general principles of assessment in higher education. A lecturer could use a variety of assessment techniques including authentic assessment that clearly reflects the participatory, learner-centered, and task-based approach to learning (Classroom Assessment, 2004). The percentage of the mark assigned to each component of the curriculum should reflect the amount of time that the students spend on that component. If students are spending 30% of their time on group activities, 30% of their final mark should be determined by group evaluation. Theoretically, a test should measure what it claims to measure. Varied modes of learning outcomes should be evaluated in different ways. For instance,

knowledge-related learning outcomes can be assessed by objective tests but attitudes are better assessed by observation and feedback. Students should be involved in determining the criteria that will be used for evaluating their work. This can be part of the planning process before the lesson starts. Students should have a clear understanding of the types of evaluation procedures that will be used throughout the lesson.

Besides conventional cognitive assessment such as standardized tests, authentic assessment could be used to measure deeper knowledge and skills. Authentic assessment includes those alternative evaluation tools in higher education systems that are able to engage and produce more responsive learners (The Gordon Commission, 2012). Authentic assessment can measure cognitive achievement and ability of individuals based on their deep understanding, higher-order thinking, and complex problem-solving skills. Authentic assessment tends to focus on real-world contextualized tasks, enabling students to demonstrate their competency in an authentic setting. Examples of authentic assessment include solving real problems, creating products or portfolios, or making simulation. Therefore, it is a powerful tool for assessing a student's 21st century abilities and competencies. Authentic assessment requires a student to develop his or her own answer in response to a stimulus or prompt which is called a constructed-response assessment (Stecher et al., 1996).

Assessment tools and techniques used to appraise students will depend largely on what is being evaluated. Students can be assessed by observing them as they are engaged in classroom activities, by measuring how well their work meets specific criteria, or by giving them different kinds of test (Classroom Assessment, 2004). Students could be assessed individually or in groups. The assessment could be conducted by the lecturer, by the student himself or herself, or by other students. Varied assessment tools such as anecdotal records, checklists, seminars, performance assessments, peer evaluations, portfolios, rating scales, rubrics, and online assessment could be used. Anecdotal records are systematically kept notes of specific observations of student behaviors, skills, and attitudes in the classroom. Systematic collection of anecdotal records on a particular student provides excellent information for evaluation of learning patterns and consistency of student progress. Well-kept anecdotal records provide a valuable, practical, and specific reference about a student's competencies. Akin to anecdotal records, portfolio as a purposeful collection of a student's works that exhibits the student's efforts, progress, and achievements in one or more areas (Classroom Assessment, 2004).

Checklists, rating scales, and rubrics are assessment tools that state specific criteria that allow lecturers and students to make judgments about an individual's competence. Checklists list specific behaviors, knowledge, skills, attitudes, and strategies for assessment, and offer systematic ways of organizing information about individual students or groups of students. Checklists usually offer a 'yes' or 'no' format in relation to the specific criteria and may be directed toward observation of an individual, a group, or a whole class. Checklists may be single-use or multiple-use. Rating scales allow for an indication of the degree or frequency of the behaviors, skills and strategies, or attitudes displayed by the learner. Rubrics are an expanded form of rating scale that list several specific criteria at each level of the scale. The quality of data acquired through the use of checklists, rating scales, and rubrics is highly dependent on the quality of the descriptors selected for the assessment. The benefits are also dependent on students' direct involvement in the assessment and interpretation of the feedback provided (Classroom Assessment, 2004). In the same token, seminars could provide opportunities for students and lecturers to discuss learning challenges and areas for improvement, and to set learning goals. Seminars are usually short informal meetings held with individual students, or a small group of students, and involve diagnostic listening, questioning, and responding. Interview, on the other hand, is a technique to gather specific information. Interview protocols comprised a set of questions that an interviewer asks for a specific purpose. Finally, performance assessments are concerned with how students apply the knowledge, demonstrate skills, and strategies to solve a specific problem. The problem could be content-specific or interdisciplinary and relate to real-life application of knowledge, skills, and strategies.

For future assessment, the principles of good assessment are unlikely to change even though examinations or qualifications change. In fact, the fundamentals of what makes good assessment will not change (Burdett, 2016). Good assessment must reflect everything that is considered pertinent to a good education. Simply put, good assessment cannot be divorced from good education. It is critical to get both right, and to understand the complex interplay between them. Valid assessment is not only designed to measure accurately the target audience but more importantly to find appropriate strategies to improve learning. As succinctly explained by Burdett (2016:14):

Table 1: Principles of Assessment

Assessment…	*Assessment…*	*Assessment…*
1. An Integral Part of Instruction and Learning • is meaningful to students • leads to goal setting • fosters integration with other curricular areas and application to daily life • reflects instructional strategies used • uses a wide variety of methods • reflects a definite purpose	**2. Continuous and Ongoing Process** • occurs through all instructional activities (observations, conferences, responses, logs) • occurs systematically over a period of time • demonstrates progress toward achievement of learning outcomes	**3. Authentic and Meaningful Learning Processes and Contexts** • focuses on connecting prior and new knowledge (integration of information) • focuses on authentic context and tasks • focuses on application of strategies for constructing meaning in new contexts
1. Collaborative and Reflective Process • Encourages meaningful student involvement and reflection • Involves parents as partners • Reaches out to the community • Focuses on collaborative review of products and processes to draw conclusions • Involves a team approach	**2. Multidimensional, Incorporating a Variety of Tasks** • Uses a variety of authentic tasks, strategies, and tools • Is completed for a variety of purposes and audiences • Reflects instructional tasks	**3. Developmentally and Culturally Appropriate** • Is suited to students' developmental levels • Is sensitive to diverse social, cultural, and linguistic backgrounds • Is unbiased
1. Focuses on Students' Strengths • Identifies what students can do and are learning to do • Identifies the competencies in the development of knowledge, skills, and attitudes • Considers preferred learning styles • Focuses on celebrations of progress and success • Provides for differentiation • Provides information to compare a student's performance with his / her other performances	**2. Based on How Students Learn** • Uses sound educational practices based on current learning theory and brain research • Fosters development of metacognition • Considers multiple intelligences and learning styles • Uses collaborative and cooperative strategies • Considers research on the role of memory in learning • Reflects current models of language learning	**3. Offers Clear Performance Targets** • Encourages student involvement (setting criteria, measuring progress, working toward outcomes and standards) • Encourages application beyond the classroom • Provides a basis for goal setting • Provides students with a sense of achievement • Provides information that compares a student's performance to predetermined criteria or standards

Source: Classroom Assessment (2004)

> Good assessment does not mean valuing only what we can measure well, but finding ways to measure what we value.

Given the paradox that surrounds education and assessment, nationally and internationally, it is hard to state categorically what "good assessment" is – values and cultural influences blur the borderlines – but good educational assessment needs to meet some basic criteria (Bassett, 2015). Assessment needs to have a clearly defined purpose. Next, it must be fit for that purpose – it must measure what the learners have learned. In other words, ensuring the validity of the assessment is critical. Most importantly, but often overlooked, good assessment should follow medical principle of *primum non nocere* – it should do *no harm*, in this case to the learners (Burdett, 2016). In universities, designing curricula and assessments often takes an integrated view with assessment as a central part of the learning experience. Other factors such as styles of learning and teaching, pedagogic skills, and assessment literacy are also indispensable. In short, good assessment is inextricable from good learning (Bassett, 2015). According to Bennett (cited in The Gordon Commission, 2013), assessment for education ought to:

- Provide meaningful information
- Satisfy multiple purposes
- Use modern conceptions of competency as a design basis
- Align test and task designs, scoring, and interpretation with those modern conceptions
- Adopt modern methods for designing and interpreting complex assessments
- Account for context
- Design for fairness and accessibility
- Design for positive impact
- Design for engagement
- Incorporate information from multiple sources
- Respect privacy
- Gather and share validity evidence
- Use technology to achieve substantive goals

In addition, feedback is another important element in higher education assessment (Wilson & Scalise, 2006). A major literature survey of over 250 sources on formative assessment (Black & Wiliam, 1998) found that effective assessment practices can play a powerful role in the learning experience and in improving a student's performance – but only if certain conditions are satisfied. Student tasks needed to be aligned, or on target, with learning goals, and students need to receive meaningful and timely feedback on their performance, as well as targeted follow-up work. To effectively monitor their learning, students should understand three main aspects regarding how they would be assessed: (a) the measures on which they will be judged, (b) where they stand on these measures, and (c) how they can improve (Black & Wiliam 1998; Wilson & Scalise, 2006).

According to Knight (1995), summative assessment in higher education has fallen into disarray, which requires a reappraisal of the assessment system. In general, educators are faced with the difficulties in understanding assessment issues. Basically, education is about learning, higher education is concerned with certain sorts of valued learning. Curriculum specifies the skills and understandings that are valued and, increasingly, identifies desirable outcomes and dispositions (Dweck, 1999). Hence, students in higher education might be expected to understand material of importance in a subject area; to develop subject-specific and general skills; to become more confident; and to reflect and think strategically. There is a strong evidence that student achievement is related to engagement (Astin, 1997). However, engagement does not simply equate to the amount of involvement in and time on task; it extends to learners' engagement in communities of practice, to their involvement in a variety of networks and to the amount and quality of interchanges with others.

Besides engagement, feedback is also critical in assessment. Knight (1995) asserts that it is helpful to distinguish between assessment systems primarily intended to provide feedout and those intended to provide feedback. Feedout is focused on summative or high stakes assessment, which is supposed to be highly reliable. When an assessment certifies or warrants achievement it has a feedout function, in that the marks and/or grades could then be treated as a sole performance indicator for the student. The summative assessment often focused on cognitive domain and ignored other domains such as creativity and artistic ability. Relying heavily on summative assessment and using it as a feedout is quite risky. According to Knight (2002), careless or capricious feedout is unethical and could be challenged.

Assessment also has a feedback function when it is intended to improve learning. If Knight (1995) argued that summative assessment is in disarray, then the feedback functions should be reappraised, thereby putting consideration of the place of assessment in higher education in a fresh light.

Feedback is supposed to be an interactive process between a teacher and a learner. Of course, there are other types of feedback such as peer feedback. In the contexts of teacher-student feedback, formative feedback is to assist students to improve their work and prevent them from making the same mistakes. Summative feedback comprised a teacher's comments on the students' specific work and the teacher's explanation on how the marks were derived (www.federation.edu.au). In order for feedback and reflection process to work, an element of trust must be there. According to Davis and Dargusch (2015), teachers need to safeguard the trust of their students. Lack of mutual trust can negatively influence the feedback process. In the same token, in assessment, trust is pertinent.

Literature has shown that there is evidence of mistrust regarding the accuracy of the assessment outcomes especially when it comes to university graduates. According to Knight (2002), assessment is supposed to supply evidence to bridge the trust gap with the belief that it is prudent to specify objectives, measure inputs, assess performance in terms of those objectives, allocate the next round of resources to efficient providers and apply sanctions to the less efficient. Lecturers should be assessment-savvy since assessment is related to upholding standards and also related to the enhancement of quality of the graduates. Due to public's low-trust and risk-averse perception on the assessment data, it becomes evident that summative assessment systems are less likely to provide the robust performance indicator (Knight, 2002).

Assessment is a vital barometer of a didactic process, as it provides measurable evidence of learning. However, some scholars in the field have criticized that the current assessment practices especially in higher education have deviated from their core purpose - to support learning (Timmis et al., 2016). In fact, assessment is often seen to be preoccupied with qualifications and narrow achievements, and critiques of current assessment systems are numerous (Attwood & Radnofsky, 2007; Schwartz & Arena, 2009). These criticisms have pushed for reform, which is backed by a growing understanding of what constitutes effective assessment and how to accurately measure students' learning. New learning theories have

contributed to a deeper understanding of the relationship between feedback processes and effective learning (Whitelock & Watt, 2008; JISC, 2010). Such developments have particularly acknowledged the importance of learner self-regulation and peer-assessment in deeper engagement and effective learning. Another emphasis on developing and assessing characteristics and dispositions of learners that augment more traditional areas of the curriculum – often labeled as 21st century skills – has also become a familiar mantra within the field (Oldfield et al., 2012).

Historically, based on the theory of classical measurement, assessment was constructed to evaluate students' ability and achievement. And assessment also could be used in the service of accountability, selection, and certification (The Gordon Commission, 2013). In a traditional paradigm, Kaestle (2012) acknowledged the power of standardized, multiple-choice tests due to their cost effectiveness and efficiency as compared to the more complex, more subjective and higher-level assessments. Shute et al. (2010: 4) succinctly put:

> When confronted by problems, especially new issues for which solutions must be created out of whole cloth, the ability to think creatively, critically, collaboratively, and then communicate effectively is essential. Learning and succeeding in a complex and dynamic world is not easily measured by multiple-choice responses on a simple knowledge test. Instead, solutions begin with re-thinking assessment, identifying new skills and state standards relevant for the 21st century, and then figuring out how we can best assess students' acquisition of the new competencies – which may in fact involve others doing this assessment (e.g., community, peers).

The challenge particularly relevant to this article is what kind of assessment drives the teaching that supports the competences and dispositions that we think matter. Inherent to the discussion of how to embed skills, knowledge, dispositions, and literacies into education is how they should be assessed. A 2005 survey of educational assessments that support the 21st century learning notes that the movement to embrace and foster widespread adoption of the new skills hinges on identifying ways to assess students' acquisition and application of this knowledge and there is a comparative lack of assessments and analyses focused on elements of 21st century learning (Honey et al., 2005). Hence, there is a critical need to further develop new assessment tools that measure higher-order, more complex thinking – such as the application of knowledge to complex situations (Honey et al., 2005; Shute et al., 2010).

One of the main issues of the current assessment practices is that most assessment instruments are identified as difficult to calibrate, measure, and evaluate. This may be in part because they can be seen as too generic or vague to measure performance in any meaningful way. Bennett and Barker (2012) make a similar argument into the complexity of measuring the higher-order thinking skills of the students. Conventional assessment systems therefore are often measuring what is easy to assess rather than what has been learned. Shute et al. (2010) proposed psychometric models that can evaluate certain competencies and use immersive learning environments to elicit and measure data related to these skills. Recognizing that current immersive approaches lack an assessment infrastructure to maximize learning potential, Shute et al. (2010) conducted a significant literature review to determine relevant competencies to assess. They chose to develop competency models for systems thinking, creativity, collaborative learning, and managing social identities and reduced each one to a granularity that could be measured in order to diagnose different levels of competency. Using a process called "evidence-centered design" (ECD) to support the validity of the assessments they devised, the researchers designed immersive learning environments by listing the knowledge, skills, and attributes that should be assessed, identifying behaviors that demonstrate these elements and crafting tasks that should elicit these behaviors and create the assessment evidence. They then measured the competencies within immersive learning environments that provide valid assessment to support students' learning via formative feedback, collaboration, and personalized content (Shute et al., 2010).

According to Gordon et al. (2012), even though the 3Rs – Reading, wRiting, and aRithmetic will continue to be essential skills but the 21st century skills emphasize more on the "Cs" as essential processes in education. The Cs such as creativity and innovation, conceptualization and problem-solving, communication and collaboration, and computer literacy. The Cs are replacing the "Rs" as the contemporary learning paradigm moves toward 21st century skills. Learning how to think critically and creatively, reason logically, interpret relationally, and to access and create knowledge will be more distinctive in the new millenium. However, traditional testing is not designed to measure students' higher-order thinking skills (Kahl, nd). Hence, the Gordon Commission (2013) recommends developing "holistic" methods for assessing students' knowledge, skills, and higher-order thinking. Diverse contexts for assessment especially in higher education are a significant challenge for educators. The growing concern for context, perspective, and situated meaning that is

associated with postmodern theory constitutes a possible challenge to higher education and its assessment systems. In addition, the tensions between the positivist traditions that focused on psychometric measurement and the post-positivist and neo-pragmatic post-modernist test theory that seemed to be more appropriate to contemporary conceptions of "qualitative" assessment in education are evident (The Gordon Commission, 2013). Hence, the rise of formal and informal assessments due to varied assessment paradigms is expected.

Nevertheless, two key issues appear as significant challenges in assessment in higher education. First is the issue of constructing valid and accurate instruments to measure the 21st century skills. Second, is the issue of technology usage in assessment in higher education (Kahl, 2015). Specifically, the students' lack of higher-order thinking skills and their poor ability to apply foundational knowledge and skills to more complex real-world problems are alarming. Furthermore, online testing commonly used in universities has tended to focus on low-level, isolated knowledge and skills, and the students are not ready to participate in high-stakes online testing. Pellegrino and Quellmalz (2010) believe that there is a symbiotic connection among theory, research, technology, and practice, especially when it comes to the integration of curriculum, instruction, and assessment. The increasing influence of digital worlds means that young people are seen to be taking on new participatory and collaborative roles in learning online and outside the classroom, and there is a growing interest in incorporating these roles and practices inside education. Bennett (2002) argued that the incorporation of digital technology into assessment is inevitable. However, as has been demonstrated by the introduction of new digital technologies, the view that educational reform through technology is usually hampered by the inefficiency in implementation and complexity of change in education systems. In addition, Bennett (2002) acknowledged that the incorporation of technology into higher education assessment may not be easy. But educators must deal with it and TEA is considered as an alternative assessment.

Alternative Assessment

As a response to educators' dissatisfaction with multiple-choice and other types of standardized tests, alternative types of assessment were introduced. Alternative assessment is not only designed to measure the learning outcomes but also students approach to their learning (Murphy, 2009). Early assessment − particularly when it provides students with timely feedback − is focused on providing input on students' strengths and weaknesses. It also gives lecturers an indication of how effective their teaching approaches are in terms of students' comprehension. Effective feedback on work submitted is crucial in helping students learn by pinpointing their weaknesses and what they need to do to improve. Alternative assessments range from written essays to competency-based assessment to portfolios. In the 1990s, alternative or more commonly known as authentic assessment has been introduced in higher education. As a realistic tool, authentic assessment measures a student's creative problem-solving skills based on a real problem. Now, in this cyber era, digital tools can be used to assess students' creativity and higher-order thinking skills. Hence, technology-enhanced assessment (TEA) has the potential to reform assessment systems. The current literature suggests it is vital to integrate TEA, shifting the focus from traditional assessment practices to the current TEA to improve learning. Digital experts are offering tips to improve assessment and to advance the debate on how TEA could facilitate such reform. Digital tools could be used for measuring complex thinking skills and learning processes, such as immersive learning environments like simulations and digital games, web tools, use of mobile and handheld devices, learning apps, and social media (Pellegrino & Quellmalz, 2010). Mobile-based inquiry and mobile-based assessment could be a new learning and assessment trend (Suarez et al., 2018).

In the digital age, technology is a catalyst for learning and a platform for assessment. Digital technology has prompted the development of advanced and comprehensive assessment systems. For instance, digital technology provides a platform to collect and manage big data gathered throughout the teaching, learning, and assessment process that could be used to map the progression of students learning (The Gordon Commission, 2013). According to Timmis et al. (2016), the idea that digital technologies will transform education and specifically assessment is not a new one. Novel technologies and digital tools open up new possibilities in educational assessment, such as offering more personalized, instantaneous or engaging assessment experiences. In a number of cases, these possibilities have been realized and demonstrated benefits. However, the literature suggests that the use of digital technologies has yet to be transformative and is often used via traditional assessment methods or within pockets of innovation that are not widespread. In addition, it is critical to understand how technologies could support or spur educational changes and what affordances are most useful to support the outcomes that educators

envisage within the current educational context. Even though the potential of digital technologies is evident, we should not be naïve about the complexity of the digital transformation especially in digital assessment. For instance, the ethical questions raised by the use of digital technologies in assessment, such as the collection, use, and protection of the large personal data sets, as well as how the use of these tools could reinforce inequalities within education. So, the question becomes how to mobilize a new vision for assessment that includes the use of advanced technology (The Gordon Commission, 2016).

Technology can enhance students learning when used in conjunction with active engagement, strong participation in groups, high interaction and feedback, and seamless connections to real-world contexts (Roschelle et al., 2000). Online resources such as digital games could enhance students' thinking skills if it is used to solve complex problems. In addition, the use of games allows lecturers and students to augment boring lesson with timely, meaningful contexts, and individualized instructional experiences (Quinn & Valentine, 2001). In gaming, students are more likely to use strategic thinking creatively in order to win a competition. An online platform will make it possible to deploy and manage students learning and assessment in a cost-effective way while minimizing additional burdens for lecturers, students, and administrators. Gamification would be much more interesting than a traditional system for teaching and learning (Gordon et al., 2012). However, digital assessment for the gamification is still at its nascent development. Therefore, the validity of digital assessment could become an issue.

Shaffer and Gee (2012) proposed GATE (Good Assessment for Twenty-first-century Education) − a new assessment system using games. Games have changed learning. Good principles for learning are even more important in the 21st century, where students need to learn to work with others and with digital tools to solve problem and not just to memorize facts. The 21st century skills like innovation, critical thinking, and systems thinking could be measured using GATE. Digital technologies − including games − are letting young people to learn and solve problems and to actively participate in higher-order learning process. Through the internet, young people are becoming amateurs with professional level skills in areas like storytelling, graphic arts, game design, photography, and robotics (Leadbeater & Miller, 2004). GATE utilized games like *Sims* and *Urban Science* to measure students' higher-order thinking, problem-solving skills, and creativity (Shaffer & Gee, 2014).

Reframing Assessment in the 21st Century Learning

Assessment is changing rapidly, unprecedented in the history of psychometrics. Future assessment focuses on the dynamic problem-solving and critical thinking skills associated with using technology to enhance students' 21st century skills. But what actually are we measuring? - is it the students' memory or their problem-solving skills? The traditional notion of examination to measure their knowledge and understanding may be useless with the ubiquitous availability of smart computers with fastest search engine and android phones where the students could find any information instantaneously to answer almost all the traditional examination questions. Future learning such as using virtual learning environment (VLE), virtual reality and augmented reality will be dominant in the future learning especially in high-risk tasks and performing complex procedures (JISC, 2010; Kumar, 2017). VLE is an online system comprising a range of tools to support learning and the management of learning. And, the mixed-reality platform (VR and AR) would be used to trigger just-in-time learning (Kumar, 2017). Just-in-time assessment would also be possible to respond to just-in-time learning. E-universities would be expected to invest and explore the advanced learning and digital assessment methods. The advent of intelligent assistant in smart phones such as Siri or Galaxy would enhance the use of machine-enabled-learning chatbots (Kumar, 2017). In addition, gamification will continue to be critical domain. Game-based learning and gamification have greater impact in imparting critical information. According to Kumar (2017), gaming increases the "focus" in learners as they immerse themselves in the process of gaming. Often time, gamification is designed to attract students to invest their time and energy in a challenging activity. In other words, learning and assessment become more mobile. Mobile-based learning, inquiry and assessment are a way forward.

In a contemporary society, emphasis is given to the importance of knowledge repertoire and its role as a basis for relating to new chunks of knowledge. There is a growing demand for the capacity for adaptability and disposition to improve learning and assessment. Bereiter and Scardamalia (2012) have identified five critical competencies for university students: (a) knowledge creating where students are able to build, amend, and create knowledge, (b) working with abstractions where students should be able to work with abstract ideas and convert them to real world applications − going from the theoretical to the practical, (c) systems thinking where students should be able to recognize and understand the complexity of the world and consider how to take advantage of the complexity whenever possible, (d) cognitive persistence

where students should be able to sustain focus on their study in the face of increasing obstacles and distractions, and (e) collective cognitive responsibility where students should be able to engage in collective work that is collaborative (cited in The Gordon Commission, 2013). Hence, learners should be given instructional space to collaborate, and assessment could be adapted to individual and collaborative efforts to solving problems that could be measured and evaluated. Furthermore, the Gordon Commission report (2013) recommends preparing learners to engage in lifelong learning and enabling them to gain new competencies while adapting them to the accelerating pace of change.

In the era of globalization and the advent of the digital age, there is a paradigm shift occurring in most universities' curriculum and academic structure. Apart from the creation of new programs, the approach and orientation have also been shifted from input-based education to outcome-based education. The criteria for the new generation of quality graduates have been much broadened (Chung, 2011). A pertinent question is how assessment can be used most effectively in the 21st century to advance that vision by serving the educational needs of university students, institution and society? And also to stimulate a debate about assessment and its relationship to teaching and learning in the face of technological advancement. Through rigorous debate and deep reflection, it could provide an opportunity to reframe the purposes of educational assessment (The Gordon Commission, 2013). Based on the literature review, TEA benefits to learning and specifically to assessment are well documented. Several scholars (Angus & Watson, 2009; Pellegrino & Quellmalz, 2010; Schwartz & Arena, 2009; Whitelock & Watt, 2008) have highlighted the benefits associated with the integration of TEA. Reframing conventional assessment in higher education could be done by integrating digital technology in assessment as follows:

- **Provide immediate feedback** – TEA offers "real-time" learner-led feedback that diagnoses and reduces misconceptions quickly and provides more opportunities to act on feedback from a range of audiences. This can also lead to useful and new forms of teacher and learner dialogue, improvements of the assessment experience and increased student engagement.
- **Increase learners' autonomy, agency, and self-regulation** – TEA supports more personalized responses to work and progress and could facilitate self-evaluative and self-regulated learning through diverse collections of evidence, immediate formative feedback, better tracking of progress to learning outcomes and reflection on achievements. The visualization of data is particularly relevant.
- **Support for collaborative learning** – TEA offers opportunities for peer assessment, undertaking and tracking knowledge building and sharing activities, co-evaluation, and social interaction.
- **Provide authenticity** – TEA provides ways to assess complex skills like problem-solving, decision making, and testing hypotheses, which is argued to be more authentic to future work experiences and what skills and knowledge will be required after formal education.
- **Widen range of measurement** – TEA creates and analyzes complex data sets that have previously been difficult to assess. For example, simulations can simultaneously measure technical computer skills, decision-making and strategy processes as well as subject specific skills like scientific enquiry. These also include tracking cognitive processes that can be developed into patterns showing levels of expertise.
- **Provide flexibility and appropriate responses** – TEA offers choice in approach, format and timing of assessment for students. They can access assessment at a time and place of their own choosing, with no constraints due to time or location. Additionally, digital tools like simulations provide multiple modalities and could offer more accessible assessment than text-based tests for students with varied learning styles or language backgrounds. Regular feedback can also make students feel less anonymous and more personally connected to their learning and courses, particularly in university settings. These possibilities can also challenge traditional methods of assessment and require a rethink of old practices.
- **Increase efficiency and reduce teachers' workloads** – TEA improves efficiency of data management such as marking, moderating and storing information by helping teachers use their time and resources better; offers more environmentally friendly administration of assessment.
- **Improve student performance by using e-feedback** – TEA improves student performance and demonstrates other benefits, such as better student engagement.
- **Integrate formative assessments** – TEA can integrate instruction and assessment, as in immersive learning environment or programmes that monitor how students solve problems on the computer and provide immediate feedback.

Future of Assessment in Higher Education

Today's world has witnessed the emerging paradigm by which goals and processes of assessment in higher education are changing. Traditional psychometrics associated

with educational measurement, such as reliability, validity, and fairness, may require reconceptualization to accommodate changing conditions, conceptions, epistemologies, demands, and purposes of the future assessment in higher education. The traditional conceptions of what it means to educate and to be an educated person are changing. Notions of and demands on practice in the teaching and learning enterprise are broadening and expanding. And the concern with accountability forces this dynamic and eclectic enterprise to constrict and, in some cases, to compromise in the interest of meeting certain accountability criteria. These realities, coupled with changes in epistemology, cognitive and learning sciences, as well as in the pedagogical technologies that inform teaching and learning, are narrowing – possibly even stifling — creativity and flexibility in teaching and learning transactions. These are among the perceived compelling contextual problem. Changing concepts and practices in educational assessment are making some traditional practices in psychometrics obsolete. The work of the Gordon Commission (2013) rests on the assumption that assessment in education can inform and improve teaching and learning processes and outcomes. In terms of the educational assessment policy, practice, and technology; consider what will be needed from educational measurement in the 21st century; and to generate recommendations on educational assessment design and application that meet and/or exceed the demands and needs of education — present and future.

According to the Gordon Commission (2013), the future of assessment in higher education would be influenced by critical research findings, psychometric advancement, and digital technology. Higher education assessment will need to keep pace if it is to remain relevant. It is predicted that the future of assessment will be digitized, personalized, and possibly gamified requiring significant adapting and reinventing educational assessment. A significant challenge as a field will be to retain and extend foundational principles, applying them in creative ways to meet the demands of the digital era (The Gordon Commission, 2013). If assessment in higher education is to remain relevant, future educational assessment systems will also need to provide trustworthy and accurate profile of the graduates' knowledge and competencies to future employers. Future assessments in higher education should be robust in documenting graduates' abilities in their content and related fields. Even at this present time, increasing demands for graduates with digital competence are anticipated.

In the 20th century, testing and measurement to evaluate individual's abilities dominated the assessment systems. But in the 21st century, assessment is digitally enhanced to determine holistic human capabilities. Assessments in the new age may comprise diagnostic, prescriptive, instructive, responsive, and/or digital tools that are capable of capturing an individual's abilities and potentials (Timmis et al., 2016). Furthermore, innovation in assessment is adopted in higher education mainly due to the advent of digital paradigm. But the challenges of integrating technology in assessment are still unfinished agenda. The barriers that could hinder the wider adoption of technology enhanced assessment have been highlighted by several scholars (Mansell, 2009; Mogey, 2011; Ripley, 2007; Timmis et al., 2016; Whitelock & Brasher, 2006; Whitelock & Watt, 2008). Examples of obstacles include:

- Potential barriers to the adoption of technology enhanced assessment practices
- Practitioner concerns about plagiarism detection and invigilation issues
- Difficulties in scalability and transferability of practices, particularly in higher education when different departments often have autonomous, separate working practices and cultures
- Concerns over reliability and validity of high-stakes assessment (such as how to ensure all students receive equivalent tests if questions are selected at random from a question bank)
- User identity verification and security issues
- Lack of lecturer's time and training for rethinking assessment strategies and how to use new technologies, from a technological and pedagogical perspective
- Cost of investment - Implementing new technology systems requires significant investment in training, support and interoperability. Additionally, some tools require large capital investment and infrastructure that many institutions do not want to prioritize (for example, having enough computers for those taking exams for on-screen testing)
- Examination boards are highly concerned with ensuring standards are not compromised
- Lack of policy leadership and system-wide imperatives
- Constraints within the examination systems
- Lack of suitable physical spaces for technology enhanced assessment, which have not developed for the needs and purposes of technology enhanced assessment.

According to Timmis et al. (2016), despite substantial challenges facing those promoting technology enhanced assessment, some studies have identified characteristics of successful TEA implementation and engagement. Beevers (2011) found that projects with solid planning with clear pedagogic needs and supportive

leadership are more likely to be successful. Whitelock and Brasher (2006) note the following enablers: active leadership and management support, pedagogical and technical support for lecturers, and solid staff development. Individuals who champion technology integration in education are also involved in assessment projects, especially regarding summative assessment (JISC, 2010). For instance, the REAP project (www.reap.ac.uk) suggests multiple strategies that are crucial when improving assessment practice, including conceptual frameworks for assessment, supportive institutional policies and departmental initiatives, student engagement in the process and quality assurance procedures to evaluate the entire process. Even though assessment innovations using digital and mobile technology were promising with potential usage but they could be a disappointment in reality if the educators in universities are reluctant to use them (Timmis et al., 2016). Nevertheless, such situation should not discourage a deeper look at the possibilities for future digital assessment. In the future, assessment especially in higher education could be ubiquitously conducted by artificial intelligent devices and mobile androids. In line with connectivist philosophy that emphasizes on autonomy, diversity, openness and interactivity, TEA is a way forward. Hence, new epistemological rationale for reframing higher education assessment is required.

Conclusion

This article reviews the crucial initiatives at improving assessment in higher education. It has highlighted the complexity of assessment because it could serve multiple purposes. There is less consensus concerning the possibility that a single test should be used, however, the consensus holds concerning the need for balance in the attention given to the use of assessment for different purposes. In contrast to traditional view, most people equate assessment with a grade but assessment in higher education now assumes that assessment could improve or hinder learning. Hence, no single framework should be permitted to distort the multi-function of assessment. Similarly, trust is a pertinent issue in dealing with assessment. Traditionally, assessment in higher education is designed to inform and improve teaching and learning processes and outcomes, without ignoring the importance of accountability. In the new paradigm, lecturers are encouraged to reflect critically on their current assessment practices. Literature and research on assessment in higher education have shown a critical need for lecturers to re-think their assessment methods and approaches. In other words, future assessment is not only regarded as a tool to measure learning but also as a way to support learning. Future assessment tends to measure creativity and higher-order thinking. Hence, the future of assessment will be influenced by the R&D output and the technological advancement. Different from traditional assessment, 21st century assessment in higher education tends to integrate advanced technology in assessment. Digital learners master content faster, are independent and have greater control of their learning and are better problem-solvers. Hence, future assessment should be designed to tailor the new characteristics of the digital learners especially in higher education. Based on connectivist philosophy, future assessment systems should also consider the diversity of the students by providing appropriate and relevant tools that will enable universities to recognize the dynamic knowledge and competencies of the students. In addition, assessment results should have pertinent implications for future learning. Dynamic and responsive assessment is needed to provide appropriate and timely feedback to students for meaningful improvement. This new perspective of assessment will require the training and employment of broadly educated specialists in digital technology, learning, cognition, measurement and assessment. It is recommended that the government and private philanthropies should increase the number of scholarships for doctoral and post-doctoral scholars dedicated to the development of future assessment tools. The present assessment in higher education will need to keep pace if it is to remain relevant. Future assessment is expected to be digitized, personalized, and possibly gamified that require significant adapting and potential reframing of educational assessment. A key challenge in the field is to retain and extend foundational principles but at the same time applying them in creative ways to meet the demands of the digital world. If assessment in higher education is to remain relevant, the system will also need to provide trustworthy and accurate information of the graduates' knowledge and competencies to the future employers. Future digital assessment will be an integral and vital part of a learning system in the sense that it can provide accurate profile of the students' capabilities, talents and aptitudes for them to chart their future career pathways. To achieve that goal, reframing assessment to support teaching, learning, and human development using futuristic assessment tools is critical and it requires deep-thinking and rigorous research. In sum, mobile-based learning, inquiry and assessement are a new way forward.

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Bad Faith Arguments for More Nuclear Power

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ABSTRACT

In the US, the decline of the nuclear industry has often been portrayed in the media and in politics as a result of partisanship and public fear. This essay argues that such claims, at least for the development of new facilities, are being made in bad faith, and that the industry's problems have more to do with technical, logistical and market difficulties that strain the financial viability of new projects. Because markets in the electricity sector are regulated, political rhetoric can have a significant, though diffuse, impact on market-making policies for all potential new energy assets connected to the electric grid, and so it is important that this rhetoric takes seriously the range of issues involved. To encourage better sense-making, this article summarizes, at a high level, the basic obstacles facing the development of new nuclear power facilities in the US, including the fragmentation of electrical markets, a failure to develop standardized designs, the slow pace of technological innovation, limits imposed by distribution and transmission systems, and troubles with waste and the environmental impacts of water use and uranium mining.

Keywords: Nuclear Power, Energy Policy, Electric Grid, United States, Climate Change, Reactionary Politics.

Advocacy

In recent years, mainstream and conservative media have published a succession of articles "advocating" for dramatically increased nuclear electrical production in the United States. In April 2019, for example, the New York Times put out an Op-Ed by Joshua Goldstein, Staffan Qvist and Steven Pinker arguing for the construction of new nuclear plants in defiance of popular fears about nuclear technology (Goldstein et al., 2019). Articles regularly pop up elsewhere in such varied publications as the National Review (Bryce, 2016; Bryce, 2019), Forbes (Shellenberger, 2019b), Quillette (Shellenberger, 2019a), Bloomberg (Marques, 2020) and Grist (Holthaus, 2018), all variations on this theme. These media efforts bolster "support" for nuclear power among politicians and talking heads in the center and on the right who are concerned about fossil fuel consumption and energy independence, and, ostensibly, they represent a position on US energy policy.

Nuclear power in the United States has been on the decline for decades now, with only two new plants having been completed since 1993, and a number of facilities around the country closing or slated to be closed as we enter a new decade. Billions have been spent since the 1990s for failed projects and those incomplete and long in development, and the construction of nuclear facilities, both replacement work and new work, has seen escalating cost (MIT Energy Initiative, 2018; Morgan et al., 2018; Cardwell, 2017; Moore, 2018; Cho 2020); during the same time, the expense of building and deploying renewable energy and natural gas has dropped precipitously, encouraging a flurry of new investment (Schneider et al., 2019). While decisions about existing nuclear assets entail different considerations than the development of new ones (Haratyk, 2017), without new development, the decline of nuclear power in the US could become terminal (Lesser, 2019; Schneider et al., 2019). This article will focus, therefore, on the potential for new nuclear projects.

The frequent premise of these articles is that a) greenhouse gas emissions need to be curbed, b) but renewable energy sucks, and c) nuclear power is amazing and cheap and has been thwarted by an irrational, feckless political agenda. It is true that the deployment of new nuclear power assets could significantly decarbonize the electricity sector. While the natural gas facilities that have replaced many older coal plants are cleaner and less carbon intensive than the latter, fracking and natural gas together emit tons upon tons of carbon pollution into the atmosphere; replaced by nuclear capacity, these emissions could largely be eliminated. It is also true that renewable energy technologies deployed at scale create their own set of problems and these also should be taken seriously; for example, renewable sources like solar and wind, even paired with energy storage assets like batteries, because of their intermittency and distributed deployment, pose technical difficulties to resource adequacy, and to the coordination of grid operation. Sadly, these articles don't address in any detail the range of substantive difficulties, technical, financial, and political, that must be overcome for a nuclear renaissance in the United States. Similarly, they refuse to look closely at the particulars of how natural gas and renewable energy technologies have almost monopolized new asset development in recent years.

Electricity markets are not only complex, they vary greatly between jurisdictions and are closely regulated; nuclear engineering is famously difficult. To the extent that market-making policies are a function of political governance, the public and its political leaders need access to accurate cost/benefit information that is adequately reflective of the underlying facts. Recently, natural gas and renewable energy technologies have been very successful in garnering huge financial investments during a time of major change in the electric grid, so the choice of nuclear power, a less successful technology over the same interval that nevertheless is not carbon-emitting, presents obvious appeal for those oriented by reactionary political feeling. Thus, the temptation to make reductive representations about various technologies for the purpose of reactionary posturing can impair good planning and decision-making.

In order to make the issues involved here more comprehensible to the non-specialist, this article will summarize, as a heuristic, the main obstacles to a resurgence in the construction of nuclear facilities in US. The summaries present only a high level view of potential issues; tenable analyses of market-making policies or proposals for particular projects require a great mound of detail that would be beyond this article's scope and purpose. There is no intention here to make a technical or financial case for any particular technology in any particular market, nor to suggest that the problems summarized here cannot be overcome. Rather, the article offers some guideposts for better *sense-making* when these issues come up in public discourse, so that the credibility of proposals or representations can be properly evaluated.

Fragmentation

Traditionally, the US electric industry has been regionally centralized, with utilities, as regulated monopolies, building power plants, maintaining transmission and distribution lines, and billing their account holders. A number of trends, especially since the energy shock of the 1970s, have coalesced throughout the last four decades to produce a much more complicated, fragmented system with many opportunities for participation by third party asset owners. The modern grid is bifurcated into two major segments, the transmission networks, which control large volumes of interstate power flows on high voltage lines, and the distribution systems, which feed power directly to utility customers. In both segments, responsibility for management and oversight is distributed hierarchically among many stakeholders according to defined roles and according to geographic and political divisions (The National Academies of Sciences, Engineering & Medicine, 2016).

The costs for the whole system are ultimately borne by utility customers at the distribution level, but up and down the chain there are a huge variety of asset owners providing different energy services to other stakeholders down the hierarchy, over different time intervals, utilizing different metering and transaction schemes, operating under different regulatory rules, connected according to different engineering standards, all throughout the vast, dispersed physical network of wires and switches that constitute the grid. Effectively, there are *thousands* of physically intertwined, but separately maintained markets for electrical energy in the US, and these markets regularly change over the life of most assets. The "economics" of a given new power plant are derived from the underlying costs of the asset's technology, construction and operations, now AND in the future, set against the specific structure of the market it would be connected to, now AND in the future. There doesn't exist a single, elementary model of financial viability for any power generating technology that automatically scales across the national grid.

If we step back from all the localized variation among these markets, we can see that the development of

energy assets is determined largely by who foots the bill for their construction: that is, investment decisions made by private financial concerns and independent developers, on one hand, and the utilities, on the other. Private companies want to own assets that can be built quickly, that generate a reasonable return on investment and that have low risk. The utilities have to balance their role in maintaining transmission and distribution networks, operating generating assets (where this is allowed) and serving the public interest under federal and state regulations; typically, they prefer to build assets that minimize upgrades to existing infrastructure, which simplify daily operation and which curtail costs in demand-based markets or those incurred by market events that are the result of stress on grid infrastructure. The lack of new nuclear facilities in recent decades would seem to indicate that neither have been particularly motivated to plunk down billions of dollars for more nuclear capacity, with all the risks involved, when they can make financially safe, incremental bets on renewables and storage, or lucrative, somewhat riskier bets on natural gas.

Standardization

One of the biggest drivers of cost to the deployment of nuclear power is the engineering and compliance activities that underlie permitting and procurement during plant construction. These costs could theoretically be reduced if a series of projects were built with the same basic design in a relatively short period of time (MIT Energy Initiative, 2018; Lesser 2019). France, for example, is noted for having successfully taken this approach among its fleet of nuclear assets in the 1970s and 1980s (Kidd, 2009). Standardization requires suitably uniform, general regulations across jurisdictions, capable engineering and project management, and a pipeline of projects to be developed and installed by the same government entity or private group. Unfortunately, the US electricity markets have long been balkanized geographically between states and even within states, and anything involving nuclear materials also draws attention from the federal Nuclear Regulatory Commission (NRC). Construction firms and engineers have not successfully navigated the regulatory and economic waters to pursue a standardized approach. This is partly due to the structure of the regulations, but the failures of engineers and construction firms among developers have also played a significant role (MIT Energy Initiative, 2018; Cardwell, 2017; Lesser 2019). Business strategy for the sector has fared no better: private investors are not enthusiastic about building single nuclear plants, much less a whole slew of them, and federal and state agencies have not chosen to participate much in building new nuclear assets since the 1990s, or provided sufficient targeted incentives. At the moment, there are no private or government entities in the US who have the motivation, sufficient capitalization, organizational efficiency and engineering excellence to pursue an aggressive national construction program with standardized design and planning. Regulatory changes, particularly at the NRC, might ease this problem (MIT Energy Initiative, 2018; Lesser 2019), but this would require significant political leadership at a federal level in tackling complex technical issues, and would do nothing to address the capital and organizational deficiencies involved in a large national or regional construction campaign.

Innovation

The US has not successfully commercialized any innovative reactor designs in recent decades (Morgan et al., 2018). There should be more funding from the public sector, and, while there has been some activity on the private side, not enough has been invested to fully commercialize new technology. New ideas could definitely bring down development costs; this could involve, as already discussed, an “assembly line” approach to construction, or it could prove advanced reactor types that use new processes and materials (MIT Energy Initiative, 2018). However, even if a massive commitment of time and resources from the federal government in partnership with private entrepreneurial ventures exceeded even recent renewed efforts, at best, the fruits of these labors wouldn’t be generating electricity until sometime in the 2030s (Cho 2020). Successful innovation in this sector is most likely to happen in China, where large pools of resources can be mobilized immediately by government fiat, and it is doubtful that possible innovations could appear on American shores until we’re approaching mid-century (Morgan et al., 2018; MIT Energy Initiative, 2018).

Services

At the moment, nuclear power plants come in one size: very large. Most plants in the US have multiple reactors, each of which approaches or exceeds 1,000 MW (by contrast, a typical residential PV system might be 7 kW). There has been significant research on smaller nuclear facilities, but nothing is close to commercialization (Morgan et al., 2018). Because no one is especially eager to park a massive nuclear plant in the middle of an urban area, they are mostly sited at the edges of large urban clusters or in

rural locations. This means that nuclear power offers little relief to problems of circuit congestion in dense, urban locations. This issue has increased in recent decades as urban populations have risen, cities sprawled, and more and more of American life has come to depend on electrical devices and machines. Because congestion is driven by loads across particular constrained distribution or transmission circuits, rather than constraints on production sources, the problems caused by it have to be managed locally, or mitigated with infrastructure upgrades. With cities taking up an ever-larger slice of economic activity in the US, the construction of huge production assets is not in line with the imperative to mitigate costs at the "grid-edge", and so is often not a prime focus of regulators and utilities. Congestion is not the only problem that grid operators combat on a daily basis. Transients, surges, rapid shifts in load, damage to power lines, power quality and power factor issues, voltage sag – all of these events have to be managed through the deployment of utility assets or the incentives embedded in regulated markets.

Modern nuclear plants may be able to assist with some of these problems better than legacy facilities, but more nuclear power will be not the most cost-effective solution in every case, and even where it is competitive, operational principles will not be identical to what they might have been in 1960s or the 1990s. Strangely, none of these articles on nuclear power discuss the contribution of congestion and these other concerns as structural factors determining the overall cost structure behind tariff rates and new construction.

Resilience

Climate change has created conditions for more and larger natural disasters across the country. Along with population growth and the proliferation of electrical devices on aging infrastructure, we face an increasing risk of operational failures on the electrical grid, large and small. Highly centralized production sources, like nuclear and coal power plants, are not as resilient as small sources that can be locally isolated. This is because local sources can be managed individually with less cumulative impact in each case, whereas a big, central power plant that takes a long time to come back online has a massive effect on a large area.

Risk

It's senseless to have emotional arguments about whether or not nuclear power plants are "safe" when reviewing energy policy. The risk of apocalyptic catastrophe can never be eliminated, but nor can intense fear be reasoned with. A better course is to reduce concerns about accidental loss of life and property to a financial question framed in terms of insurance. The downside risk of catastrophic failure at a nuclear facility is basically uninsurable, especially at sites near large urban centers. Under the Price-Anderson Act, the US federal government sets a premium per reactor site, with additional fees assessed in the case of an actual claim. These monies are collected into an insurance pool currently totaling about $13.4 billion, available in the case of any single disaster (United States Nuclear Regulatory Commission, 2019). Here are two points of comparison for the cost of major disasters: in the immediate aftermath of the 2010 Deepwater Horizon oil spill, BP promised to pay out $20 billion (Stelloh & the Associated Press, 2016); Hurricane Katrina may have caused $161 billion in damage to property in New Orleans and around the Gulf Coast (CNN Library, 2019).

This insurance pool is available in the case of incidents of any size. If damages exceed this amount, the federal government is on the hook. This is a sensible policy, but it is also major public subsidy. The bulk of risk, in the case of calamity, would be borne by the local community and the federal government, not the plant owner or the insurance company or even many of the rate-payers, and so the value of this risk in excess of the mandated insurance pool, as it might be underwritten on empirical grounds, has to be tallied as a subsidy when cost comparisons are being made between different electrical energy technologies.

Waste

Nuclear waste storage is a permanent, expensive obligation. Long after our many nuclear plants have been decommissioned, we will be dealing with and possibly paying for a hoard of waste (Wade, 2019). It's unclear how to financially model the burden of radioactive waste management over, potentially, hundreds of thousands of years, but if we're comparing how "expensive" or "cheap" different energy technologies are, such future liabilities have to be considered. The federal government, by the Nuclear Waste Policy Act of 1982, is supposed to collect nuclear waste from power plants and weapons programs in a permanent, safe repository. A site at Yucca Mountain near Las Vegas, NV, was chosen under this Act, and a large, expensive facility has been built there (United States Nuclear Regulatory Commission, 2018). However, because of political opposition, the facility has

not been used for this purpose, and waste is generally stored on site at power plants across the country. Many of these power plants are beginning to run out of room for "temporary" storage (Brady, 2019). It could be argued that nuclear power production creates, by volume, a miniscule fraction of the waste generated by fossil fuels and even renewable energy systems, and this has to be factored to its credit. But nuclear waste is correspondingly more toxic and dangerous, and this toxicity could well last longer than our current civilization. Without a streamlined, successful policy of waste management, it is hard to argue that we should be generating even more spent nuclear fuel.

Mining

Nuclear fuel is not renewable, and uranium has to be mined out of the ground. New promised technologies, like fusion reactors, that could use other kinds of materials are nowhere near commercial viability (Morgan et al., 2018). Like other mining activities, uranium mining and refining are a significant ongoing, and possibly increasing, cost of operation, whereas renewable energy assets demand minimal operational expense. Uranium mining also has the potential to cause serious pollution problems that linger for decades, and that are carried as unpriced externalities by parts of society not involved in electricity production. A well known example of devastation wrought by uranium mining comes from the many abandoned sites in the Navajo Nation from the second half of the 20th century; unremediated tailings and open shafts are known to have caused a scourge of high cancer rates and other health problems among local inhabitants, most of them Native Americans (United States Environmental Protection Agency, 2019; Macmillan, 2012). While, no doubt, mining can be conducted more safely with modern methods, the risk of serious, long term pollution must be accounted for.

Water

Most coal and nuclear power plants use large steam turbines that require a prodigious use of water. According to a 2015 study by the US Geological Survey, 41% of the useful water in the US runs through a thermo-electric power plant somewhere in the country (United States Geological Survey, 2018). Much of this water is withdrawn and returned to a water course, and is not consumed. Water withdrawals, while not as detrimental to the environment and other users as massive water consumption, still alter the hydrological character of nearby and downstream ecosystems, and undermine their resilience in cases of drought or flooding. Returned water is also warmer than when withdrawn and this can impact local aquatic flora and fauna. Water resources, especially out West, are becoming ever more limited and under stress, and water scarcity may argue for ruling out a number of otherwise viable sites for nuclear power production.

Advocacy?

A company who wants to build a nuclear power plant has to figure out how to overcome all of the obstacles presented here, and then, with a site and plans for a particular project in hand, get in front of the independent system operator or local utility, the state public utility commission, the NRC and some investors with billions of dollars to burn and years to wait before they can see their first returns. This is how projects get built. If what is being proposed is a revolution in the US electric grid to replace most of the currently operating coal and natural gas assets with new nuclear plants, there will need to be *hundreds* of them. The economic models under which these assets might be financed are governed by policy-making that entails a dizzying array of highly technical details, involving, to name a few, the structure of transmission-level markets, the efficacy of nuclear engineering regulations, nuclear waste disposal, the costs and benefits of waste mitigation through reprocessing, and funding the prevention and/or cleanup of pollution from uranium mining activities. Project development and policy reform both demand a high level of expertise and professionalism to carry off successfully, and good faith public communications require not only the nexus of some specific project or policy, but grounding in such professional competence. These articles appear to be "advocating" for nuclear power as a general political condition, minimally related to the many particulars, as if investment and all the risk a nuclear power plant carries for a multiplicity of stakeholders were merely a function of ambient public attitudes. Whatever one imagines as an impediment to nuclear-friendly policy or a new proposed power plant – mass protests, uncomfortable demonstrations by anti-nuclear fanatics, industry lobbying, political corruption, left-wing media legerdemain – the actual building of new facilities will only happen where the industry and its counterparts in government exhibit vision and execution at a high level, not merely a special political feeling.

The best way to make good on the premise of these articles would be to: a) nationalize the whole industry of electricity production, transmission and distribution,

including stripping certain regulatory powers from state and regional authorities, b) implement broad anti-competitive measures in electricity markets designed to favor new nuclear asset building and corresponding infrastructure, c) immediately allocate billions in federal funding towards this asset construction, and d) make aggressive use of eminent domain for siting and waste disposal. In other words, socialism! The New York Times article (i.e., Goldstein et al., 2018) cites Sweden and France, both noted for having strong central governments and generous social policies, as countries that have successfully scaled up major nuclear capacity, and this is no coincidence. And there is, in fact, a precedent in the US for nationalized power, the Tennessee Valley Authority, which, as might be expected, is responsible for those last two successfully completed nuclear reactors, at the Watts Bar site in Tennessee (Cardwell 2017). It is ironic that most of the enthusiastic chatter for nuclear power comes from conservatives who, supposedly, hate "socialism" and who intermittently trash the legacy of the New Deal. While the US electric grid is tightly regulated, the system, as a whole, is fundamentally market driven, and not administered from on high by a centralized state authority. At any time, there is likely to be an appetite somewhere in America for ANY technology that is convenient to system operators, beneficial to ratepayers, and offering of a nice, low-risk payout to investors.

These articles on nuclear power are not about energy policy itself, but more about creating a smokescreen so that those at a certain register of reactionary feeling can avoid uncomfortable realities. Climate change threatens civilization, if not the future of human existence, and we don't know, in the coming years, if we will be equal to the forces that have been unleashed by industrialization. The earth may not be able to support 7+ billion human beings, with current levels of energy usage and decent standards of living, for more than a century or two; indeed, a sustainable human worldwide human population could be frighteningly smaller. Flora and fauna around the world have been dying at an alarming rate, and this trend will continue to accelerate in coming decades as weather and ecosystems are thrown into chaos. The era of cheap energy may be coming to a close, for technical and structural reasons, and, if this is true, there is no coagulation of political opinion, or utopian yearning, that will change the facts.

We should not discount the potential of nuclear technology to contribute to decarbonization, as new investments are made in the electric grid, but it is good sense-making on the merits of the details which will permit new nuclear assets to be constructed. To the extent that regulation in the electric sector is market-making, and therefore subject to public attitudes and political maneuvering, reactionary thinking has no legitimate role. So when nuclear advocates peddle claims about the benefits of nuclear power without wrestling the list of issues summarized here – well, anyone selling a free lunch is not to be trusted.

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ORIGINAL ARTICLE

Scary Tales of Martin McDonagh: *The Beauty Queen of Leenane, a Skull in Connemara, the Lonesome West, the Pillowman*

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ABSTRACT

The essay addresses the poetics and rhetoric of plays by Martin McDonagh – a most prolific and ingenious modern playwright in the English language. His popularity nowadays equals that of Shakespeare and Chekhov, all the more so since he has made quite a name for himself in cinema with his last Oscar winning film *Three Billboards Outside Ebbing, Missouri*. His works arouse much controversy among both critics and viewers. The aim of this essay is to show different sides of his bright talent through the analysis of his early psychological dramas set in Ireland (*The Beauty Queen of Leenane* (1996*), A Skull in Connemara* (1997) and *The Lonesome West* (1997) on the one hand, and a provocative, overtly postmodern later play *The Pillowman* (2003), on the other.

Keywords: *In-Ye-Face* theatre, postmodernism, parable, conflict, psychological drama, Ireland.

Introduction

It is hard to overestimate the contribution of Irish authors to both British and world drama: just remember the names of G. B. Shaw, Samuel Beckett, and Oscar Wilde. This list has been recently supplemented by another bright name – that of Martin McDonagh, whose plays are successfully running not only on the leading stages of London, but also all over the world, including in Russia. Martin McDonagh was born on March 26, 1970 in London to an Irish family of a worker and a cleaning woman and has dual citizenship – Irish and British. Today he is considered the leading living Irish playwright. In addition, he made quite a name for himself in the cinema by writing scripts and directing several films, among which is the Oscar winning *Three Billboards Outside Ebbing, Missouri*. When Martin was still a boy his parents moved back to Galway, Ireland, leaving him and his brother John Michael, who later became a director and screenwriter, to finish their education in London. Martin would visit his parents over the summer, and it was during these visits that he got acquainted with the life of the Irish hinterland: perhaps it was then that he realized his Irish roots and felt an attachment to this harsh land, which would later be the scene of his first two most famous trilogies. The first trilogy (*The Beauty Queen of Leenane* (1996*), A Skull in Connemara* (1997) and *The Lonesome West* (1997) unfolds in the town of Leenane on the west coast of Ireland, and the second (*The Cripple of Inishmaan* (1997), *Lieutenant of Inishmore* (2001) and *The Banshees of Inisheer* (still unpublished) is set on the Aran Islands. However, the texts of McDonagh's plays are just beginning to be introduced into scholarly discussions. As Patrick Lonergan, the author of the first monograph on his work, rightly points out in this regard: "he is admired far more by audiences and theatre-makers than he is by critics and academics" (Lonergan, 2012, p. xv).

Still, lately English academicians have increasingly turned to the plays of McDonagh, recognizing him as one of the leading representatives of modern theater. In this regard we can distinguish the works of P. Lonergan (Lonergan, 2012), I. Jordan (2014), L. Chambers (2006), Russell R.R. (2007) and J. Kelleher (2016). In my essay I will try to address the most distinct features of his rhetoric and poetics on the basis of the *Trilogy of Lennane* and his most paradoxical play – *The Pillowman*, which in my viewpoint demonstrate different sides of McDonagh's bright talent.

Family dramas

Let us take a closer look at the first trilogy, which has become a kind of calling card for the playwright. All three plays are set in the characters' squalid homes or against the background of a harsh rural landscape, even in a cemetery (*A Skull in Connemara*). People drink a lot on stage – not the famous Irish whiskey, but moonshine; they swear, fight, eat chips and cookies, make tea, fry something on the stove, and often use obscene language. Here is the routine in all its manifestations, frighteningly recognizable, although it takes place in the remote Irish hinterland, in the West of Ireland. It is not the mythologized *wild West,* with its romantic attractiveness, but the *lonesome West,* as the playwright calls it in the eponymous play.

The plays of the first trilogy are set in the 1990s, but this is a world without time, the backyards of civilization, so similar in all countries. At the same time the stage space is extremely limited, which, on the one hand, creates the feeling of a cage that for all its apparent amorphousness very tenaciously holds the characters in its grip, and on the other hand – provokes the growth of internal tension. At first glance, not much is going on. The action is reduced to a minimum, mainly being the dialogues of rather tongue-tied characters, which despite being quite funny by themselves do not carry any communicative message. The source of the comicality here is the outright idiocy of the characters, a fact which is sad in itself. There is no tangible plot development – the action seems to be marking time. Despite the active contradictions and quarrels of the characters with each other, eventually it becomes clear that they conflict not so much with each other as with the environment, with their worthless existence: and, unable to change it, they take revenge on the others for their failure. The dramatic conflict in McDonagh's plays, as in the plays of Russian *new drama,* is simulative: the hero seems to interact with other characters, with the environment, but the situation has no progress.

And yet for all the lack of dynamics there is a movement – a movement into the past, which allows us to talk about the analytical composition of McDonagh's plays. The most exemplary in this respect is the second play of the trilogy, *A Skull in Connemara*. The plot is based on a real and at the same time absolutely monstrous situation, which gives it a surrealistic touch, characteristic of many of McDonagh's plays: due to the overcrowding of the village cemetery it was decided to exhume the remains buried several years before to make room for the new dead. This is what the main character Mick is doing. At the same time this situation acquires a metaphorical meaning, actualizing the famous English proverb about a *skeleton in the cupboard*. Mick has to exhume the remains of his beloved wife, whose death he is responsible for since she died in a car accident when Mick was driving drunk. However, there are other opinions – people in the village gossip that Mick first struck his wife on the head in a fit of drunken rage and then simulated an accident. That is why the hapless village police officer Tom Henlan steals the skull of Mick's wife and saws a hole in it in order to re-open the case and get at least one successful investigation to his credit. The audience will never know what really happened – this quality is also characteristic of most of McDonagh's plays. One thing is evident: Mick is conducting a constant dialogue with his past, and, breaking rotten bones with a hammer, is trying to destroy it.

Maureen (*The Beauty Queen*) also has her "skeleton", which her mother gloatingly exposes by producing a certificate: as a result of a nervous breakdown Maureen was treated in a psychiatric clinic. This later explains the fact that she came up with a happy ending to her relationship with the local man Pato, and only the news of his upcoming marriage brings her back to reality. And the "skeleton" itself is actualized when Maureen, after learning that her mother has burnt a letter from Pato in which he asked her to leave the village with him, kills the latter. However, in the village this death was qualified as an accident.

In the play *The Lonesome West,* the "skeleton" is sticking out of the cupboard from the very beginning: although, thanks to the testimony of one of the Connor brothers, it was recognized that their father had died in an accident, they do not conceal the fact that Coleman simply shot the old man because the latter criticized his hairdo, and Valene covered it up because, thanks to this, he inherited all the old man's money. Later, they calmly relate all of this to the local priest, Father Welsh.

As follows from the above, all the plays in the trilogy are somehow related to the family theme. But they have nothing to do with patriarchal family values, which are believed to still be alive in the remote rural Irish districts. In these plays the family is a bloody battlefield, where brother raises a hand against brother, husband against wife, son against father, and daughter against mother. This allowed Michael Billington to write in his review of *The Beauty Queen of Leenane* that "McDonagh offers a suave assault, through the bitter mother-daughter relationship, on the Irish faith in the sanctity of family" (Billington, 2010).

The whole village of Leenane is shown in these plays as one big family where everyone knows everything about

everyone, literally and figuratively washing each other's bones, loving and hating each other. These people are capable of barbaric cruelty and at the same time are as naive as children. This creates a special kind of humor in McDonagh's plays. Even outright cruelty and revenge here often takes on the character of a childish sadism: one brother cuts off the ears of his brother's favorite dog, the other urinates into the latter's beer (*The Lonesome West*); a moronic teenager fries a hamster in the microwave and complains that the door is not transparent and he cannot see the process (*A Skull in Connemara*); in order to annoy her daughter, a mother empties her night pot into the kitchen sink, while the daughter purposely buys her the biscuits that the latter hates (*The Beauty Queen*); a son shoots his father because he criticized his hair. (*The Lonesome West*). All of them are at one and the same time executioners and victims, and all dream of escaping, leaving the province. But where to? To London, where they call you 'Irish mug,' or to America, where you're just a stranger? Maureen (*The Beauty Queen*) has already been to London and does not seek to go there again, and her fleeting hope of happiness with Pato in America is rudely destroyed by her mother's intervention. They are all losers. No wonder the hapless police officer Tom Henlan from *A Skull* is reported to have inexplicably committed suicide (*The Lonely West*). He sat on the shore, thought about something for a while, then went into the water further and further until he disappeared beneath it.

The only person in the entire trilogy who seeks to change something is the Catholic priest Father Welsh. He is mentioned in all three plays but he only physically appears in the last one – *The Lonesome West,* which becomes a logical conclusion of the entire trilogy. He, too, has failed. When he arrived in Leenane he was fascinated by the peace and quiet of this place but soon realized that this peace was deceptive. Eventually he also escapes – escapes from life, committing suicide – the most terrible sin for a priest. But before he dies he leaves a letter for the brothers Connor that sounds like an appeal to all the characters of the trilogy: " Could the both of ye, go stepping back and be making a listen of all things about the other that do get on yere nerves, and the wrongs the other has done all down through the years that you still hold against him? And be reading them lists out, and be discussing them openly, and be taking a deep breath then and be forgiving each other them wrongs, no matter what they may be?...Would that be so awful hard now?" (McDonagh, 1997 p. 43).

In his student's guide to modern Irish drama, Geoffrey Dawson identified several features that are characteristic of most plays by Irish playwrights. Here are some of them: a cold, often sad and dreary landscape, a characteristic rhythm of speech, straightforward humor, naturalistic scenography (a kitchen, often poor lodgings or a bar), a universal addiction to alcohol, everyday actions on the stage, dysfunctional families, family breakdown, tragicomic elements, and a dream of escaping from the clutches of this pathetic routine to start all over again (Dowson, 2015). As we have shown all this is fully characteristic of McDonagh. It may seem that this allows us to draw a conclusion about the obvious national identity of his drama. But at the same time McDonagh's image of the Irish hinterland takes on a broader meaning, and the national gives way to the universal: his plays depict the margins of modern civilization, inhabited by the adult children who are unable to grow up, crushed by the senselessness of their existence. This, perhaps, is largely the reason for the success of his plays on the stages of different countries, in which the audience can easily recognize their own hinterland.

In his later plays, McDonagh leaves his homeland and sets the action in different places – an unnamed totalitarian state in *The Pillow Man,* in the USA (*Behanding in Spokane*) and in London (*The Hangmen*). Moreover, he quits the naturalism inherent in his earlier plays and often resorts to postmodern techniques. The most illustrative in this respect is his play *The Pillowman*, which has caused the most controversy among critics.

Fairy Tales Not for Children

While McDonagh's previous plays, despite their intertextuality and some other postmodern features, still fully fit into the aesthetics of the realistic psychological theater, *The Pillowman* completely breaks with it. The architectonics of the entire play balance on two mutually exclusive principles. On the one hand, there is a fairly coherent, realistic layer that can be retold. In a certain totalitarian state in Eastern Europe, terrible murders of children start to take place. These murders repeat to the letter the situations described in the stories of a certain writer named Katurian. During the investigation the police officers – Ariel (young, neurotic) and Tupolsky (elderly and reasonable) – find out that Katurian's parents set up a kind of experiment with him in childhood. They noticed the boy's extraordinary creative abilities and decided to develop them in a rather peculiar way: when he was 7 years old, every night he would hear a child's heart-rending screams from behind the wall, while his parents insisted that it was just a figment of his imagination. The boy's stories got better and better,

and darker and darker. At the age of 14 he won the first prize in a literary competition but soon after learned that his parents had been tormenting his older brother in a secret room for all these years: as a result of this experiment, the older brother became mentally retarded. Katurian killed his parents and started taking care of his brother. As the play opens, Katurian is being interrogated, and hears the screams of his brother Michal from behind the wall, whom, as it turns out later, the police officer Ariel did not beat, but simply asked to shout as loudly and pitifully as possible. Katurian is mostly concerned about the fate of his brother and his stories; he is ready to give his life for them. However, learning that it was his mentally retarded brother who made his scary stories real, Katurian kills the latter to save him from suffering and accepts the blame. He is ready to accept death, begging for only one thing – that his stories should not be destroyed.

Thus, the play clearly articulates the main issues that are often addressed in literature – the moral responsibility of an artist for his/her creations, as well as the responsibility of parents for the actions of their children and the legitimacy of restricting the freedom of creativity. These important questions are presented in a metatheatrical form. From the very beginning it is realized through the very form of interrogation in which the policemen clearly assign their roles: "I forgot to say, he is a bad cop, and I am a good one." "Me and Ariel, we have this funny thing, we always say, "This reminds me" when the thing hasn't really reminded us of the thing we're saying. It's really funny" (McDonagh, 2003).

Therefore, the concept of "play" – one of the key concepts of postmodernism – is introduced from the very beginning. Michal is forced to play – that is, to scream as if he is being tortured, and he is very happy when he is praised for his good performance. Michal in his turn decided to act out his brother's stories, according to him, not knowing what would happen. The concept *world's a stage* merges in the play with the concept *world's a text*: "we do not know that the children died, they just wrote about this in the newspaper" – says Katurian (McDonagh, 2003). The reality of the suffering brother becomes Katurian's texts, which in their turn materialize in reality. In the finale, the executed Katurian gets up and, removing the bag from his head, says that in the last moments of his life he came up with an interesting twist for the story about his brother: when the Pillowman invited Michal to die in order to avoid suffering, the latter chose to suffer for the sake of his brother, who in the future would become a good writer. Thus, the text again takes over.

Moreover, the approach of the investigators to Katurian's stories is very similar to the approach of some traditionalist critics to a postmodern work:

> TUPOLSKI. This is a story, it starts off, there is a little girl, and her father treats her badly...
>
> KATURIAN. He slaps her around and that. He's a ...
>
> TUPOLSKI. You seem to have a lot of st... He's a what?
>
> KATURIAN. What?
>
> TUPOLSKI. The father
>
> ARIEL."He's a ... something, you said.
>
> TUPOLSKI. He represents something, does he?
>
> KATURIAN. He represents a bad father. He is a bad father. How do you mean represents"?
>
> TUPOLSKI. He is a bad father?
>
> KATURIAN. Yes, he slaps the little girl around.
>
> TUPOLSKI.This is why he is a bad father.
>
> KATURIAN. Yes.
>
> TUPOLSKI. What else does he do to the little girl, "he is a bad father"?
>
> KATURIAN. All the story says, I think, is the father treats the little girl badly. You can draw your own conclusions.
>
> ARIEL. Oh, we can draw our own conclusions, now, can we?
>
> KATURIAN. Hah?
>
> ARIEL. You're telling us we can draw our own conclusions now, are you?!
>
> KATURIAN. No! Yes!
>
> ARIEL. We know we can draw our own fucking conclusions!
>
> KATURIAN. I know.
>
> ARIEL.Hah?KATURIAN. I know.
>
> ARIEL.Fucking ... hah?! (Ariel gets up and paces.)
>
> TUPOLSKI. Ariel's getting a bit aggrieved because "We can draw our own conclusions" is, sort of, our job. (Pause.) And the first conclusion we are drawing is exactly how many stories have you got "a little girl is treated badly," or "a little boy is treated badly"?
>
> KATURIAN. A few. A few.
>
> ARIEL. "A few." I'll say a fucking few. The first fucking twenty we picked up was "a little girl is fucked over in this way, or a little boy is fucked over in this way?
>
> KATURIAN. But that isn't saying anything, I'm not trying to say anything ...
>
> ARIEL. You are not what?

> KATURIAN.What?
>
> ARIEL.Not what?
>
> KATURIAN. What, are you trying to say that I'm trying to say that the children represent something!
>
> ARIEL. "I am trying to say...?"
>
> KATURIAN. That the children represent The People, or something?
>
> ARIEL. (Approaching.) "I am trying to say." He's putting words into my fucking mouth now, "I am trying to say," let alone draw our own fucking conclusions ... (McDonagh, 2003).

And just like a postmodernist writer, Katurian tries to convince his investigators throughout the interrogation that "the only duty of a storyteller is to tell a story," defending the author's absolute freedom both in the choice of material and from any responsibility for the possible consequences of what he has written.

One of the major themes of the play is the theme of childhood. In fact, all of Katurian's stories are associated with child abuse, which, as it turns out, took place in the childhood of the police investigators as well: Ariel was abused by his father and finally, like Katurian, killed him, explaining his neurasthenia. Topolski's father was a hopeless drunkard. By putting the children's suffering in the texts, Katurian, on the one hand, denounces the monstrous cruelty, but on the other, unwillingly provokes it.

The theme of parents and children acquires a metaphorical meaning by merging with the theme of authorship, which in turn is one of the characteristic metaphors of postmodernism: the postmodern artist constantly feels and realizes his/her connection with literary ancestors, simultaneously destroying and deforming this dependence. It is notable that the playwright uses the thriller genre, which is so often exploited by postmodernism – just remember *Perfume* by Süskind, *The Trial of Elizabeth Cree* by Ackroyd or *Decorator* by Akunin. In all these novels, beauty and art are created through mortification and appropriation, which in turn can be interpreted as an ironic self-reflection by postmodern artists. Detective elements, which at the beginning seem to determine the plot of the play, also turn into a purely literary game, as much greater attention is paid to the texts created by Katurian than to the criminal events that have taken place.

Step by step, the reader unravels numerous literary allusions, starting with an obvious reference to Franz Kafka's *The Trial* – when Katurian, just like Kafka's hero, cannot understand what he is accused of for a long time – and ending with Dostoevsky's "tears of a tortured child", which in turn mark two oppositely charged poles. The juxtaposition of these poles generates the incredible tension of the play. On the one hand is the eternal existential guilt that prevails over everything and everyone, and on the other is a passionate search for an answer to the question of whether even the most beautiful creation can justify the tears of a tortured child. This question is addressed in the story of a girl who thinks she is Jesus and her parents condemn her to a martyr's death.

This inevitably involves the question of the author's moral position. As is well known, postmodernism denies traditional values, which does not mean the denial of moral categories as such, but rather a rejection of their absoluteness and universality in favor of a plurality of interpretations. All of McDonagh's works are riddled with ambiguity, dictated by the inconsistency of human nature and of life as such, and in this case almost everything presented in the play is ambivalent. Due to the sufferings of his brother Katurian became a good writer; he writes good stories but they provoke murder; he kills his parents but thus restores justice; in his story the beautiful image of the girl-Jesus turns into a perversion of generally accepted moral norms by adults; in another of Katurian's stories, a mysterious wanderer cuts off a boy's toes in gratitude for his kindness, and then it turns out that the wanderer was the Pied Piper of Hamelin, who would rid the city of rats, but, after the citizens refused to pay him, would lead all the children of the city to death, except for one lame boy, who could not keep up with the others and thus was saved.

The most paradoxical is the title image of the Pillowman. This is a benevolent creature invented by Katurian who comes to children in the days of their happy childhood and tires to persuade them to leave life before it becomes a nightmare. Few agree, and those who refuse later bitterly regret that they did not heed the persuasions of the Pillowman. All this seems to testify to an overwhelming relativism permeating the play, and everything ultimately depends on the audience and reader's interpretation. As P. Lonergan justly points out: "Audience members who demand that a play must convey one specific 'message' will thus find themselves identifying not with Katurian but with Ariel and Tupolski: men who are limited in their perspective, brutal in their outlook and violent in their impulse to reduce every - thing to one narrow 'truth'." (Lonergan 2012, p. 110). If it is the duty of a writer to tell a story, then it is the business of the readers and critics to interpret it. Besides the legend of the Pied Piper of Hamelin, there are other references to

the tales of the Brothers Grimm, which, being borrowed from folklore, abound with examples of child abuse. Just recall *Hansel and Gretel* and *The Armless Girl*, which also once shocked readers and overturned traditional moral concepts. In this regard I side with the argument of Jose Lanters, who writes: "what is sometimes understood as the "perverted" morality of Martin McDonagh must be reconsidered... and defined as his way of expressing morality based on conditional truth and embodied in the text of the play, and not the morality that is based on the idea of universal absolute truth" (Lanters, 2007, p.9).

And yet, despite the above, the playwright, as Joan Dean puts it, "seeks to reconcile postmodernism and moralism" (Dean, 2009, p. 169). The cynical, skeptical McDonagh, as in his other plays, gradually and discreetly leads his audience to the light. As it turns out, the halfwit Michal, realizing what a turn his games have taken, does not kill the third child. He chooses the most positive story of a green piglet that didn't want to be like others; Michal paints the girl green and sends her to play with piglets. Moreover, in the end he asks his brother to destroy all the stories that can cause evil. This enables us to speak about the parable element of the play. According to E. Balburov and M. Bologova, parable is a "palimpsest of moral memory" (Balburov, Bologova, 2011, p. 44). This "moral memory" distinctly shines through the play's numerous layers of meaning. It does not mean that all the meanings are reduced to a common denominator. S. Makhotina is right in saying that "as a rule a parable includes not only a superficial, situational meaning that can be easily read at once but also several layers of deep meaning that differ, and sometimes are directly opposite to the surface one (Makhotina, 2001, p. 7).

By bringing Katurian back to life in the finale to say that in the last minutes of his life he invented another story, the author again blurs the line between text and reality, turning everything into a game. Against this background, the image of Michal can be perceived as a metaphor for a modern man lost in the world of simulacra, of blurred concepts of good and evil, looking for a foothold and finding it in a simple fairy tale that teaches good. Thus, the modern artist, using the multi-layered metaphor of the parable, creates a hyper-narrative that can be interpreted in a much broader sense than its surface elements allow.

Conclusion

Although British critics consider McDonagh one of the key figures of *In-Yer-Face* theater (Sierge, 2001), in my opinion his dramas stand out despite the fact that we can find many features characteristic of this theatrical movement – provocative duality, deliberately shocking imagery, themes and language. However, McDonagh's plays are, above all good drama – multi-layered and metaphorical, which unlike many *In-Yer-Face* plays depict not just social types but full-blooded characters, who despite their vices evoke the sympathy of both the audience and the author himself. Despite their genre and stylistic diversity, McDonagh's dramas are always filled with pain and compassion, a desire to see the human in any person and if not to point out the way, then at least to awaken this human element. To my mind this should be the course of true art, which does not exclude experiments and innovations but first and foremost appeals to the human.

Martin McDonagh apparently understood this from the beginning and, unlike many of his colleagues, seeks to promote the humanistic function of art by awakening "good feelings" with his lyre, which also brings him closer to the best traditions of world theater. With his plays he not only terrifies and shocks his public but also makes people think about the diseases of modern civilization and ultimately look into oneself.

Competing Interests

The author has declared that no competing interest exists.

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Challenges of Public Policy Implementation: A Critical Analysis of Consumer Rights Protection Act in Bangladesh

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ABSTRACT

The purpose of this article is to analyze the challenges of execution of Consumer Rights Protection Act (CRPA-2009) in Bangladesh. There are not much meaningful research works have been conducted in the area of CRPA 2009 and comprehensive research on various aspects of this Act is highly required as this act is one of the strongest tools for protecting consumer rights in Bangladesh. This article is written based on both primary and secondary data. Primary data has been collected through a series of in-depth interviews with consumers, members of Consumers Association of Bangladesh (CAB) and the directorate of National Consumer Rights Protection. Secondary data/information have been collected from contemporary literature from various journals, books, newspapers, and authentic online sources. This article gives a thorough analysis of the challenges of implementation of this Act and proposes some policy suggestions regarding the protection of consumers' interests. The authors believe that the policy suggestions will assist the Government to revamp the existing policies and will add to the existing stock of knowledge.

Keywords: Bangladesh, citizen, consumer rights protection act, implementation of policy, Public Policy.

Introduction

Bangladesh is one of the most densely populated countries in the world. It is often characterized by extreme poverty and inequality. (Bangladesh Bureau of Statistics, 2011, p. 3). The population of Bangladesh has recently experienced an exponential increase of 14.4% when compared with the 2001 census. Its population density is three times higher than that of neighboring India, four times that of the United Kingdom, seven times that of China and over thirty times that of the United States (Bangladesh Bureau of Statistics, 2011, p. 3). The enormous population of the country has heightened poverty levels because it affects per capita income and consumption, diminishes the positive effects of development intervention, and undermines the country's poverty reduction efforts (Islam, S. A., 2004, p. 1). After 48 years of independence, Bangladesh is struggling for the betterment of basic human rights to its people. For strengthening the economy of a country, protection of consumer rights is highly essential because the consumer is one of the key actors of economy of the country. Since the consumer is the key actor of the market there is no alternative but to ensure the protection of the rights of the consumers. It is essential that each country enact a series of laws that have an impact on the producer, manufacturer, supplier or distributor, seller, and ultimately the consumer. Government of Bangladesh (GOB as GOB is mentioned later) has enacted 'Consumer Right Protection Act in 2009. For this reason, GOB has established eight regional offices (Zannat el. Al, 2009). This paper aims to analyze the challenges for, and difficulties of, implementation of this act.

Significance of the paper

Over the years, protection of consumer rights has increased its significance throughout the world. Among

the South Asian countries, India was the pioneer to enact comprehensive consumer protection law which was followed by Pakistan, Nepal. In Bangladesh, before 2009, there was no law to protect the consumer rights (briefly what was the situation before 2009, any organization/ body?). But in 2009, the Government of Bangladesh enacted The Consumer Rights Protection Act, 2009. We have seen implementation of this law since 6th April, 2010. Protection of consumer rights has become a talk of the country in recent times. In keeping pace with the modern world, the formulation of the Consumer Rights Protection Act 2009 is a significant movement towards the protection of the rights and interests of the consumers in Bangladesh. Protection of consumer rights is one of the fundamental constitutional right of citizens. According to Article 32 of Bangladesh constitution "Consuming 'safe goods and services' is the fundamental right of every citizen." There is dearth of empirical research on this issue; therefore it is timely to conduct a comprehensive research on this issue.

Methodology

Research methodology includes the research method, the research strategy, the research approach, the methods of data collection, the selection of the sample, the research process, and data analysis. Rajshahi is the 2nd biggest division and as an academic and researcher of University of Rajshahi I have chosen Rajshahi City Corporation as my research area. The paper aims to analyze the current implementing situation of Consumer Rights Protection Act-2009. People from the implementing agencies and the consumers are the research population. Among them ten officials and 30 consumers were taken purposively as sample. Respondents from the implementing agency were selected on the basis of their knowledge, relationships, and expertise regarding the research subject. In order to accomplish the objectives of the study, the case oriented qualitative research strategy has been selected. As Creswell (cited in Panday, 2004:7) points out six assumptions of qualitative research based on Merriam's (1988) assumptions; qualitative researchers are concerned primarily with (i) process, (ii) interested in learning how people make sense of their lives, experience, (iii) the researcher is the primary instrument for data collection and analysis, (iv) it involves fieldwork, (v) is descriptive in that the researchers are interested in process, meaning, and understanding gained through words or pictures (vi) qualitative research is inductive.

As previously discussed, the present study is based on both primary as well as secondary data. To collect the primary data, the author conducted a six months long field study. Interview, observation and case story were used as data collection techniques. Secondary sources of the research basically include different books, written research reports, journals, thesis, relevant publications, daily newspapers, and relevant websites. Rajshahi City Corporation has been chosen as a study area because it is the second biggest division of the country. Since the objective of the research is to explore the implementation situation of Consumer Rights Protection Act, ten officials from implementation agencies and 30 consumers were chosen through purposive sampling. Some authors argue that too large a sample may involve huge cost, manpower, material, and time while too small a sample may invalidate the result. Around thirty samples might seem to be bare minimum where statistical data analysis can be done. On the other hand, many researchers regard one hundred cases as standard to achieve a reliable result (Fisher et al, 1991 cited in Islam, 2008:115). The present study does not require very large sample size since case oriented qualitative research approach is applied for this study. A sample is selected on the basis of the purpose of the study not on the basis of representative population. As Yin (1994) argues the evaluation of case studies should be based on the theoretical construct, not on the size of the sample, as is done in conventional quantitative strategies. My interest was to have a complete in-depth understanding of the case.

Theoretical Key Concepts

Consumer

Generally, the term "consumer" indicates everyone in a society including a baby born today to the most aged person; from the head of the state to the rickshaw puller on the street. In simple words, the persons who use or consume products or services are consumers. In the eyes of the law, a person is required to fulfill certain conditions to be regarded as a consumer. Consumers are those persons who, for one or for the dependents, buy or use or obtain a permission to use any products or service by offering a price, prompt or due or in installments. In addition, any person using such products with the consent of the buyer will also be treated as a consumer. But if someone buys something for the purpose of resale or for any other commercial purposes, he or she shall not be a consumer as such. Personal consumption is the main test for defining oneself as a consumer. Under CRPA 2009, a person who buys goods to earn a livelihood by 'self-employment' also falls within the definition of a consumer (Amzad and Emrana, 2007).

Consumer means any individual who in relation to a commercial practice is acting for purposes which are outside his business. Section-2 (19) of the Consumer Protection Act, 2009 in Bangladesh states the definition of consumer. Consumer +means such type of person: a. who except for the purpose of resale and commercial intention purchases or agrees to purchase any product by payment of a price b. purchases or agrees to purchase by part payment of price. In this study consumer is a person who buys or uses any product or exchanges of money or uses the utility of product.

Consumer Rights

Every citizen of a state is a consumer. Product seller has the right to earn profit, simultaneously consumer has the equal right of owing a product. According to the declaration of US former president John F. Kennedy in 1962 outlined only four basic consumer rights (sentence formation problem).

- *The right to safety: Protection from hazardous and unsafe products and services.*
- *The right to be informed: Information about the quality, quantity, potency, purity, standard, and price of products and services.*
- *The right to choose: Availability of selection of goods and services from their varieties to justify the quality, cost, preference*
- *The right to be heard: Raise unhappiness against consumer malpractice; or right to be represented by consumer organizations.*

A global federation named Consumers International (CI) with 250 Consumer Organizations movement added four more rights.

- *the right to satisfaction of basic needs: Access to food, clothing, education, healthcare, shelter is a fundamental right according to the Constitution of Bangladesh*
- *the right to redress: This is the crux of consumer rights. The consumer is entitled to have legal remedy, either monetary or exchange, in case of violation of consumer rights*
- *the right to education: To have access to programs and information that helps the consumer to make a better and informed buying decision.*
- *the right to a healthy environment: To live and work in an environment that does not affect consumers' welfare and health.*

The mentioned eight consumer rights form the basis of all types of consumer movements in Bangladesh. In Bangladesh, around 61 laws are prevailing on consumer rights that aim to ensure safety of products and security in service.

Consumer Rights Protection

There are three aspects of consumer rights protection, which every country must consider. Firstly, voluntary protection: which means that consumers themselves would voluntarily set up associations and/or organizations to safeguard their own rights and interests. Like many other countries of South Asia, Bangladesh has launched Consumer Association of Bangladesh in 1978. Secondly, Institutional Protection: consumer rights of citizens can be ensured by establishing national institutions such as National Consumer Protection Council in India, Islamabad Consumer Protection Council in Pakistan, Commissioner of Internal Trade, and the Consumer Protection Council in Nepal and Sri Lanka. And lastly, Statutory Protection which means the rights and interests of the consumers are protected by enacting relevant laws. For example, the Consumer Protection Act 1979 in both Thailand and Sri Lanka, Consumer Protection Act 1986 in India, Consumer Act of the Philippines 1990 in the Philippines, Islamabad Consumers Protection Act 1995 in Pakistan, Consumer Protection Act 1998 in Nepal, The Law on Consumer Protection 1999 in Indonesia, and Consumer Protection Act 1999 in Malaysia. In Bangladesh, Consumer Rights Protection Act, 2009 has been enacted to safeguard consumer rights.

Consumer Association of Bangladesh (CAB)

The Consumer Association of Bangladesh (CAB) had first initiated the consumer protection movement. This organization has played a vital role in the movement of the consumer protection law in Bangladesh. The core objective of CAB is to promote and protect the rights and interests of consumers. The major objectives of CAB are as follows

a. to make consumers aware of their rights and responsibilities;
b. to promote consumer education, aiming at raising awareness of consumers against exploitation, and providing them with technical knowledge and support for real protection;
c. focus on consumers' problems and develop a spirit of mutual co-operation and understanding among different groups, associations, institutions, NGOs, and Government agencies functioning in the interests of the welfare of the people;

d. exchange information and knowledge of various actions about consumer protection with national and international organizations;
e. to organize and set up consumer Association and groups at the district and Thana levels; and undertake research studies on consumer issues and problems.
f. regularly monitors the market prices of essential commodities and services to show the actual price situation in the market and to keep prices within the purchasing power of general consumers. It runs a market monitoring cell which regularly conducts market surveys and supplies relevant information to consumers through national dailies.

CAB is a non-profit organization that was established in 1978. It is imbued with the idea of consumerism. Since its birth, CAB has been trying to spread the essence of consumerism among poor and low-middle class consumers. In February 2000, Ministry of Commerce sent the draft act (with necessary amendment suggestions) to the Bangladesh Law Commission to do necessary research on it. On 29th October 2000, the Law Commission suggested various changes to the draft act so prepared. Based on all these reforms, a bill was later introduced in the Parliament for the enactment.

Consumer Rights Protection Act 2009

The Awami League Cabinet of 1996-2001 approved the relevant bill in principle but it was again sent to the Secretarial Committee meeting for further scrutiny. The following Bangladesh Nationalist Party (BNP) government enlisted it in its priorities of 100 days and approved the bill in 2004. However, in 2006, a revised draft of the consumer Protection Act was framed and the reality is that no such consumer protection legislation had been enacted before the non-party Caretaker Government came into power. The (draft) Consumer Protection Act 2000 was very much similar to that of India and Sri Lanka. Some claim that it borrows heavily from the consumer protection law of Nepal too.

The caretaker Government in 2007 took the matter into consideration. The advisory committee of the caretaker government, in principle, approved a draft ordinance on consumer rights protection in November in 2007, asking the law ministry to plug loopholes, if any, before the final approval. There had been, again, a series of revisions of the draft. Finally, the consumer rights protection ordinance 2008 was approved by the government on 13th October 2008. CAB organized numerous press conferences, workshops, round table discussions, consultation meetings, trainings, and orientation sessions and took part in talk shows to provide input to the proposed consumer rights protection acts most importantly.

Public Policy Implementation:

The starting point for a discussion of approaches to policy implementation must be to consider what we mean by the term 'implementation'. Implementation is what realises decision or what generates outputs? Presseman and Wildavsky (1984) define implementation as "*a process of interaction between the setting of goals and actions geared to achieving them. Implementation, then, is the ability to forge subsequent links in the causal chain so as to obtain the desired results"*. Van Meter and Van Horn (1975) attempt to provide a conceptual framework to the process of implementation by stating, "*Policy implementation encompasses those actions by public and private individuals (or groups) that are directed at the achievement of objectives set forth in prior policy decisions".* There are two other models of policy implementation i. top down ii. bottom up. Bottom up theories involved the problem that the policy aired to correct and looked for an anchor in the Network of Implementation (Schoficed, 2001) and not adapting to the importance drivers of Implementation can lead to policy failure (palumbo-1984). In the Bottom up approach central initiative adapted poorly to the local condition. (May randmoddy, 1990). Najam (1995) argued that Synthesizers referred to the process when it is imperative to implement theory incorporation with both top down and Bottom up structure (Najam, 1995).

In this study, Inter-Organizational Interaction Approach (Kumar de, 2012) has been applied. Interaction approach refers to a process of interactions among different organizations. Interaction approach includes two approaches: i. Power dependency approach and Organizational exchange approach. Power dependency approach takes place in the context of interaction of various organizations. According to this approach more powerful organizations persuade other less powerful organizations to communicate with them. Powerful organizations work in a context where they secure and protect their own interests. Organizational exchange approach refers to a process where a set of organizations collaborate with their counterparts for mutual benefit. Dominance and dependence are key to the power dependency approach and exchanging mutual benefit is key to the organizational exchange approach. The author argues that a law cannot be implemented by a single actor or organization but a set of actors or organizations

Review of recent Literature

Bhavet and Mohita (2009) in their article entitled, ''Current practices in Consumer protection in south Asia (with special reference to India, Bangladesh, Pakistan, and Nepal) argued that consumer protection legislation is an integral part of a consumer protection framework of any country. This framework encompasses various issues which interact with each other. They further argued that there is no appropriate approach of protecting consumer's rights. It depends on the socio economic and political context of any country.

Tami (2009) has written an article on consumer rights protection in Bangladesh where he proposed that the consumer rights protection act will not work without full participation of citizens. He again stated that to give full protection of consumer rights, limitation and criticisms of the law should be properly addressed. In another study, Afrin (2019) has written 'consumer rights at a glance' where she described both the strengths and weaknesses of the act. In an editorial note, (Daily Star, 2015) the editor claimed that CRPA -2009 has a section of medical issues which is not sufficient in terms of meting out punishments proportionate to the crime.

In another study on the role of Government agencies in consumer protection conducted by Dhyani (1990) she argued that monopoly and restrictive trade practices of Commission of India were unable to keep pace with the complaints filed before it. In her study she had pointed out the weaknesses of the commission to protect consumer rights. Likewise, Shourie (1993) sheds light on some causes of the unsatisfactory role of district forum to settle consumer disputes. The causes include staffing, infrastructure, and provision of funds. While discussing some negative sides of the effort, Ingram, Skinner and Taylor (2005) stated that if the committed consumers perceive the corporate actions of an organization as unethical, there are certain chances that the organization may lose its loyal consumers and ultimately the customer bucket shrinks.

In the context of Bangladesh, Faruque, (2010), wrote a 'Booklet on Consumer Protection in Bangladesh'. In this study the author argued the consumer Rights Protection Act-2009. Furthermore, whereas a victim could file his complaint or the process of complaining all important information he added in this Booklet. Last but not the least he included all CAB officers' contacts and addresses in this Booklet where a consumer can find all leading information. From the above discussion, it is obvious that there is hardly any empirical research conducted on the implementation of this act. Therefore, the author argues that this paper will fill the void of the knowledge gap and contribute to the existing body of knowledge.

Conceptual Framework

Conceptual framework is a written or visual presentation that explains either graphically, or in narrative form, the main things to be studied – the key factors, concepts or variables and the presumed relationship among them (Miles and Huberman, 1994:18). In the following mentioned conceptual model, the author argues that the policy implementation is the outcome of interaction of various organizations such as the implementers of policy (government officials), producers of goods and services, citizens or consumers, CAB and other organizations such as NGOs and civil societies. The following framework reveals how these organizations or actors influence the policy implementation through interaction. The success of the implementation of any policy depends on how actively these actors work by interacting with each other.

The framework illustrates how government officials play a key role in implementing the law. According to the CRPA-09(26) article no 18 has to be established on the basis of this act. Head office should be in Dhaka and Government could establish more offices in other districts, if necessary. For consumers, 64 offices have been established in every district and seven regional offices. Though some offices have no official infrastructure but their program is going on. Dhaka head office was established in 2009

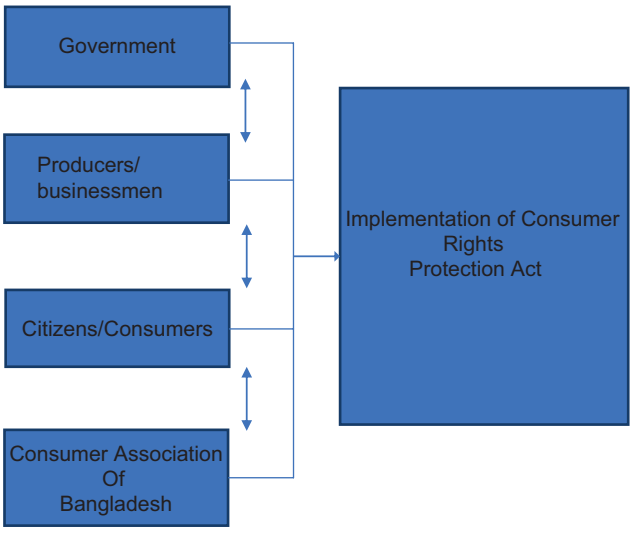

Figure 1: Conceptual Framework
Source: The Authors

and Directorate of National Consumer Rights Protection was established in 2011. Each Directorate should have one Director General who was appointed by the government and his recruiting condition is always reserved by government (20). Generally, the directorate deals with three types of work. Firstly, monitoring and raiding market regularly. Secondly, taking complaints in written, hearing and the disposal of written complaints, and the third one is publicity; these activities are always done by the Director with the help of Assistant Directors and also with the Police or The Border Guard Bangladesh (BGB) for security concerns. The implementation depends on the efficiency of the directorate. The second key actor is the supplier or producer or businessmen who produce and supply goods for consumption. The third important actor is the consumer who consumes the product and whose awareness is highly important in this case. Consumer awareness will grow at that moment when a consumer is concerned about the available products and services being marketed and sold and also about the rights he or she has as a consumer. CAB regularly monitors the market prices of essential commodities and services to show the actual price situation in the market and to keep prices within the purchasing power of general consumers. A consumer has to put forth a complaint to CAB by filling out a form. The success of the consumer rights protection law depends on the role and efficiency of all these organizations.

Findings and Analysis

The findings of the study suggest that market monitoring, raiding, and fining are the basic activities of the Directorate as per the CRPA-09. Raiding against the dishonest activity of the seller or institute or shop held by the substructures of the written complaint of the consumers, sometimes based on the randomly choosing process and also by the information provided from the person or organization which is considered as a confidential source.

What about written complaints? Written complaints are the most attractive and popular in consumers for its disposal process and 25% from the fining which can be defined as remuneration or reward. The directorate is very much aware about written complaints. Consumers can complain against any of sector where he or she gets a purchasing slip as a proof. The disposal processes are very short and easy, easy in the sense consumers need not complain in a court, need not waste time or money on the lawyer and bootless harassment on the name of court hearing. Directorate maintains the serial; in a working day, it called both disputants to maintain the process of hearing and as a result of the hearing the accused had to pay the fine on the basis of their misdeeds and the consumer gets 25% from the fine instantly. As a consumer, satisfaction is that from complaining to the judgmental day it takes only 37 days based on the number of complaints.

Consumer

Are you aware about your rights?

Answer of the consumers	Number	Percentage
yes	10	33.33%
No	20	66.67%
Total	30	100

Source: Field Study

Table shows that 33.33% people were aware about their consumer rights whereas 66.67% people were not aware. Most of them replied that they have no knowledge about consumer rights.

Do you think you are being deceived by the seller?

Answer of the consumers	Number	Percentage
Yes	16	53.33%
No	14	46.66%
Total	30	100

Source: Field Study

The Table shows how many people think that they are being deceived by the seller. The table illustrates that 53.33% consumers believe they are being deceived. On the contrary 46.66% people also believe that the sellers can never cheat because they also have to obey some rules and they are guided by some ethics.

Do you check MRP and manufacturing and expiry date while purchasing product?

Sort	Number	Percentage
Yes	19	63.33%
No	11	36.66%
Total		100

Source: Field Study

The table illustrates that 63.33% people check MRP and the manufacturing and expiry date, while on the other hand 36.66% consumers check MRP and the manufacturing and expiry date while purchasing a product.

Do you check BSTI logo?

Answer of consumers	Number	Percentage
Yes	10	33.33%
No	20	66.66%
Total		100

Source: Field Study

BSTI stands for Bangladesh Standards and Testing Institute. BSTI works in standardization of services and product, introduction of the international unit system of weights and measures, promotion of metrology services, promotion of quality assurance activities, rendering testing facilities for services and products, preparation, promotion and adaptation of national standards. The table shows that only 33.33% people check this logo whereas 66.66% never check BSTI logo.

Are you aware about filing a complaint?

Answer of consumers	Number	Percentage
Yes	9	30%
No	21	70%
Total	30	100

Source: Field Study

The table demonstrates that most of the respondents do not know about consumer rights. In that case filing a complaint envisions even though Bangladesh Government has taken several steps to protect consumer rights through the directorate with the formal compilation of the consumers. From the correspondents only 30% were familiar with filing a complaint whereas 70% were not aware about filing a complaint.

According to field data there were 75% male and 25% male members from which only 40% were aware of consumer rights. Though, they were aware about consumer rights and thought that they are being deceived by the sellers but only 40% check MRP while purchasing a product and only 35% check BSTI logo. It has been seen that most of the students and married people are conscious about their consumer rights but 85% people do not know where to file a complaint. Even a housewife and secondary student complain in the directorate which is remarkable.

To protect consumer rights effectively, Bangladesh Government established Directorate in seven divisions. According to Directorate of Rajshahi in economic year 2016–2017, 34 cases were filed whereas more than 91% cases were dismissed this year which is remarkable. They also encourage and educate consumers by distributing gazettes, leaflets as well as by arranging seminars, conferences. There is inordinate delay in disposing the cases of the aggrieved consumers. The findings of the study suggest that there is a need of effective coordination and concerted efforts by all concerned to educate the consumers about their rights and the redressal machinery available to them. The consumers of Bangladesh have not enough idea and information regarding the existing laws. Besides they have no idea about their rights as a consumer due to lack of knowledge. Only 8% are aware about their consumer rights and only 3% know where to file a complaint. People do not know if the sellers cheat them, what they should do, or where they should go. Most of consumers thought they are not cheated by the sellers. This finding reveals that consumers' right is still a comparatively new concept to the consumers of Bangladesh. Consumers have no knowledge about their right to get proper service for which they are paying. (Briefly discuss chief factors for lack of information and the potential solutions: is there coordination among agencies working towards implementation?)

Case Story: Awareness and action of the consumers

Sawrna *(pseudo name) stated "I am college teacher and I met with another colleague at a local restaurant. We had a dinner together. Just after we finished our dinner, the waiter served us soft drinks as per our order. The MRP of soft drinks was 15tk but she charged 20tk from us.*

I instantly complained to the manager but the manager angrily said they have been doing it from the very beginning but nobody had ever complained like us. Then I brought the receipt and filed a complaint to the Consumer Association of Bangladesh. After a long time, I received a phone call from CAB. They asked me to be present in their office to settle the issue. The directorate accused the manager of the restaurant and fined 50,000 tk. However, the manager apologized to me and the directorate asked me whether I would like to forgive him. I then pardoned him and instantly the amount decreased from 50,000tk to 5,000tk only. And I received 25% of the total amount of fine".

There are many cases available on the website of the directorate. Every day, they update their websites with the actions taken against the dishonest businessman, adulterated food business and fining. The author has identified that most of the cases were against food and extra charge of soft drinks and most of the values added by the provider of not more than five taka. If drinks are served in a glass or in cup the added value will be the cost

as service charge and a complaint will not be applicable. The directorate of Rajshahi also took charge against some famous restaurant named Seyamoon, Nanking, Top and the fining range was 3 to 1 lac. Directorate is unable to take any steps which are not referred by the act 2009. On this note, a person came to the directorate to complain against a coaching centre but the officials denied taking this case because they were not permitted to take such a case. Mobile phone companies are deceiving their subscribers in the name of conditions, hiding cost and vat.

On the other hand, most of time, the people of Bangladesh do compromise with the quality and quantity of commodities bought due to their financial limitations. There is no separate court and ministry in the Bangladesh. My field study suggests that corrupt businessmen tend to establish a good relation with corrupt government officials who might help them to cheat and exploit the innocent consumers. BSTI does not have modern equipment and facilities for testing commodities. When I asked the consumers about the efficiency of the BSTI they sadly replied that the officials of BSTI are inefficient and non-cooperative as per consumers' perception. The consumers are facing a weak consumer movement in our country. As a huge number of people are still illiterate, consumers' movement is facing difficulty in our present socio economic condition. As a result, the field study suggests that consumers of Bangladesh have faced various problems in the market, such as

- adulterations
- high price of products
- deceptive advertising
- deceptive packaging
- deceptive branding
- deceptive labeling
- providing false information about goods and services
- shortage in weight measures
- false date attached with product
- exaggeration unduly
- producing fake products
- black marketing and
- fake billboard.

When government officials were asked about their thinking regarding the types of challenges that consumers encounter they instantly replied that unabated rise in the prices of essential goods has made the lives of the consumers miserable. They further replied it is very important that the consumers are well aware about their rights and responsibilities. The study investigated the level of awareness and satisfaction of educated consumers about the various laws and found that there was a direct relation between education and awareness. It also highlighted the significant role of electronic and press media in creating awareness amongst the consumers. It also found that most of the consumers want that the Government should make serious efforts for increasing the awareness among rural and illiterate masses which coincides with study findings conducted by Tangade and Basavaraj in 2004. The legal and the policy framework in the country are fairly good to capture the measures suggested by the UN Guidelines[1] but when it comes to implementation, the situation is not up to the mark. It concludes with some suggestions and recommendations that might further improve the consumer protection regime in the country (Bansal, 2006).

Conclusion

The Government has enacted the Consumer Rights Protection Act, 2009 to protect the rights of the consumers. This is a pragmatic approach of the Government to ensure consumers' rights that ultimately ensures right to life. But for proper implementation of this Act, directorate needs to perform their regular work effectively. However, directorate of Consumer Rights Protection will only succeed when citizens become aware of their rights. Therefore, from the detailed analysis of the paper, it is evident that effective implementation of Consumer rights protection depends on consumers' awareness and the effective activities of the directorates.

Competing Interests

No potential conflict of interest was reported by the author(s).

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ORIGINAL ARTICLE

The Mediating Effect of Perceived Risk on the Relationship between Physical Incivilities and Health in Residential Areas

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ABSTRACT

Previous studies have linked incivilities to public health, but varied in outcomes and methods used. The present study examined perceived risk as a potential mediator of the relationship between perceptions of physical incivilities and self-rated health in a multi-ethnic residential neighbourhood. A sample of 241 residents in Penang, Malaysia was analysed by using structural equation modelling. Results demonstrated that respondents with high levels of perceived incivilities likewise exhibited high tendencies to report frequent feelings of risk in their neighbourhood environment. Results also indicated that physical incivilities and perceived risk had negative impacts on health outcomes. Findings further suggest the mediating effect of perceived risk on the relationship between physical incivilities and health, implying the direct and indirect negative effects of physical disorder on health. This study concludes by highlighting incivility-reduction strategies that can be applied in disorderly areas.

Keywords: physical disorder, perceived risk, health, mediating effect, structural equation modelling.

Introduction

Concerns about the impact of the built environment on health and wellbeing tend to focus on the physical deterioration of the surrounding area (Xuan, 2019). Neighbourhoods serve as the heart of communities and thus play a key role in people's wellbeing. Neighbourhood incivility is normally used in studies of people's perceptions of the built environment. A growing body of evidence reiterates the possible negative impacts of incivilities and risk perceptions on the health and wellbeing of residents (Robinette et al., 2019). Living in a disadvantaged area may increase risk perceptions (Medway et al., 2016) and impair residents' health (Ross & Mirowsky, 1999). Skogan (1990) suggested that fear of crime facilitators are based on people's perception of the spatial environment, which is one known cue of social and physical disorder. Franklin and Franklin (2009) stated that in a neighbourhood, the absence of concern and lack of informal social control could result in fear of disorder and may threaten individuals more than actual victimisation. LaGrange et al. (1992) also reported that neighbourhood incivilities are more powerful than crime itself in representing feelings.

Incivility has two main categories, namely, social and physical (Skogan, 1990). However, this study focuses on physical incivility due to its huge impact on health and wellbeing. Physical incivilities refer to disorderly environments such as trash and litter, vacant houses, abandoned cars, vandalised property and dilapidated homes, whereas social incivilities refer to disruptive elements such as loose dogs, public intoxication, unsupervised youth, inconsiderate neighbours, beggars, loiterers, gangs and excessive noise (Austin et al., 2002; Franklin & Franklin, 2009). Physical incivilities can affect residents' perceptions in two ways. First, physical incivilities can influence residents to permit infractions against social order and to less likely intervene to prevent crime and incivilities. Second, residents experience concerns when

observing disorderly features. Consequently, they prefer to spend their leisure times at home and are unlikely to interact with neighbours (Jones et al., 2011). As such, residents do not spend time in public spaces, indicating poor social control and health outcomes.

Previous studies have measured the quality of the physical environment by focusing on residents' perceptions of their dwellings and neighbourhoods (Austin et al., 2002). A study on neighbourhood health and quality of life is especially important in the context of Penang, which is listed amongst states with high housing prices. According to the Department of Statistics Malaysia (2014), the residential mobility pattern is quite high in Penang as compared with other states. A recent survey on residential location preferences in Penang Island based on residents' desires and aspirations concluded that other states are more likely to be chosen over Penang (Fattah et al., 2018). The present study captured residents' perceptions of incivilities in a low to medium class neighbourhood in Penang, Malaysia, to study the effects of physical incivility on residents' risk perceptions and quality of life. Determining the means to enhance health and wellbeing may be especially important in Malaysia with its various ethnic backgrounds, because previous research suggests low levels of health and wellbeing in similar multi-ethnic communities (Williams & Collins, 2016).

Theoretical background of the study

Shaw and McKay (1942) initiated the disorder model while testing their social disorganisation theory throughout Chicago City. This theory focuses on the relationship between crime, social control and neighbourhood structure (Kubrin & Weitzer, 2003), with an emphasis on the latter and its physical conditions. Several studies found a direct and positive relationship between physical incivilities and both perceived risk and fear of crime (Cohen et al., 2000). Perceived risk includes cognitive judgments such as on danger after dark and the possibility of victimisation (Franklin & Franklin, 2009; Gabriel & Greve, 2003). A growing body of evidence supports the notion that perceived risk towards the surrounding environment is linked to poor health outcomes (Baum et al., 2009; O'Brien et al., 2019).

According to Greenberg (1999), the ideal neighbourhood is safe, clean and stable, whereas poor neighbourhood quality is associated with crime and physical incivilities. Dunstan et al. (2005) reported that characteristics of incivility such as litter, vandalism, graffiti, abandoned cars, vacant properties and unmaintained gardens may decrease the quality of an area. Considering such factors is therefore important when measuring the perceptions of residents. Numerous academic works suggest that these factors may influence the morale and perceptions of residents (O'Brien et al., 2019). Overall, the current study explores the hypothesis that health and quality of life are in part a function of the physical characteristics of neighbourhood environments. Meanwhile, perceived risk is identified as a potential mediator between neighbourhood physical conditions and health (Lorenc et al., 2012; Marzbali et al., 2016, 2019). Table 1 depicts the operational definitions of the study variables.

The above-presented discussions lead to the following research hypotheses:

H1 Physical incivility is positively associated with perceived risk.

H2 Physical incivility is negatively associated with self-rated health.

H3 Perceived risk is negatively associated with self-rated health.

H4 Perceived risk mediates the relationship between physical incivility and self-rated health.

Methodology

Site Selection

This study constituted a portion of a larger research, which examined the physical characteristics of neighbourhoods and residents' wellbeing. The study was conducted in Penang, Malaysia, specifically in the Kampung Kastam area, which covered a sample of 241 residents in a neighbourhood with multiple ethnic backgrounds. The level of heterogeneity is not an issue because the study did not focus on social interactions among neighbours in terms of social bonds. As a typical low to medium class neighbourhood located in the central part of Penang Island, Kampung Kastam is a working-class

Table 1: Operationalization of the latent variables

Dimensions	Definitions
Physical incivilities	Residents' perceptions of physical incivility such as trash and litter, and vacant houses in the neighbourhood environment
Perceived risk	To what extent respondents felt safe in their neighbourhood.
Health	The extent to which respondents rate their general health and quality of life.

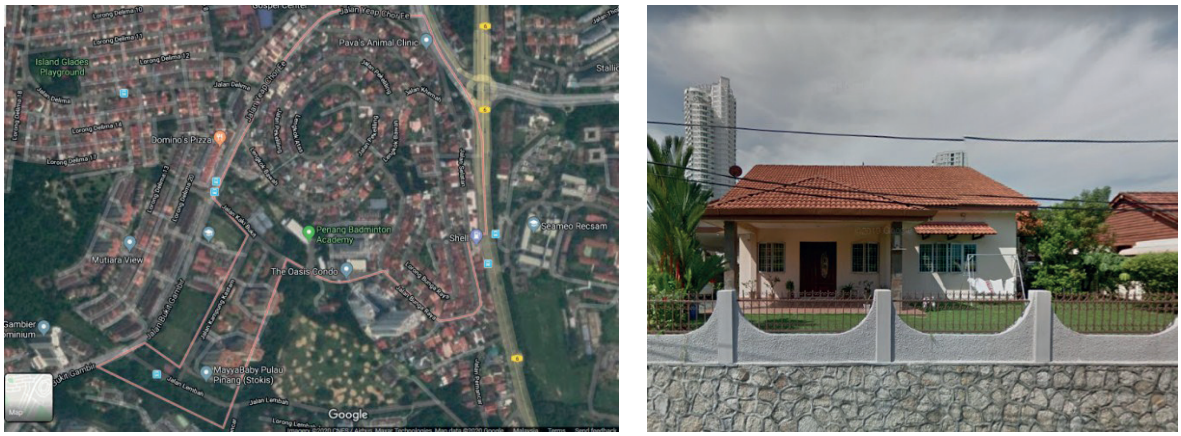

Figure 1: The site map of Kampung Kastam (left) and a typical single-storey house (Google Maps, 2019; Google Street View, 2019)

neighbourhood established to accommodate employees in the early 1960s. Numerous government quarters in this area are now vacant. Landed houses within Kampung Kastam are typically two-storey, but several are single-storey. Figure 1 shows the site map (left) and a typical single-storey house (right) in the study area.

A questionnaire survey was conducted to determine the residents' perceptions towards the physical neighbourhood environment. A systematic sampling method was used to select participants from the population. The survey was conducted in English and Malay on the basis of the respondents' preference and required approximately 10 minutes to complete. The study focused on residents of landed properties, which were the dominant type of dwelling in the study area. Table 2 depicts the demographic characteristics of the respondents. Among the 241 respondents, 50.2% were male and 49.8% were female, with a mean age of 48 years (SD = 17.42). Slightly over 63% of respondents have lived in their property for at least 10 years, implying a very stable neighbourhood with long-term occupants (M = 19.7, SD = 15.7).

Table 2: Respondents' demographic characteristics

Demographic variables	Categories	Island Glades (n = 247)
Ownership	Owner	180 (74.7%)
	Tenant	22 (9.1%)
	Others	39 (16.2%)
Gender	Male	121 (50.2%)
	Female	120 (49.8.2%)
Marital status	Single, widowed or separated	78 (32.4%)
	Married or living as married	163 (67.6%)
Ethnicity	Malay	62 (25.7%)
	Chinese	102 (42.3%)
	Indian	62 (25.7%)
	Others	15 (6.2%)
Education	University/college	121 (50.2%)
	Secondary education	99 (41.1%)
	Primary education	18 (7.5%)
	Non formal education	3 (1.2%)
Occupation	Self-employed	44 (18.3%)
	Private sector employee	51 (21.2%)
	Public sector employee	22 (9.1%)
	Retiree	64 (26.6%)
	Unemployed	31 (12.9%)
	Others	29 (12%)

Survey Instrument

The quantitative study prompted residents to respond to a set of self-administered questionnaires. Apart from providing their demographic information, participants responded to 15 statements that reflect physical incivilities, perceived risk, health and quality of life. Table 3 presents the study variables with their respective indicators.

Statistical Analyses

The proposed model and hypothesis testing were conducted by using Partial Least Squares (PLS) analysis with the SmartPLS 3 software (Ringle et al., 2015). PLS was chosen because of its suitability to the mediation model and the exploratory nature of this study. Nonparametric bootstrapping (Wetzels et al., 2009) was applied to test the significance of the path coefficient among and between the latent variables and the respective manifest variables. The measurement model (validity and reliability) and structural model (testing the relationship among variables) were

Table 3: Study variables with respective indicators

Construct	Item	Description
Perceived risk- Items were adapted from Franklin and Franklin (2009) and Mason et al. (2013). (1 = very safe, 5 = very unsafe)		
	PR1	How safe do you feel walking alone in your street during the day?
	PR2	How safe do you feel walking alone in your street after dark?
	PR3	How safe do you feel walking alone in this neighbourhood during the day?
	PR4	How safe do you feel walking alone in this neighbourhood after dark?
	PR5	How safe do you feel when you are in home alone at night?
	PR6	How safe do you feel when you are in a park or playground in your neighbourhood during the day?
Perceived disorder- Items were adapted from Foster et al. (2010), Gibson et al. (2002) and Sampson and Raudenbush (1999). (1 = not an issue/no problem, 7 = big problem)		
	PD1	Houses and fences not looked after.
	PD2	Littering and dumping of rubbish in public areas.
	PD3	Vandalism or graffiti in public properties.
	PD4	Inconsiderate or disruptive neighbors.
	PD5	Problems regarding selling and dealing with drugs.
	PD6	Teenagers hanging around the street.
Self-rated health- Items were adapted from Baum et al. (2009) and Wallace et al. (2012). (1 = poor, 5 =excellent)		
	SRHealth1	Would you say that your mental health is poor, fair, good, very good or excellent?
	SRHealth2	Would you say that your physical health is poor, fair, good, very good or excellent?
	SRHealth3	How would you describe your overall quality of life?

tested to finalise the outcome. In addition to the assessment of the path coefficient, three criteria were required to examine the structural model: coefficient of determination (R^2), effect size (f^2) and variance inflation factor (VIF).

Results and Findings

Measurement Model Results

The measurement model evaluation requires outer loadings, convergent validity, composite reliability and discriminant validity (Tables 4 and 5). For a given construct, the threshold value of composite reliability is 0.7 (Bagozzi & Yi, 1988). Table 4 posits that all constructs have composite reliability values above 0.70. Convergent validity is the average variance extracted, for which the threshold value is 0.5 (Fornell & Larcker, 1981). Consequently, all constructs possess convergent validity (Table 4).

The SmartPLS 3 software offers a unique measure to establish the discriminant validity for a pair of constructs: heterotrait–monotrait (HTMT) ratio and confidence interval, which have liberal threshold values less than 0.85 and 1, respectively (Henseler et al., 2015). Table 5 shows that the HTMT ratios and the corresponding confidence intervals for each pair are less than 0.85 and 1, respectively. Hence, the model possesses discriminant validity.

Additionally, the possibility of common method variance was examined by using Harman's one-factor test (Podsakoff et al., 2003). Common method variance occurs when only one factor emerges from a factor analysis

Table 4*:* The measurement model results for the latent constructs

Construct	Items	Loadings	Composite reliability (CR)	*t* value	Average variance extracted (AVE)
Physical disorder	PD1	0.820	0.907	24.390***	0.620
	PD2	0.812		20.771***	
	PD3	0.845		35.923***	
	PD4	0.776		24.974***	
	PD5	0.797		24.452***	
	PD6	0.663		12.355***	
Perceived risk	PR1	0.845	0.919	36.264***	0.654
	PR2	0.843		34.792***	
	PR3	0.855		44.621***	
	PR4	0.844		33.992***	
	PR5	0.771		23.199***	
	PR6	0.680		12.211***	
Self-rated health	SRH1	0.749	0.789	7.434***	0.555
	SRH 2	0.777		7.918***	
	SRH 3	0.707		6.620***	

Note. *** $p < .01$

or when the first factor explains more than 50% of the variance. In this light, all the items for the constructs were introduced into a factor analysis and the unrotated matrix indicated that the first factor explains 36% of the variance. Therefore, common method variance was not an issue in this study.

Assessment of the Structural Model

Table 6 depicts the results of the path analysis used to test the hypothesis of direct effects among latent variables. The results revealed the significant impact of physical incivilities on perceived risk (β = 0.379, p < 0.01) and health (β = –0.251, p < 0.01). In line with previous studies, the results suggest that high perceptions of incivilities in the neighbourhood environment were associated with high levels of perceived risk. This finding implies that respondents with high levels of perceived incivilities had higher tendencies to report frequent feelings of risk in the neighbourhood environment. Moreover, high perceptions of neighbourhood incivilities were associated with poorer general health. In line with previous studies, the results also indicated a negative and significant association between perceived risk and health (β = –0.212, p < 0.01), where high levels of perceived risk were associated with poorer general health and quality of life. Hence, the results support H1, H2 and H3.

This study also estimated a mediating relationship among the variables, as shown in Figure 2. The t value was computed with a sample of 1,000 by using a bootstrapping procedure suggested by Hayes (2009). The t value for the indirect effect is obtained by dividing the ab by the standard error (SE) of the indirect effect. SE is the standard deviation of the repeated bootstrap estimates of the indirect effect. The result shows that the t value of the indirect effect is significant at the 0.05 level (t = –2.530 > 1.96), thereby supporting H4.

The variance accounted for was calculated to estimate the size of the indirect effect through division by the total effect (Shrout & Bolger, 2002). The result shows that perceived risk explained approximately 24% of the variance in mediating the relationship between incivilities and health; the magnitude is also considered partial (Hair et al., 2013). On the basis of the R^2 values, the result reveals that incivilities explain approximately 14% of the variance in perceived risk, whereas incivilities and perceived risk explain approximately 15% of the variance in health.

Table 5: Heterotrait-Monotrait (HTMT)

	Physical disorder	Perceived risk
Perceived risk	0.362 **CI.90** (0.293, 0.533)	
Health	0.421 **CI.90** (0.259, 0.578)	0.362 **CI.90** (0.235, 0.512)

Table 6: Path coefficient and hypothesis testing (direct effects)

Hs	Relationship	β	t value	Decision	f^2	VIF
H1	Incivilities → Perceived risk	0.379	7.087***	Supported	0.168 (Moderate)	1.000
H2	Incivilities → Health	–0.251	3.507***	Supported	0.064 (Small)	1.168
H3	Perceived risk → Health	–0.212	2.783***	Supported	0.045 (Small)	1.168

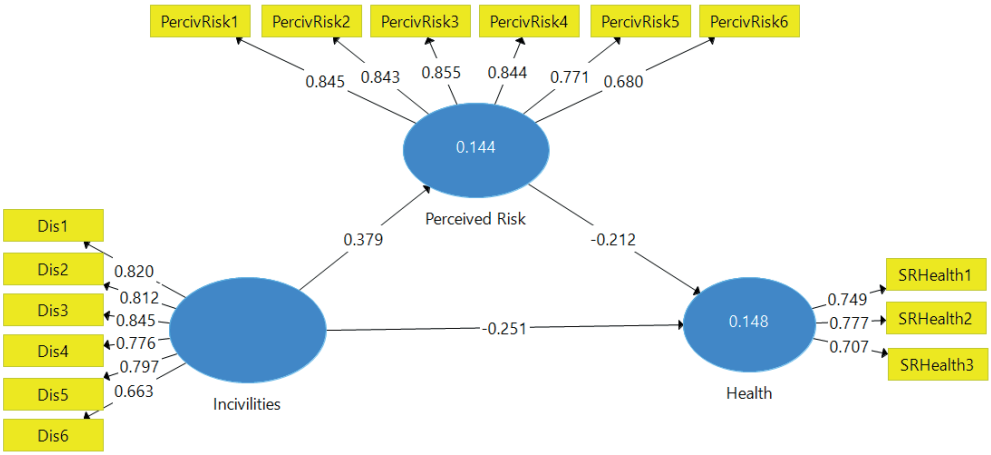

Figure 2: The parameter estimates of the PLS analysis

The purpose of calculating the effect size (f^2) is to estimate the extent of the influence of an independent latent variable on the dependent variable. Effect size is based on the change in the coefficient of determination (R^2). According to Chin (1998), the values of 0.02, 0.15 and 0.35 represent the effect size as small, moderate and substantial, respectively. Results reported that the f^2 for incivilities and perceived risk on health were 0.064 and 0.045, respectively. Multicollinearity among variables was also evaluated by using the criteria of variance inflation factor; all values were below the suggested threshold of 5.00 (Table 6) and thus were no cause for concern (Hair et al., 2013).

Conclusion

The significant impact of the built environment on health and wellbeing is widely acknowledged (World Health Organization, 2010). Evidence from previous research suggests that compared with the general population, residents in deprived neighbourhoods have an increased perception of risk (Algren et al., 2018). The current study seeks to investigate the relationship among physical incivilities, perceived risk, and health and wellbeing in a residential neighbourhood in Penang, Malaysia. The hypothesis is that if the built environment can affect residents' health and wellbeing, then the effect is likely caused by fostering or decreasing the degree of perceived risk. Consistent with those of a broad range of studies, the present results indicate that respondents who perceive high levels of physical incivilities in the surrounding environment likewise have high tendencies to report high perceptions of risk and poor health (Lorenc et al., 2012).

Although our findings are generally consistent across various contexts, several aspects are noteworthy for improvement. First, the cross-sectional study design precludes any inference of causal relationships between the physical characteristics of neighbourhoods and health outcomes. Second, this study only focuses on the effects of physical incivilities on health outcomes, but social incivilities might likewise affect health outcomes (Ambrey, 2016). Therefore, future research may bring new insights by focusing on both social and physical incivilities of the spatial environment. In addition, a study on physical incivilities using structured observation of a wide range of ethnic groups in Los Angeles neighbourhoods found that a high level of ethnic diversity is associated with a low level of physical disorder. Therefore, future research could examine ethnicity as a moderator in the relationship between incivilities and health outcomes.

Neighbourhood physical conditions therefore play a key role in shaping residents' behaviour and perceptions of the environment. Local authorities and neighbourhood communities have the potential to send a positive signal to residents that the neighbourhood is a pleasant living environment by maintaining and optimising its attributes. Crime prevention through environmental design strategies can be implemented to remedy perceptions of incivilities. Appropriate lighting, pavement treatments, maximum informal surveillance opportunities through building design, tidiness of lawns, landscaping maintenance and management and provision of legibility are several factors that could remedy physical incivilities and risk perceptions. Design of physical barriers such as landscaping, fences and walls should also provide good visibility. Basic features of such design strategies characterise a safe and pleasant living area.

This study recommends that local planning authorities pay attention to neighbourhood facilities such as adding mixed-use activities (increasing the variety of business uses and leisure activities by residents), eliminating concealed spots, designing streetscapes to enhance visibility and providing clear routes for different modes of traffic.

Competing Interests

No potential conflict of interest was reported by the author(s).

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ORIGINAL ARTICLE

EFL Curriculum Implementation: An Exploratory Study into Teachers and Students' Perceptions

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ABSTRACT

This qualitative study attempts to document how university English as a foreign language (EFL) teachers implemented their curriculum and how students perceived such implementation. To do so, the researchers went into one Thailand university, interviewed four EFL teachers and thirteen students undertaking the English foundation course, observed EFL classrooms, and collected written documents and artifacts (e.g., curricula and teaching materials). Gathered data were then coded, categorized, and compared and contrasted. The analyses revealed the differences in the teacher participants' implementation of their curriculum and the student participants' mixed perceptions toward their teachers' implementation of the curriculum. To some extent, one lone teacher made some adaptation to the imposed curriculum on account of his students' needs and interests. In contrast, the other three teachers restrictively followed the prescribed official curriculum and closely adhered to the scope and sequence of their assigned textbook. The student participants were satisfied with the teacher whose decision concerning curriculum implementation was largely grounded upon interaction/contact between the teacher and his students. However, the students complained against the teachers whose instruction was doctrinally adhered to the imposed curriculum.

Keywords: Curriculum implementation, Approaches, Fidelity, Mutual-adaptation, Enactment, Perceptions, Qualitative, Coding.

Introduction

In the late 1970s, Fullan and Pomfret (1977) made an urgent call for studies on teachers' approaches to curriculum implementation. This was because there was a need to bridge an existing gap between the transitional process of policies from the invented curricula and teachers' implementation of such curricula in actual classrooms. Indeed, little was known about how the invented curricula were implemented in the reality of the classrooms, how teachers decided to approach the invented curricula, what teachers decided to do or not to do with the invented curricula, and what classroom factors affected teachers' decision regarding curriculum implementation. Fullan and Pomfret's quotation, though lengthy, is worth mentioning.

> There is a singular lack of curiosity about what happened to an innovation between the time it was designed, and various people agreed to carry it out, and the time that the consequences became evident. Once an innovation was planned and adopted, interest tended to shift toward the monitoring of outcomes. The assumption appears to have been that the move from the drawing board to the school or classroom was unproblematic, that the innovation would be implemented or used more or less as planned, and that the actual use would eventually correspond to planned use, and the actual use would eventually correspond to planned or intended use. The whole

> area of implementation, what the innovation actually consists of in practice and why it develops as it does, was viewed as a "black box" where innovations entering one side somehow produce the consequences emanating from the other. (p. 337)

Therefore, knowledge and understanding of teachers' approaches to curriculum implementation in actual classrooms is essential as it could explain not only the differences (if any) between the intended curriculum and its actual implementation but also the failures of many establishments of educational changes (Chapman, Wright, & Pascoe, 2018; Fullan, 2007; Fullan & Pomfret, 1977; Janik, Janko, Pešková, Knect, & Spurnà, 2018; Kirkgöz, 2008; Park & Sung, 2013; Zhu & Shu, 2017).

Given this, curriculum implementation has, over the years, become an area of particular focus for researchers interested in unveiling the reciprocal relationships between teachers' curriculum implementation and other education-related activities. For example, several researchers and educators in the realm of general education have concluded, with evidence, that teachers' approaches to curriculum implementation determine students' learning and achievements (Darling-Hammond, 2000; Erickson & Shults, 1992; King, 2002, Wells, 1999; Wilson, Reichsman, Mutch-Jones, Gardner, Marchi, Kowalski, Lord, & Dorsey, 2018). Findings from studies of, for example, Bakah (2019), Banegas (2019), Craig (2006), Eisner (2002), and Parker (1997) have convincingly verified the relationships between teachers' implementation of their curriculum and their professional development. The observed effects of teachers' approaches to curriculum implementation noted in previous studies have urged the researchers of the current study to explore and document how university EFL teachers in one Thai university implement their prescribed curriculum and the assigned textbook in actual classrooms, and how students think about these teachers' approaches to curriculum implementation.

Two research questions helped frame the study. (1) What are these university EFL teachers' approaches to implementing their officially prescribed curriculum and their assigned textbooks in their actual classrooms? (2) What effects do teachers' approaches to curriculum implementation and the assigned textbook have on students' learning?

Theoretical framework

The current study has drawn on multiple integrated perspectives of teachers' approaches to curriculum implementation.

In their review paper on curriculum and instruction implementation, Fullan and Pomfret (1997) examined 15 different studies with an aim of defining and measuring curriculum implementation. They identify two orientations explaining the degrees to which teachers implement their officially prescribed curriculum. One is the fidelity perspective and the other one is the mutual adaptation/process perspective. Further, Fullan and Pomfret are able to identify 14 determinants influencing teachers' approaches to curriculum implementation. These determinants are grouped into four categories: (1) characteristics of the innovation (explicitness, complexity), (2) strategies (in-service training, resource support, feedback mechanisms, and participation), (3) characteristics of the adopting unit (adoption process, organizational climate, environmental support, and demographic factors), and (4) characteristics of macro sociopolitical units (design questions, incentive system, evaluation, and political complexity) (pp. 367-368).

Snyder, Bolin, and Zumwalt (1992) extend the work of Fullan and Pomfret (1977) further and suggest three different ways of clarifying teachers' approaches to curriculum implementation. They are: (1) fidelity, (2) mutual-adaptation, and (3) enactment. Under each approach, teachers' roles are different. In the fidelity approach, teachers play the role of "a consumer who just delivers the curriculum message as intact as possible according to specific curriculum implementation instructions" (Shawer, 2017, p. 297). In other words, teachers dogmatically follow a curriculum developed by policy makers or authorities. In contrast, the mutual adaptation requires teachers to adjust and adapt curriculum instructions drawn by either policy-makers or authorities to suit their contexts. This, hence, suggests a change in both teachers' roles and curriculum. Here, teachers become more active as teachers and do not necessarily follow the officially prescribed curriculum linearly. Teachers possibly adjust the curriculum and make it more relevant to their students (Ben-Peretz, 1990; Shawer, 2017, Snyder et al., 1992). Compared to the mutual adaptation, the enactment provides teachers with autonomous independence in dealing with the prescribed curriculum. Under this notion, teachers have the utmost freedom; they may choose not to rely on their prescribed curriculum instructions. In fact, teachers constantly interact with students to construct and re-construct a curriculum until it meets students' needs and interests (Erickson & Shultz, 1992; Munby, 1990; Shawer, 2017; Snyder et al., 1992). Further, Snyder et al. explain, "While teachers may use externally designed curriculum and benefit from the simulation of an 'outside', it is they and their students who create the enacted curriculum and give meaning to it … [*T*]eachers

are creators rather than primarily receivers of curriculum knowledge" (p. 429).

In addition, Snyder et al. (1992) review previous works on curriculum implementation and listed 15 factors affecting teachers' approaches to curriculum implementation. These factors are categorized into four main categories: (1) characteristics of the change (need and relevance of the change, clarity, complexity, and quality and practicality of program), (2) characteristics at the school district level (the district's history of innovative attempts, the adoption process, district administrative support, staff development and participation, time-line and information system, and board and community), (3) school-level factors (the role of the principal, teacher-teacher relationships, and teacher characteristics and orientations), and (4) the external environment (government agencies and external assistance). (See Snyder et al., 1992, pp. 415-417 for more details.)

Mode of inquiry

Data Collection Tools

The current study was grounded upon the theoretical notions of a qualitative research paradigm. More importantly, the researchers developed and designed three different data collection tools in order to counteract the inefficacy of a single data collection source (Ballantine, Hammack, & Stuber, 2017; Eisner, 2017; Merriam & Greiner, 2019; Metz, 2000; Sarma, 2015). These tools were (1) semi-structured interviews, (2) classroom observations, and (3) a collection of written documents and artifacts.

Semi-structured interviews

A semi-structured interview was selected as one of the data collection tools for the current study. This is because this type of interview, as widely understood, would offer the potential participants (EFL teachers and students) with enough flexibility in articulating their perceptions of the issues under investigation (Adams, 2015; Berg, 1985; DeJonckheere & Vaughn, 2019; Gray, 2009; Jamshed, 2014; Kallio, Pietilä, Johnson, & Kangasniemi, 2016; Mangubhai, Marland, Dashwood, & Son, 2004; Rabionet, 2011; Sampson & Johannessen, 2019).

To conduct a semi-structured interview, the researchers first created an interview guiding framework by adapting and combining the notions of an ethnographic interview (Spradley, 1979) and a semi-structured interview (Ashworth & Lucas, 2000; Brown & Danaher, 2019; Madill, 2011; Robinson, 2014; Wilson, Onwuegbuzie, & Manning, 2016). Before an actual interview, the researchers drafted two sets of open-ended questions and piloted these questions on two EFL teachers and four students whose characteristics were close to the potential research participants. The researchers then scrutinized the interview responses and comments from the piloted interviews and modified the interview questions (Sampson, 2004). In total, two set of 13 interview questions were developed and used to interview EFL teachers and students participating in the study (N = 17, 4 EFL teachers, 13 students). (These two sets of interview questions were almost identical. Except some questions in the one used to interview student participants focused more on students' perceptions of their teachers' approaches to curriculum implementation and classroom instruction. [See Appendix A and B for interview questions.]) All interviews, with permission from the research participants, were audio-recorded and subsequently transcribed for further analyses.

Classroom observations

To better depict the teacher participants' approaches to curriculum implementation, the researchers conducted a series of classroom observations. At their best, the classroom observations provided robust information about habits of mind and first-hand data concerning not only teachers' approaches to curriculum implementation in their actual classrooms but also students' reactions to such approaches (Bell, Dobbelear, Klette, & Visscher, 2019; Kane, Sandretto, & Heath, 2002; Nava, Park, Dockterman, Kawasaki, Schweig, Quartz, & Martinez, 2019; Park, Brownell, Bettini, & Benedict, 2019; Schoenfield, Floden, Chidiac, Gillingham, Fink, Hu, Sayavedra, Weltman, & Zarkh, 2018).

To conduct classroom observations, the researchers followed Merriam's (1988) guidance of observer as participant. In addition, they also borrowed and adapted Hongboontri and Jantayasakorn's (2016) and Hongboontri and Keawkhong's (2014) Foreign Language Classroom Observation Protocol (FLCOP) to record their observational data of a total of 12 EFL classes. These data were later transcribed and analyzed.

Written documents and artifacts

Throughout the process of data collection, the researchers also collected written documents and artifacts in relation to the EFL instruction at *Pilgrim University* (a pseudonym used to replace the actual name of the participating university). The written documents and artifacts collected included, for example, curriculum documents and course syllabi, teaching materials (assigned

textbooks), and teaching artifacts, among many others. Later, these documents and artifacts were extracted and included in the report of the findings where necessary.

Participants

After gaining permission to conduct research from *Pilgrim University*, the researchers contacted four EFL teachers who had been teaching an English Foundation course at *Pilgrim University* for at least one academic semester and the students in their classrooms. Each teacher and student received a letter explaining the study and describing all the means taken into practice to assure potential research participants' well-being as well as their confidentiality and privacy. Attached to the letter was a consent form. Teachers and students who volunteered to participate in the study signed the form and returned it to the researchers.

In total, 4 EFL teachers and 13 students consented to voluntary participation. The four teachers were *Helen*, *Natalie*, *Rodger*, and *Simon*. (All names are pseudonyms.) *Helen* was Thai and held a PhD in Applied Linguistics. She had been teaching at *Pilgrim University* for more than one decade. *Natalie* was also Thai; she held a master's degree in English literature. She taught both English Foundation and English literature courses and had been teaching at this *University* for almost a decade. *Rodger* was American. He held a master's degree in Applied Linguistics. He had been teaching at *Pilgrim University* for seven years. *Simon* was English and had just joined the *University* for four months before the study was conducted. (See Table 1 for further details.)

The 13 participating students were *Alice*, *Bonnie*, *Charlotte*, *Darlene*, *Ellie*, *Faye*, *Georgia*, *Harry*, *Irene*, *Jane*, *Katie*, *Laura*, and *Mary*. (All names are pseudonyms.) Their ages ranged between 18 to 22 years. These students came from different faculties and had varying amounts of English language learning experience. (See Table 2 for further details.)

Table 1: Teacher Participants

Name*	Nationality	Educational Background	Teaching Experience
Helen	Thai	PhD in Applied Linguistics	12 years
Natalie	Thai	MA in English Literature	9 years
Rodger	American	MA in Applied Linguistics	7 years
Simon	English	BA in Japanese and Music	4 months

(*All names are pseudonyms.)

Table 2: Student Participants

Name*	Age	Major	Years of Studying English	Teacher
Alice	20	Liberal Arts	12	*Helen*
Katie	19	Medicine	12	*Helen*
Harry	19	Dentistry	12	*Rodger*
Laura	19	Engineering	10	*Rodger*
Mary	19	Medicine	16	*Rodger*
Charlotte	18	Science	10	*Natalie*
Darlene	20	Medicine	16	*Natalie*
Irene	20	Medicine	13	*Natalie*
Jane	19	Medicine	12	*Natalie*
Bonnie	22	Medicine	16	*Simon*
Ellie	22	Medicine	19	*Simon*
Faye	19	Medicine	13	*Simon*
Georgia	19	Medicine	12	*Simon*

(*All names are pseudonyms.)

Data Analysis

The researchers used Strauss and Corbin's (1998) notions and perspectives of open and axial coding techniques to analyze their transcribed data. In the open coding, the researchers read the transcribed data line-by-line and named concepts and assigned categories for the read data. Then, the categorized data were read and re-read to group concepts and to develop properties for each re-assigned category. Later, the developed categories were compared and contrasted in terms of consistency, inconsistency, and contradictory to better depict how the participating EFL teachers approached their prescribed curriculum in their actual classrooms and what perceptions their students had toward such the approaches. (Kane et al., 2002; Kern, 2018; Leech & Onwuegbuzie, 2007; Mathison, 1988).

Results

The English Language Curriculum

The curriculum chosen for this current study was developed for the *Foundation English Language Course for University Students*. It was a required course offered by *Pilgrim University* for its first-year undergraduate students. Its main aim was to help students develop their communicative ability for both general communicative and academic purposes.

The curriculum for *Foundation English Language Course for University Students* was drawn-up by its course coordinator (*Natalie*, who was also one of the four teachers participating in this study). The curriculum detailed

course description, course objectives, weekly taught topics, materials (course textbook and other supplementary materials), pedagogical instructions, and methods of assessment and grading criteria.

In developing the curriculum for the course, *Natalie* took the course description ad verbatim from the student handbook (prepared by the *University*). This course description briefly outlined the overall goal of the course as well as some explanation of the taught content. The course objectives aligned with the course description were later developed. The weekly taught content included in the curriculum was taken directly from the table of contents of the commercially-available textbook *Natalie* had selected for the course (*Empower B2 by Cambridge University Press*). This particular section listed the weekly taught topic but contained very few details. (See Table III for more details.)

Teachers' Approaches to Curriculum Implementation and Instruction

In the following sections, the researchers summarize the views of the four participating EFL teachers on their approaches to curriculum implementation and instruction and the rationale behind their practices. Of particular interest, the researchers' findings indicated the different degrees to which these EFL teachers implemented their officially imposed curriculum and what these teachers typically did in their classrooms and why. In brief, *Rodger*'s adherence to the prescribed curriculum was rather minimal. Instead, he tailored his instruction in accordance to his students' needs and in negotiation with his own needs and informed decisions. In contrast, the other three teachers (*Helen*, *Natalie*, and *Simon*) meticulously followed the prescribed curriculum and centralized their classroom instruction on the assigned textbooks.

Rodger

Prevalent in *Rodger*'s responses to the interview questions was his sheer dissatisfaction with the curriculum and syllabus developed by the *University* and *Natalie*. In particular, he strongly complained about the vagueness and lack of authenticity of the course goals. "[*Course goals*] are just so inauthentic. They're just some gobbledygook that's just been scrambled together to make it sound good. 'Students will learn how to use passive, progressive ….. things like that.'" *Rodger* appeared to be rather reluctant when trying to recall the course objectives. Later, he admitted that he deliberately ignored the curriculum as he disagreed with the philosophy behind the curriculum development. In his own words,

> It's kind of my own fault that I haven't really subscribed to their [*the University and Natalie*] philosophy of curriculum development. I didn't pay much attention to these things. So I couldn't even tell you what all the objectives are without looking at the curriculum again. (Italics added)

Rodger also expressed dissatisfaction with the assigned textbook and avoided using it in his teaching where possible. The textbook, as *Rodger* criticized, was not organized well; nor did its content relate to his students' needs and interests.

> Generally, my teaching isn't really centralized on the assigned textbook as I wasn't impressed with it in regard to its organization, content, and authenticity. The textbook separates tasks into four skills [*listening*, *reading*, *speaking*, and *writing*]. I was shocked because I didn't know there was such a rigid and defined allocation for each of those skills. When you use language, I think they are all just a part of fluency and need to be used together for effective and genuine communication. The students do not enjoy or have much connection [*with the content in the assigned textbook*]. Most of these [*sections of the assigned textbook*] don't really relate to what students are being tested on, so I overlook them. (Italics added).

This same teacher went on to explain how he typically conducted his teaching. In a language classroom, a teacher, as *Rodger* believed, needs to engage students with authentic content in order for lessons to be effective. As a result, *Rodger* brought a lot of activities into his classrooms. With these activities, *Rodger* engaged and fostered relationships with his students, assessed his students' language proficiencies, and discovered his students' needs and interests. He described,

> Language learning should be student-centered, and the teacher needs to use tasks to engage students in authentic discourse. I bring a lot of activities into my classrooms. These activities fulfill many purposes. At the beginning, they are designed to build camaraderie and relationships between students. Most activities encourage oral communication and help me to evaluate student ability and needs.

In the classrooms, *Rodger* played various roles. Apart from being a teacher, *Rodger* sometimes took on the roles of a coach and a motivator. Through these two roles, *Rodger* thought he could help his students become more confident with their English language and could encourage as well as challenge the students to make more effort into learning the language. More

Table 3: The Curriculum for English Foundation Course for University Student

English Foundation Course for University Student (Level IV)

Course Description

Integrating four English skills by practicing reading news, research articles, commentary, and academic texts, for comprehension and critical thinking , from various sources focusing on the issues that enhance students' world knowledge; listening to news, lecture, and speech via multimedia and the internet; making conversations on various situations including speaking in public, giving oral presentations and making simulations; and writing essays in various types using citations and references, also practicing sub-skills such as grammar, pronunciation, and vocabulary used in appropriate context.

Course Objectives

On successful completion of this course, students will be able to:

1) understand the news, research articles, commentary, academic texts through listening and reading skills.
2) make conversations in various situations including speaking in public.
3) give oral presentations and making simulations.
4) write essays in various types using citations and references.
5) use sub-skills such as grammar, pronunciation, and vocabulary used in appropriate context.

Course Outline

Week One	Course Introduction: Ice-breaking activity
Week Two	Travel & Tourism (Grammar – Gerund & Infinitives, the Passive, Introducing requests and Showing gratefulness)
Week Three	Life in Cities (Grammar – Too/Enough, So/Such, Causative Have/Get
Week Four	Crime (Grammar – Third Conditional; should have + past participle, verb patterns, Reporting Verbs)
Week Five	Revision
Week Six	Mid-term Exam
Week Seven	New Invention for Health (Grammar – Relative Clauses, Reported Speech, Reported Verbs, Past modals of deduction, Adjectives with prefixes)
Week Eight	Self-study
Week Nine	(No Class)
Week Ten	Life Achievements (Grammar – Verbs of efforts)
Week Eleven	Listening Test
Week Twelve	Revision
Week Thirteen	Writing Exam and Outside Reading Test
Week Fourteen	Final Exam
Teaching Methods	Lectures, Presentation, Discussion, Demonstration, Media
Teaching Media	Teacher-generated materials, Commercial Textbook, LCD/Visualizer,
DVD,	Computers

Measurement and Evaluation of Student Achievement

Student achievement will be graded according to the faculty and university standard using the symbols: A, B+, B, C+, C, D+, D, and F. Methods of assessment include mid-term exam, final exam, outside reading test, writing test, listening text, and attendance and participation.

Course Evaluation

Students will be evaluated as indicated above. Students' satisfaction towards teaching and learning of the course will be completed with a questionnaire survey.

Reference

Doff, A., Thaine, C., Puchta, H., Stranks, J., & Lewis-Jones, P. (2015). *Empower B2*. Cambridge: Cambridge University Press.

importantly, *Rodger* believed that his uses of language-related activities and his various roles in the classroom could not only instigate but also promote students' involvement and participation in language teaching and learning. *Rodger* added,

> In my teaching, I play different roles. I kind of see myself as a coach and a motivator – someone that can provide real experiences for the students. Students need to have such experiences because, when they leave my classroom, they'll have to use English with another foreigner. They need to lose that fear that they may have at the start. My coaching mentality is different from others. But, for me, I kind of take the approach slowly. Slowly, I build up students' confidence and push them just beyond what they think they can do.

Evident from *Rodger*'s observed classrooms were his frequent uses of a series of language-related activities to promote teaching and learning. By adopting multiple roles such as those of a motivator, a facilitator, and a guide, among many others, *Rodger* successfully built strong working relationships with the students in his classroom. Moreover, he was able to encourage the students to actively participate in most of the activities that he had prepared for his teaching. These activities were, for example, discussions about television shows and

money, a debate about who to save during the apocalypse, and an interrogation game requiring the students to find holes in stories their classmates told. As observed in his teaching, these activities helped facilitate communication between *Rodger* and the students as well as among the students themselves. Better yet, they also encouraged the students to use the target language in the classrooms.

Interestingly, the researchers' observations of *Rodger*'s classrooms revealed that he did not totally ignore the officially prescribed curriculum as he had claimed. To some extent, he adapted some of the sections in the assigned textbook that he was dissatisfied with and replaced them with more authentic teaching materials. Occasionally, his teaching was centralized on some of the topics in his assigned textbook as he believed they were important for the students.

Helen

Demonstrated in her interview responses regarding her perceptions of the officially prescribed curriculum and the assigned textbook was *Helen*'s strong satisfaction of them both. Specifically, *Helen c*omplimented the curriculum for its clear objectives and praised the textbook for its content. Both the curriculum and the textbook assisted her in her preparation for her teaching. In her own words, *Helen* said, "[*T*]he curriculum tells me what the students need to be able to do and how I can help my students to attain these goals. And I can use the list of textbook exercises for each lesson as my plan for teaching." Further, *Helen* discussed the approaches she used in implementing the curriculum. In particular, she talked about her role in the classroom, her preparation for her teaching, and her reasons for excluding any language-related activities from her teaching.

In her classrooms, *Helen* saw herself as a facilitator. In her teaching, she tried to encourage her students to use the target language to improve their English as well as to develop positive attitudes toward the language. To achieve these, *Helen*, as she asserted further, played YouTube in her classrooms to model how English was used in real life. Also, she introduced her students to the cultures of the English-speaking people in order to help improve her students' communicative competence. *Helen* maintained,

> My role in the classroom is a facilitator. I encourage the students in my classroom to improve their English, to participate, and to use English in the classroom. I try to tell them that they can improve their English if they try and participate. So, in my classroom, we watch YouTube channels to learn how people usually speak English in their real life. I also want my students to have positive attitudes toward the English language. So, I often include the cultures of the English-speaking people in my teaching. I believe that the understanding of these cultures would help enrich students' communicative competence.

Helen also proceeded to share her preparation of her teaching with the researchers. She strictly followed the officially prescribed curriculum. "We've got the outline and it is planned for us. I look at the outline and then plan my teaching around it. Because, if not, I can't actually finish what I have to do in one class as suggested. Typically, I use the list of textbook exercises for each lesson as my plan for teaching." Absent from her teaching were language activities to promote student involvement in teaching and learning. This was because of the teacher's lack of understanding of how activities could be used to promote language learning and address students' inattentiveness to class activities. *Helen* began,

> I want to do activities in my classes as I believe that activities could help my students learn better. I don't have any activities for my students, and I wish that I could do more activities with them. The problem is I don't know that many activities. I admit that choosing and developing activities are my weak points. Also, I want to play games, but I don't know which and how.

Helen continued,

> I've been through the system before, so I know what and how students feel. Thai students focus a lot on their marks for the exam. If they don't really have something concrete, they will actually think they won't have anything to help them improve their grades to get good marks. In the past, when we learned English with some native teachers who tried to bring in some games and activities that encouraged us to speak more English in the classroom, or to encourage us to more English in the class, we enjoyed the class. But, at the end of the class, we usually think, "Oh, we learned nothing. What about the exam?"

The researchers' observations of *Helen*'s teaching revealed that her typical instructional practices ran in parallel with her interview responses. *Helen*'s classrooms were heavily teacher-centric and reminiscent of traditional classrooms. That is, the teacher alone did the talking and the students listened and took notes. *Helen*'s teaching was largely centralized on the assigned textbook and there was little (almost no) room for authentic materials. Indeed, the assigned textbook was the only focal point about which all elements of *Helen*'s instructional practices were based. For example, in one single observation, *Helen* devoted three quarters of her class time to

cover discrete grammar points in the assigned textbook. The rest of the class involved students completing seatwork grammar exercises in the textbook. The authentic language teaching materials that this particular teacher had often championed in her interview as an important part of her instruction (e.g., YouTube programs) failed to materialize. (In fact, there was no evidence of YouTube being played in any of *Helen*'s classes.) There was little interaction between *Helen a*nd her students and among the students themselves. Indeed, the students appeared to be rather passive with limited opportunities to use the target language for actual communication.

Natalie

Natalie was a course coordinator of this English Foundation course. As a course coordinator, she took charge in designing and developing the curriculum/ syllabus for the course and selected the textbook for the course. Unsurprisingly, *Natalie* was satisfied with the curriculum and syllabus that she had created as it was clear and informative. In her own words,

> The curriculum that I created was very helpful. It clearly talks about the goals for teaching and learning. It explains what we are trying to do on the course and also what we should do to achieve each week. It really helps me prepare the teaching that could be compatible with these goals.

Natalie's classroom instruction restrictively adhered to the assigned textbook as the textbook, she believed, standardized both teaching and learning. She opined,

> I rely heavily on the textbook. The textbook ensures that all the teachers teach the same things, not only in terms of language and grammar points, but also about different topics to be covered in the classrooms. Moreover, the textbook also is a platform for the students to think about topics they may not have thought about before.

The observations of *Natalie*'s actual classroom instruction correlated with her interview responses. Indeed, the majority of *Natalie*'s instruction was dedicated to her introduction of grammar points to her students, chorus reading, direct translation from English to Thai, and students' completion of exercises in the assigned textbook. Each observed class had large amounts of time devoted to explicit grammar instruction that was independent of any authentic language use. There was little (almost no) communication between *Natalie* and her students, nor was there any among the students themselves.

Simon

Simon's description of his implementation of the officially prescribed curriculum and his typical classroom instruction at first suggested his departure from the curriculum and the assigned textbook. During an interview, he shared with the researchers of his frequent attempts to relate the grammar points in the assigned textbook to what his students could probably encounter in their daily lives outside of the classroom. He also added that he often brought in cultures of the target language to interest his students as well as to build relationships with them.

> My teaching would be less focused on grammars being studied from the assigned textbook and in writing, and perhaps using grammar more in speaking. Classroom activities are definitely important and essential. Often that's students' favourite part of a lesson. In the classroom, I would try to fit the grammar into a more practical real-world context …. avoiding contexts that they are not likely to find themselves in their daily lives. I often bring the target language culture into the classrooms. This keeps students interested. My experiences in my own culture are a way of making the lessons interesting to the students. I think it is part of the rapport that you build.

The observations of S*imon*'s classroom instruction showed otherwise. *Simon*'s classes were predominately teacher-centric; his teaching was mandated by the officially prescribed curriculum and exclusively centralized on the assigned textbook. Student involvement was rather scarce, almost to the point of being non-existent. The vast majority of his teaching time was filled with the students either being lectured to by *Simon* at the front of the class or completing textbook exercises individually. Then, *Simon* went over the exercises with the students by providing them with answers. There was no evidence of students discussing the exercises as either pairs or groups. Nor was there any sign of interaction between *Simon* and the students taking place. Indeed, with the curriculum and the assigned textbook playing such a vital role in his classes, there was a dearth of other more authentic materials used in his classes (despite his claim of bringing different aspects of the target language culture into his classrooms). Overall, the observations revealed that traditional classroom practices were employed for long stretches of *Simon*'s classes.

Students' Perceptions of their Teachers' Approaches to Curriculum Implementation

All 13 student participants were vociferous in their opinions of the approaches that their EFL teachers employed to implement the officially prescribed curriculum. Overall, the majority were dissatisfied with what three of the four teacher participants (*Helen*, *Natalie*, and *Simon*) did in the classrooms. They lamented at how these three teachers

rigidly planned their teaching around the curriculum and the assigned textbook but ignored students' needs and interests. Not only did such an approach demotivate the students, but also it restricted the students from improving their communicative competence.

Katie's criticisms focused on *Helen*'s dominant role in the classroom. *Helen's* teaching was routinely centralized on the officially prescribed curriculum and the assigned textbook. Whilst teaching, *Helen* often stood in front of the classroom and gave lectures on various grammar points included in the textbook. The students in the class had little-to-no involvement in teaching and learning as they were instructed to comply with *Helen*'s direction. *Helen*'s approaches to curriculum implementation and teaching not only fostered passive learning in the students but also minimized their interests in learning. *Katie* voiced,

> *Helen* only uses the book and students just have to listen to her and do the exercises that she tells us to do. Or we need to join in any exercises that she does. That's pretty much what she normally does in the class. There is a lack of speaking. Many of the students do not pay much attention; some feel really sleepy. You can learn more when you are being active. We can learn more when we do things in the class and practice. My English skills will improve more.

Alice's interview responses loudly echoed *Katie*'s complaints about *Helen*'s classroom practices.

> In my classroom, the textbook is the main thing *Helen* uses, even though a lot of it isn't about the kind of English we need. *Helen* only follows the topics included in the textbook and the curriculum. It is not enough. We never go for any discussion about what we need. Students just sit and be quiet and just listen to *Helen*. She is a speaker, but not a good listener. Interaction between *Helen* and the students in the class are very … very rare. I notice that all of us, including me, do not really feel free to talk with *Helen*. I don't like that I just have to sit and listen to *Helen*. We never discuss what we need.

Further, this same student concluded that teaching and learning should not be mandated by either the curriculum or the textbook. Instead, it needed to focus on students.

> The curriculum and the assigned textbook should be used as a guideline and also used for homework. They should not be used in a classroom the whole time. Moreover, the teacher should necessarily put a focus on students. Because if the teacher is the focus, I feel like we are in a frame. The teacher puts a frame on us about what we can do, what we can say, and what we can think. It also makes us think that whatever the teacher does is always right.

Four students from *Natalie*'s class shared similar concerns about *Natalie*'s strict implementation of the officially prescribed curriculum and the assigned textbook. *Daria* condemned *Natalie*'s dominance of what happened in the classroom and her rigorous adherence to the curriculum and the assigned textbook.

> I am always in... a textbook-centered classroom. I never enjoy that. *Natalie* bases her teaching on the curriculum and the assigned textbook. As far as I can remember, we never discuss what students want to study with *Natalie*. She always does the speaking and we just sit and listen or we just take note. I don't like it. I think my English has gotten rustier since I now don't have a chance to talk, to write, or to listen, and to be exposed to real English.

Later, the same student contended that students should be the real focus of teaching and learning, instead of teachers. *Daria* argued, "Students should be the key role – the main role in the classroom. My friends and I have become very passive." Merely listening to teacher's lectures would not help students become proficient in English. *Daria* metaphorically compared learning a language to learning to play a musical instrument. Without practice, students would acquire neither language proficiencies nor musical skills. "Language is skill like playing a musical instrument. You cannot practice English with lecturing like you cannot play violin with only watching concerts."

Jane's criticisms of *Natalie* for not including students in her teaching matched with those of *Daria*. Her clear dissatisfaction with *Natalie*'s approaches to curriculum implementation in her actual classroom drove *Jane* to say, "We have no involvement. *Natalie* informed us about her teaching style but never once asked us about our needs. We have to be the ones who control the class. The teacher should be listening to us, not us listen to and follow the teacher." *Jane* also offered some suggestions of what *Natalie* could do to improve her teaching.

> Students should have the opportunity to choose what they want to read, and it should be more real – practical books, not a textbook. Jokes and stories are important in the classroom to gain the interest of the students. But *Natalie* goes directly into the curriculum and the textbook and sticks with them.

Charlotte's comments on *Natalie* were similar to those of *Daria* and *Jane* in that she criticized *Natalie* for her rigid reliance on the officially prescribed curriculum and the assigned textbook. Because of this, some of the students in *Natalie*'s class paid little (or almost no) attention to her teaching. *Charlotte* voiced, "A lot of time it's like *Natalie*

is giving a lecture and some students can't concentrate because it's so boring to listen and follow the curriculum and the textbook with teacher standing at the front of the classroom. In fact, some even fell to sleep. The textbook has lots of information, but some isn't that necessary or practical."

Irene agreed and posited:

> The teacher just orders us to do exercises in the textbook, and then she gives us like an hour to complete these exercises. The textbook is of little of use to us. It doesn't help much. The exercises don't teach us anything. I believe it would be much better to bring extra materials in so that we are not just repeating what we already knew.

The perceptions *Simon*'s students had of his approaches to curriculum implementation were distinctively divided. Two students (*Faye* and *Georgia*) commended *Simon*'s attempts to involve students in teaching and learning, to some extent, through his uses of activities. *Faye* used to study with both *Helen a*nd *Natalie*. She compared *Simon* with her two previous teachers and praised *Simon*. "In *Helen* and *Natalie*'s classes, the focus is very definitely on teachers. *Simon* somehow is a bit different. He uses some activities; he tries to get students involved through games; and he sometimes gives us some group discussions to do." Another student, *Georgia*, reverberated and added that *Simon* had helped the students in his class improve their English language skills. "*Simon* somehow focuses on the students. He tries to get students involved in teaching and learning. He brings in games; he encourages us to speak English. These are good. Overall, he has helped us a lot to improve our English skills."

Nevertheless, there was an ambivalence about *Simon*'s approaches in curriculum implementation. Two students were strongly dissatisfied with how *Simon* had chosen to approach the officially prescribed curriculum and the assigned teaching material. In particular, they complained about *Simon*'s rigid adherence to the textbook and students' lack of opportunities to become involved in teaching and learning. As *Bonnie* criticized,

> Really there are not many opportunities to use English in *Simon*'s class. I thought there would have been more, but not many at all. Actually, we don't have many things to talk about in English with *Simon*. Mostly what we do in the class is just to follow the textbook. Its content, honestly speaking, is not new to us.

Simon's heavy reliance on the curriculum and the textbook, as *Bonnie* concluded, was not conducive to learning. She felt that her English made minimal progress since she had enrolled in *Simon*'s class. "My English has not improved that much because most of the things in the book were what we had already learned before. There are many methods for teaching and learning English, and textbooks should not be the only major one."

Ellie also raised concerns about *Simon* using the officially prescribed curriculum and the assigned textbook to scaffold his classroom instruction while ignoring students' needs and interests. *Ellie* put it like this:

> The focus is definitely on the teacher. I would say the class is overall a more of …. teacher-focused. This is very different from other classes that I had taken. Usually, at the beginning of the semester teachers would ask students to write down their needs and interests on a piece of paper and send it back to the teachers. These needs and interests might be incorporated later into the teaching and learning. But this doesn't happen in this class. *Simon* never asks us to share either our needs or interests. The curriculum and the textbook are the two major things that *Simon* uses in his teaching. He basically follows the curriculum and the textbook.

Three participating students from *Rodger*'s class were overwhelmingly satisfied with *Rodger*'s classroom instructional practices. Their comments on *Rodger*'s practices were nothing but positive. Different from the other three teacher participants, *Rodger,* as *Harry*, *Laura*, and *Mary* commonly agreed, consistently involved the students in his class in teaching and learning through a series of classroom activities. Student engagement was prevalent; interaction/contact between *Rodger* and the students and among the students themselves was abundant. Speaking for all the students in *Rodger*'s class, *Harry* complimented *Rodger* for what he had done to help his classmates and him improve their English language skills.

> I think a lot of the students in my class would agree with me that we've moved from a passive class to an active class. The students in my class are mostly active. *Rodger* does an excellent job in trying to make the students active and making us speak English more. The teacher encourages all of us to speak and I think everyone has a chance to practice his speaking skills. My English has improved a lot and *Rodger* has made the most contribution to my improvement. *Rodger* is the one who lets me practice my speaking as well as my listening skills. Additionally, he helps me with my writing by correcting and giving feedback on my essays. So, after all, yeah, I think the improvement mainly comes from my teacher – *Rodger.*

Compliments of *Rodger*'s instructional practices were also abundant in *Laura*'s interview responses. Commenting

on how *Rodger* helped the students in the class increase their confidence in English speaking, *Laura* said:

> In my class, we have plenty of interaction between our teacher and the students. The main thing that *Rodger* does in his class is to build our confidence for speaking English. He wants the students to have more confidence, so he gives is the microphone to speak in front of everyone. During activities and games that we play, there are lots of opportunities for us to speak English.

Airing similar commendation of *Rodger*'s approaches to curriculum implementation, *Mary* remarked that she was content with *Rodger*'s decision to deviate from the imposed curriculum and the assigned textbook and to focus on activities and games instead. *Rodger*'s implementation of language-related activities and games not only enlivened the class but also helped the students increase their confidence in communicating in English.

> I am happy that *Rodger* does not really use the textbook in our class. This is because the content in the textbook is pretty much a repetition of what had learned in my high school. *Rodger* often gives us activities in speaking in English. This is so much better than passive learning – sitting in our desk and listening to the teacher and doing exercises after exercises in the textbook.

Discussion and Conclusion

Following Wolcott's (1990, 2001) suggestions, the researchers revisited and rearranged their analyses to answer the research questions.

What are these university EFL teachers' approaches to implementing their prescribed curriculum and their assigned textbooks in their actual classrooms?

The findings of the current study found two approaches used among the four teacher participants in implementing their officially prescribed curriculum and the assigned teaching material. One was a mutual-adaptation approach; the other was a fidelity-oriented approach.

Rodger's obvious dissatisfaction with both the curriculum and the textbook drove him to follow the notions of the communicative language teaching approach (Breen & Candilin, 1980; Canale & Swain, 1980; Savignon, 1997, 2002, 2007, 2018) and adjusted both the curriculum and the textbook, to varying degrees, to meet his students' needs and interests. His classroom instruction promoted learner-centered classes. Often, *Rodger* used activities to serve different teaching and learning purposes. For example, activities were implemented to engage students, to help them determine their own learning objectives, to encourage them to become active as well as responsible for their own learning, and to assess students' learning outcomes. It is obvious that *Rodger*'s adaptation of the curriculum and the textbook was heavily influenced by his pre-service training and his language teaching experience (Shawer, 2017). In essence, this particular finding supported previous research whose results emphasized the relationships between pre-service training and teaching experience and teachers' adaption of officially prescribed curriculum (Clemente, Ramirez, & Dominguez, 2000; John, 2002. Kinach, 2002; Kirk & MacDonald, 2001).

Surprisingly, the current findings also challenge the interplay between teachers' approaches to curriculum implementation and teachers' pre-service training and teaching experience to some extent. Notwithstanding their pre-service training and teaching experience, both *Helen a*nd *Natalie* chose to restrictively follow the officially prescribed curriculum the assigned textbook, using them both as the only sources of their instructional content. Their teaching plans were customarily centralized on the curriculum; they typically went through the textbook page-by-page, a teaching approach/strategy referred to, as Shawer (2017) coined, "*fixed-lesson plans*" (p. 298, italics original). What this means is that teachers "deliver [*the instructional content*] without responding to classroom dynamics, and depend on the teacher's guide [*e.g. the imposed curriculum and the assigned textbook*] to transform received content" (Shawer, 2017, p. 298, italics added). (See also Grossman & Thompson, 2014; You, Lee, & Craig, 2019). Such practices, as the findings indicated, could be attributed to teachers' understandings and experiences (as a learner in a second language classroom) of teaching and learning (Johnson, 1992; Pajares, 1992; Richardson, 1996).

Simon's approaches to implementing curriculum and classroom instruction also supported the influential role of teacher understanding and experience in instructional practice. *Simon* had neither training in EFL education nor experience in teaching at the tertiary level. Given his insufficient pedagogical knowledge, he necessarily adhered to the imposed curriculum and the assigned textbook (Lee, 1995).

Interestingly, this drawn data set, to some extent, could be used to support previous findings on the differences in how experienced teachers and novice teachers approach their imposed curriculum and the assigned textbook. Several researchers have suggested that

experienced teachers have more ability in either adapting or developing curriculum than novice teachers (Beck & Konsnik, 2001; Clement et al., 2000; Doyle & Carter, 2003; Zheng & Borg, 2014). In addition, the current data also offer another alternative explanation to teachers' approaches to curriculum implementation. It may be possible that teachers' approaches to curriculum implementation are determined by their understandings of teaching and learning and their experiences (as a learner in a classroom).

What effects do teachers' approaches to curriculum implementation and the assigned textbook have on students' learning?

The findings of the current data augment the interplay between teachers' approaches to curriculum implementation and students' learning (Aldhafri & Alrajhl, 2014; Alrajhl & Aldhafri, 2015; Beck, 2001; Dever & Karabenick, 2011; Green & Fugita, 2016; Liu & He, 2014; Paolini, 2015; Tasdemir & Yalcin Arslan, 2018; Tulbure, 2012; Wilson, 2012). The students in *Rodger*'s classroom, in which the teacher adapted the imposed curriculum and the taught content to meet the students' needs and interests, were strongly satisfied with the teacher's approaches to implementing curriculum and instruction. They were motivated and active, being able to participate in *Rodger*'s language-related activities.

In contrast, the students in the other three teacher participants' classrooms, whose practices were largely defined by the officially prescribed curriculum and the assigned textbook, demonstrated their dissatisfaction with the teachers' instructional practices and made vicious complaints. While the students felt that they needed to be involved in teaching and learning, the teachers ignored this and chose to deliver predetermined content in a linear-like fashion. Student classroom participation was not encouraged. Hence, their motivation to learn English was low as they felt that the approaches that their teachers used contributed almost nothing to their learning (Shawer, Gilmore, & Banks-Joseph, 2009).

Implications and Future Studies

Teacher training programs may use the findings of the current study to develop a training program that may help equip pre-service teachers with knowledge on approaches to curriculum implementation and classroom instruction. In essence, this training program should introduce pre-service teachers to possible approaches/strategies for dealing with requirements from policy-makers and the workplace, differences in teaching approaches and strategies and learning styles, and learner diversity, among many others. At their best, these approaches and strategies may assist teachers in exercising "control over their own level of functioning and over events that affect their lives" (Bandura, 1993, p. 118).

To some extent, the findings not only raise awareness of the disadvantages of marginalization/division within a school context but also emphasize the necessity to lessen the marginalization/division. Necessarily schools should promote more collaboration among teachers; cultures of sharing and exchanging should be fostered. With teachers being more involved, not only would they be more certain with their teaching practices but those practices would also be less routine (Hargreaves, 2019; Hongboontri & Keawkhong, 2014; Kleinsasser, 1993; Rosenholtz, 1991; Vangrieken, Dochy, Raes, & Kyndt, 2015). More importantly, these cultures would contribute greatly to student learning (Ronfeldt, Farmer, McQueen, & Grisson, 2015). In her own words, Rosenholtz (1991) maintained:

> [*Collaborative principals*] shook loose new elements of collegial interdependence, seeming to vastly expand teachers' sense of possibility and their instincts for improvisation …. Principals often orchestrated collaborative relations between more and less successful teachers, explicitly acknowledging that improvement was possible, necessary, and expected. Teachers saw that working together seemed to reduce their endemic uncertainty and increase their classroom success. Such was the power of teacher learning that, like good, it became its own propagator …. With greater teacher certainty about instructional practice and technical knowledge, teachers tended to search for reasons and ways to help, not for excuses for their failures. They often found what they were looking for in the sage counsel of principals and colleagues, and in the cooperation, trust, and support of parents. With more nonroutine and humanistic treatment came personal promises fulfilled: the sweet promise of helping children learn, the glittering promises of societal contribution, the warm promise of freedom from failure, from lack of faith in themselves and their teaching culture. (Italics added, pp. 208-209).

As the findings of the present study underpin the effectiveness of a communicative language teaching (CLT) approach in language teaching and learning (Rahman, Pandian, & Kaur, 2018; Shawer, 2010a, b), they call for more training on CLT for both pre-and in-service language teachers. More importantly, the training should provide language teachers with opportunities to mix and balance both theory and practice. As a result, language teachers would not only acquire a better theoretical

understanding of CLT but also gain a better insight into how CLT could be practically used, especially in an actual language classroom.

These implications also call for more studies in various areas. For example, what factors affect the way teachers choose to implement the curriculum at a classroom level? What are the relationships between workplace culture and teachers' approaches to implementing the curriculum at a classroom level? To what extent does workplace pressure influence teachers' implementation of the officially prescribed curriculum? How do schools promote collaboration among their teachers? All these questions await further exploration.

Competing Interests

The author(s) reported no potential conflict of interest.

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APPENDIX A

Interview Questions for Participating Teachers

1. How long have you been teaching English?
2. How long have you been teaching at *Pilgrim University*?
3. What teacher training have you received?
4. How did your teacher training prepare you for teaching?
5. What do you typically do in your EFL classroom?
6. How do use your textbook and other teaching materials in your classroom?
7. What different roles do you play in your classroom?
8. What are your perceptions of the officially prescribed curriculum and the assigned textbook?
9. What language-related activities do you use in your classroom? And how do you use them?
10. What other teaching materials do you use in your classroom?
11. What problems have you experienced in carrying out your planned instruction?
12. What are your strengths? What are your weaknesses?
13. Is there anything else you would like to add to your comments?

APPENDIX B

Interview Questions for Participating Students

1. How long have you studied English?
2. What is your English language learning experience like?
3. What do you like/dislike of your current EFL classroom?
4. What do you think about your current English subject? How do you think the course could be improved?
5. What are your perceptions of the officially prescribed curriculum and the assigned textbook?
6. What does your EFL teacher typically do in your classroom?
7. What do you think of your teacher's teaching styles?
8. How does your teacher implement the curriculum? How does your teacher use the textbook?
9. What strengths do you think your teacher has? What weaknesses does your teacher have?
10. How do you think other resources such as activities and games should be used in your classroom?
11. To what extent are you satisfied with your teachers' approaches to curriculum implementation and classroom instruction? And why?
12. In what way are you involved in the teaching and learning in your classroom?
13. Is there anything else you would like to add to your comments?

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ORIGINAL ARTICLE

Use of Graphic Organiser and Instructional Scaffolding as a Teaching Strategy for TESL Undergraduates: An Overview of Students' Experiences

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ABSTRACT

Debates over the use of graphic organiser and instructional scaffolding as a teaching strategy are great in number, but not on students' experiences of using them. Therefore, this study explored the significant differences in the learning experiences gained when 'graphic organiser instructional scaffolding' (GOIS) and 'no graphic organiser no instructional scaffolding' (NGNI) delivery modes were used as teaching strategies for argumentative writing in a TESL program. A semi-structured interview questionnaire was used to guide the interviews. A total of 6 students (GOIS, n=3; NGNI, n=3) were interviewed and audio-recorded. The constant comparative approach was used to analyze the interview transcripts of the GOIS and NGNI groups. The findings indicated that the students who use the GOIS delivery mode have more positive experiences compared to students in the NGNI delivery mode. Hence, the study recommends educators to use this delivery mode in future to ensure better learning experiences.

Keywords: argumentative essay, graphic organiser, instructional scaffolding, sociocultural theory, TESL undergraduates.

Introduction

Mastering the skill of writing is most challenging and difficult when compared to other language skills. A number of reasons have been cited as the cause for a poor writing performance which includes inappropriate teaching methods (Tayib, 2015), educators' qualities (Kepol, 2017), classroom size (Imtiaz, 2014) and the ineffective use/lack of use of e-learning tools (Konstantinidis, Tsiatsos, Demetriadis & Pomportsis, 2011). To address these concerns a wide range of studies had looked into instructional scaffolding and graphic organiser as a way to improve argumentative writing (Lancaster, 2011; Meera & Aiswarya, 2014; Tayib, 2015; Allenger, 2015).

Although there are researches on the effectiveness of the graphic organisers and instructional scaffolding in enhancing argumentative essay, the researchers believe that the need should be focused on developing argumentative writing capacity using graphic organisers as instructional scaffolding that includes explicit instruction and guidance from a facilitator and jointly written argumentative tasks in small groups. The researchers believe by doing so, collaboration could occur, helping students accomplish their argumentative tasks successfully. This is consistent with Storch (2011) who noted that in the language classrooms, very few studies have investigated the nature of collaboration when students produce a jointly written text. It would, therefore, be useful to find out if the GOIS delivery mode, which incorporates those criteria, would be an added advantage over the NGNI delivery modes in the argumentative writing performance among TESL undergraduates in Malaysia, as studies had also pointed out the need to conduct research on the efficacy of graphic organisers as instructional scaffolding in argumentative writing (Hawkins, 2011).

Vygotsky's Socio-cultural theory (SCT) was adopted as it was found to be closely related to the study. The major

theme of Vygotsky's theoretical framework is that social interaction plays a fundamental role in the development of cognition. Vygotsky believed everything is learned on two levels, social and then individual. The ZPD is the learning zone where support is necessary in various ways and which requires social interaction to fully develop. Scaffolding is explained as *"the role of teachers and others in supporting the learner's development and providing support structures to get to the next stage or level"* (Vygotsky, 1978, p. 176). In the beginning, Vygotsky asserts that learners receive full assistance from their teachers and as they advance, teachers slowly withdraw support and move the responsibility of learning to learners so that they become independent learners. According to Majid and Stapa (2017) scaffolding is closely related to collaboration in a real setting and allows students to view and come out with a conclusion through sharing ideas with their peers in the group.

The key implication of instructional scaffolding is that learners are engaged with their educators, peers, and instructional tools with a high quality of support and help from educators who understand the requirement of learners to perform the task. Instructional scaffolding involves active learning where facilitators question and encourage students to build on prior knowledge, form new knowledge, give positive feedback, and motivate learners by minimizing the level of frustration, thereby ensuring internalization of learning for the learners (Rodrigo, 2012). But, in tertiary education today, there are more than 30 students in a classroom, making it impossible for an educator to ensure learners' learning (Derrick, 2019). According to Chukwuagu (2016), without coaching and maintaining learners' interest in learning, their achievement is affected.

The scaffolding metaphor has been acknowledged as an effective learning tool in enhancing writing performance (Obeiah & Bataineh, 2015). Support is offered for learners to partake in collaborative learning in groups where they learn by sharing ideas in real-life situations among peers. Scaffolding, also undoubtedly provides a supportive learning environment for learners to ask questions, offer feedback and assist their peers in learning new subject materials, hence taking a more active role in their own learning. Scaffolding is therefore, seen as a momentary support to assist students in accomplishing new tasks and understanding concepts which they cannot achieve on their own.

There is a variety of scaffolding approaches to accommodate learners of different levels of knowledge, for instance, teachers are less active in the teaching and learning because learners are actively involved in the collaborative learning tasks (Gagné & Parks, 2013). Therefore, *"the concept of scaffolding has received a great deal of attention in educational research over the past few decades"* (van de Pol, Volman & Beishuizen, 2010, p. 1) and the scaffolding approach is indicated as fundamental in second language learning (L2) as its use of mediators and support from more knowledgeable persons such as educators and peers ensure learners' potential development is achieved successfully (Dongyu, Fanyu & Wanyi, 2013).

It must be noted that scaffolding is not used as commonly as the lecture method at the higher tertiary level and therefore its use or lack thereof, varies from different courses or programs offered in the universities. There are views that the lecture method might be suitable as an effective teaching approach for pedagogical reasons (French & Kennedy, 2016; Kelly, 2017). Replacing the lecture method which is the behavioral learning theory with SCT in ESL learning would entail changes in pedagogy. The educator's role would have to move from the conventional teaching approach such as the lecture method (Brandon & All, 2010) to a more social and friendly approach. The educator shifts from "knowledge provider" to "knowledge facilitator" and large classes are changed to small groups to promote social interaction.

Implementing the SCT in the ESL learning context would certainly be challenging and time-consuming as educators and learners have to get adapted to a different approach to learning, but it is possible and requires training as the impact is positive and promising. Thus, any university programs considering adopting the use of graphic organisers and instructional scaffolding in argumentative writing must weigh its benefits and disadvantages. Care should be taken in the implementation for a sudden shift in learning methodology that could adversely affect the success rate of instructional scaffolding. According to Servati (2012, p.24) can be ineffective in learning where *"learners may end up confused, causing more stress on their cognitive load…"* if not modeled appropriately. Therefore, the implementation of graphic organiser as instructional scaffolding should be incremental in order to provide both teacher and learners with enough time to become familiar with the new instructional method.

Past studies have looked into the effectiveness of graphic organisers and instructional scaffolding in various contexts and aspects to show how it supports writing (Lancaster, 2011; Meera & Aiswarya, 2014; Tayib, 2015; Allenger, 2015). It would, therefore, be useful to explore students' learning experiences when 'graphic organiser

instructional scaffolding' (GOIS) and 'no graphic organiser no instructional scaffolding' (NGNI) delivery modes were used as teaching strategies for argumentative writing in a TESL program.

Methods

In the present study, the researchers carried out semi-structured interviews with the TESL undergraduates on their learning experiences to investigate if there is a link between the two different delivery modes on the argumentative writing performance among TESL undergraduates. Semi-structured interviews are in-depth interviews where participants are required to answer pre-set open-ended questions and these have been widely employed by scholars (Jamshed, 2014). According to Laforest (2009), semi-structured interviews are used to collect qualitative information and are useful for studying specific situations. The researchers believe that the qualitative data from the semi-structured interviews in this study can purvey meaningful feedback on students' learning experiences in the two delivery modes. Semi-structured interviews were also found to be suitable for small samples and for providing access to participants' perceptions and opinions. Newton (2010) asserted that semi-structured interviews provide opportunities for researchers to generate rich data. To facilitate this, the following interview questions were posed to the students:

1. How was your overall learning experience using the delivery mode?

2. How did the delivery mode help you expand your knowledge of argumentative writing ability?

3. What were the challenges that you faced during the learning process using the delivery mode?

4. How would you describe your participation in the learning process using the delivery mode?

5. What are the benefits that you perceived in the use of the delivery mode?

A total of six students, three from each delivery mode, who volunteered to take part in the semi-structured interview were used as samples. As Alshenqeeti (2014) pointed out, students should be free to refuse or to agree in taking part in the semi-structured interview. Although the number of interviewees are small, it is more important to get persistent data rather than getting enough data.

In this study, the graphic organisers and instructional scaffolding were guidance and support provided by a knowledgeable person, i.e. the facilitator. The facilitator used the graphic organisers as visuals (as well as paper-based- modeling, questioning, and group discussion) during the teaching and learning process to assist the students in the argumentative writing task in a more structured and efficient way to optimize performance. The samples are TESL undergraduates.

The GOIS delivery mode functioned as the study intervention in the experimental group while the lecture method, NGNI, was included as a control condition to enhance the understanding of the effectiveness of the present study intervention. Teaching procedure for the GOIS delivery mode involved four stages of learning with the use of the graphic organiser as instructional scaffolding; Stage 1: The Introduction, Stage 2: Assisted Group Discussion, Stage 3: Writing an Individual Essay and Stage 4: Peer Review. During the first stage of week one, the facilitator introduced the argumentative graphic organiser as well as the elements of an argumentative essay via slides. Then, the facilitator modeled the lesson by showing a sample of completed graphic organiser and a sample of a written argumentative essay. The purpose of modeling using the graphic organisers is to provide students with explicit information on the content, organization, argumentative elements, and the use of conjunctions for argumentative writing. Additionally, the facilitator also posed some questions to check on students' understanding as well as to enrich the classroom discourse.

In the second stage of week one, the facilitator allocated students to their respective groups. The facilitator provided students copies of a sample essay and a blank graphic organiser. Students were instructed to read the sample essay, identify and underline the conjunctions used and then, discuss and complete the graphic organiser with appropriate information. The facilitator assisted group members when necessary. Subsequently, in stage three, the facilitator instructed the students to write an individual argumentative essay based on the information gathered in the graphic organiser.

During the last week, students were instructed to complete a checklist and reflect on their peer's essay. In this stage, the facilitator provided students with an A4 paper attached with an argumentative topic. Group members were instructed to draw an argumentative graphic organiser discuss and then complete the graphic organiser with appropriate information. Subsequently, the facilitator instructed the students to write an individual

argumentative essay based on the completed graphic organisers. The facilitator assisted group members when necessary.

In the NGNI delivery mode, the same lecturer who was involved in the GOIS delivery mode acted as the instructor in delivering the teaching method. The teaching was implemented in a classroom equipped with teaching facilities similar to the GOIS delivery mode. The teaching procedure for the NGNI condition involved four stages of learning; Stage 1: The Introduction, Stage 2: Peer Learning, Stage 3: Individual Essay Writing and Stage 4: The Review.

During the first stage, the instructor started the lesson by introducing the argumentative topic. After that, the instructor wrote down the following argumentative elements on the whiteboard and explained them verbally; thesis statements, paragraphs, topic sentences, and supporting details. Then, the instructor asked a few questions related to the argumentative topic. The instructor also introduced and wrote down a few transition signals on the whiteboard and explained them verbally. Next, in the second stage, the lecturer asked the students to form groups. Students were instructed to discuss and list down important points from their discussion. The instructor provided help only when necessary. After that, in stage three, students were instructed to write an individual argumentative essay based on the topic of discussion. In the last stage, the instructor collected and reviewed the students' essays. In the NGNI condition, the instructor provided very basic information and was less involved in the learning process compared to the GOIS condition. During the intervention period of four weeks, students went through lessons based on the lecture mode without the use of graphic organisers and instructional scaffolding

To facilitate data analysis, the interviews were recorded. Jamshed (2014) suggested that researchers should record semi-structured interviews conducted because handwritten notes are found to be unreliable and can cause researchers to miss some important key points. Meanwhile, recording provides the opportunity for researchers to pay attention to the content of an interview as well as the verbal prompts and thus helps transcriptionist to produce a "verbatim transcript" of the interview. The constant comparative approach was employed in this study as *"…it generates theory that can be used as a precursor for further investigation of this phenomenon and related issues"* (Lawrence & Tar, 2013, p.35).

The semi-structured interview was administered using the convenience sampling technique one week after the argumentative essay writing post-test. The researchers sought the help of the subject coordinator to engage the students for the interview based on their interest in taking part, collected before the interview, an important ethical procedure to be observed (Alshenqeeti, 2014 & Palinkas et al., 2015). Onwuegbuzie and Leech (2007) recommended that *"…when comparing subgroups, at least three cases per subgroup should be selected"* (p.245). Further, issues such as the respondents' manners, views and interviewer's predictions can be a guide to high validity and at the same time possibility for unfairness. Therefore, to avoid these possibilities, the researchers emphasized on the respondents' honest replies and views related to the interview questions.

The respondents were also allowed to use the language that they were comfortable in and express their views without fear of grammatical errors. Since it was a semi-structured interview the researchers ended the conversation when they found that the respondents had nothing more to add. The recorded data were transcribed verbatim by listening to the recorded data. The transcriptions were verified by an inter-rater and subsequently analyzed for 'emergent themes' using the 'constant comparative method'.

An analytical framework which is a modified version by Leech and Onwuegbuzie (2007) from Glaser and Strauss (1967 as cited in Leech & Onwuegbuzie, 2007) was employed in the present study. The analysis of the interview transcriptions was done manually, and the steps presented in Table 1 were adopted.

Initially, as advocated by Leech and Onwuegbuzie (2007), interviews from each delivery mode which were analyzed according to the themes identified were given to the interviewees to confirm whether the themes had captured their statements exactly. Once associations

Table 1: Analysis Procedures for Semi-Structured Interview

Step	Procedure
1	The entire set of data is read.
2	The data were chunked into smaller meaningful parts by underlining the chunk in the interview transcript.
3	Each chunk of data is labeled with a code.
4	All new chunks of data are compared with previous code and *"similar chunks will be labeled with the same code"* (Leech & Onwuegbuzie, 2007, p.565)
5	All coded data are grouped by similarity.
6	A theme is then identified and assigned to each group of coded data.

(Source: Leech & Onwuegbuzie, 2007)

were made, the themes within the two delivery modes were confirmed before making a comparison and judging on why one particular delivery mode was better than the other in terms of overall argumentative writing performance.

Two validity checking approaches suggested by Creswell (2014) that is, the 'external auditor' and 'member checking' were employed by the researchers. First, the researchers requested a colleague who had experience in teaching ESL to analyze the interview transcripts by reading through the six interview transcripts and identifying the emergent categories. Then, the emerged categories were discussed by the researchers and the colleague to check if the categories were reasonably accurate. The inaccurate categories were discussed further until both parties came to a consensus. Besides that, the researchers had also requested two interviewees to look through the themes that had emerged from the interview for accuracy. No amendments were made as the emergent themes identified in the interview transcripts contained true experiences of the interviewees.

Results and Discussions

This section presents the analysis of the semi-structured interview data of six selected students who underwent the two delivery modes, that is the GOIS (*n* = 3) and the NGNI (*n* = 3). The findings from these analyses are presented and discussed according to the categories and subcategories that emerged from the students' learning experiences. Additionally, similarities and differences in students' learning experiences of the two different groups are also presented.

A total of six interview transcripts were analyzed and compared from the two delivery modes and a total of two similar categories emerged: similar 'commitment to accomplish the learning task,' and 'challenges.' Table 2 illustrates the similar categories and subcategories that emerged among the interviewees of the two delivery modes.

Table 2 shows the similarities in responses of the six respondents on the experience gained from their lessons; the GOIS and NGNI groups. For the purpose of this research, only the categories which indicated similarities will be discussed. They are 'commitment to accomplish the learning task' and 'challenges'.

Category a: Commitment to accomplish the learning task

The category 'commitment to accomplish the learning task' emerged from students' involvement in the learning process and commitment to accomplish the written task. Commitment towards the written task is essential as it helps students to construct knowledge through independent learning and contribution of ideas during group discussions. The subcategory 'independent learning' describes how the delivery modes had persuaded individual students from the GOIS and NGNI groups to be independent to accomplish the learning task. The following student mentioned that she had to write her own individual essay without referring to any source.

> *Aaaa… in this delivery mode completing the task when I have to write down my own individually essay, aaaa... normally before this I refer to the samples from the website, from internet to write my essay. Aaaa... so, aaaa... so when I were asked to write my essay mmmm... to my own essay so, it's a bit hard and a bit challenging for me because it... ya, [yes] I have to write my essay without referring to website and on another things.* (GOIS12)

On the other hand, the following student cited that she had to plan the time for consultation with her lecturer regarding the learning task. She also added that there was a need for her to spend more time to practice writing in L2 so that she could express her feelings.

> *So, I try to make, to make a time to mmmm… to consult with the lecturer, in the other time like not in the class only but mmmm… mmmm… after the class. So, I think I really need have to spend time more aaaa… spend more time in practicing writing. Besides that, aaaa… instead of depending on the teacher. But I always try like aaaa… I try to aaaa… like I want to express my feelings, I write in notes so that I try to write aaaa… I try to write in English.* (NGNI04)

Table 2: Similarities in Categories and Subcategories for GOIS and NGNI Delivery Modes

No.	Categories	No.	Subcategories	GOIS	NGNI
(a)	Commitment to accomplish the learning task	(i)	Independent learning	√	√
(b)	Challenges	(i)	Uncertainty with information	√	√

Category b: Challenges

The 'challenges' category emerged in the statements made by students about the challenges that they had experienced using the GOIS and NGNI delivery modes under the following subcategory; 'uncertainty with information' explains students' experience of being uncertain to accomplish the given task. The following excerpt from the GOIS12 explains the situation where some group members had something in their minds, but they did not know how to explain their points and ideas. As a result, it was difficult for the group members to make a decision. The following quote explains the situation:

> *They have something on their mind but they don't know how to deliver that... how to explain that because some ya, [yes] because I don't know, maybe they scared or scared to try to explain the point and the ideas. So, mmmm... so, it was so difficult because aaaa... to decide aaaa... to decide the which ideas is true, which idea is acceptable and so on.* (GOIS12)

As for the NGNI delivery mode, the following student revealed that it was hard for her to structure the paragraph for argumentative writing because she obtained very few exercises and very little guidance from her lecturers. The following excerpt explains the situation:

> *Aaaa… structuring the paragraph, I think that's really hard. Because, I don't know which is more important and which is not. So, I don't know how can I rearrange the point and aaaa… make it to a paragraph. Which aaaa… I don't know whether it is my fault or the lecturer's fault. Because, sometimes the lecturers give aaaa… less exercises on how to write the writing.* (NGNI14)

Hence, based on the analysis, the GOIS and NGNI delivery modes have two similar categories.

Besides the similarities, the two delivery modes revealed a total of six different categories; 'improved knowledge,' 'knowledge construction,' 'proffers support in learning,' 'room for collaboration,' 'commitment to accomplish the learning task,' and 'challenges.' Table 3 illustrates the different categories and subcategories that emerged from the interviewees of the two delivery modes.

Category a: Improved knowledge

The "improved knowledge" category emerged for the GOIS delivery mode but not for the NGNI delivery mode

Table 3: Differences in Categories and Subcategories for the GOIS and NGNI Delivery Modes

No.	Categories	No.	Subcategories	GOIS	NGNI
(a)	Improved knowledge	(i)	Produce a good result	√	X
		(ii)	Construct a good essay	√	X
		(ii)	Exchange and share ideas	√	X
		(iv)	Prevent redundancy of ideas	√	X
		(v)	Identify ideas	√	X
(b)	Knowledge construction	(i)	Planning the Essay	√	X
		(ii)	Create ideas	√	X
(c)	Proffers support in learning	(i)	Completing the writing task	√	X
		(ii)	Link to prior knowledge	√	X
		(iii)	Provides room for understanding	√	X
(d)	Room for collaboration	(i)	Chance for interaction	√	X
(e)	Commitment to accomplish the learning task	(i)	The need to contribute ideas	√	X
		(ii)	The need to ask questions	X	√
(f)	Challenges	(i)	Prevent from thinking further	√	X
		(ii)	Lesson not interesting	X	√
		(iii)	Lack of practice	X	√
		(iv)	Barriers to thinking	X	√
		(v)	Unproductive pair discussion	X	√
		(vi)	Unclear explanation	X	√
		(vii)	Lack of feedback	X	√
		(viii)	Exam-oriented learning	X	√

(Table 3). The following five subcategories were found to emerge for the GOIS delivery mode: 'produce a good result,' 'construct a good essay,' 'exchange and share ideas,' 'prevent redundancy of ideas', and 'identify ideas.' The subcategory 'produce good result' describes how the GOIS delivery mode has given the students confidence to produce good results. The following student expressed that the delivery mode has given students the confidence to produce good results.

> *With the help of the lecturer... with help mmmm… of the mmmm... with help of the group of friends mmmm... will... mmmm… will help to mmmm… will help us to create a good result.* (GOIS04)

The subcategory 'construct a good essay' describes how the delivery mode has assisted the students to construct good essays. According to the following student, the graphic organiser has helped her to write a quality essay because it shows the steps clearly and also shows the part to be corrected.

> *Mmmm... okay. For me, mmmm… I am not very good in writing abilities so, mmmm… so, for me graphic organisers, mmmm… with help of the teacher, will help me to give a good essay, good writing because they show us steps, they show us mmmm… which aaaa… which part we should correct it. Mmmm… they show us mmmm… how to make a very good quality essays.* (GOIS04)

Subcategory 'exchange and share ideas' describes how the GOIS delivery mode has provided a chance for students to exchange and share ideas. The following student indeed agreed that the delivery mode has provided her a chance to exchange and share her ideas with the group members.

> *So, I can exchange and share my ideas with them. So that, the result of my essay is aaaa.... is very good. So, mmmm...* (GOIS04)

The subcategory 'prevent redundancy of ideas' describes how the GOIS delivery mode had helped students to avoid redundancy of ideas in learning. The following student clearly described her experience.

> *I think without it… without this, we just always argue, argue, argue…just like I say, leader, our leader is very active and busy during the group discussion, so using this one we know all that particular idea or aaaa… idea aaaa… have been said before this. So, there is no redundant in that using ideas, so we just oh, we just pass by, pass by just proceed… proceed to the next idea until we get the conclusion.* (GOIS14)

The subcategory 'identify ideas' describes how the GOIS delivery mode has assisted students to easily identify ideas for their writing. One of the students stated that a step-by-step procedure and guidance as well as practice helped her to identify ideas for writing.

> *Aaaa… in this delivery mode aaaa... where the facilitators shows me the steps-by-steps of the procedure, guidance and the practice, really improve me identify the ideas in writing.* (GOIS12)

Category b: Knowledge Construction

The 'knowledge construction' category emerged from how the GOIS delivery mode assisted students to construct knowledge. This was achieved through students' participation in the learning where they were able to grasp the learning content. Two subcategories emerged for GOIS delivery mode, and they were: 'planning the essay' and 'create ideas.' These were not experienced by the respondents in the NGNI group.

The subcategory 'planning the essay' describes how the delivery mode of GOIS had guided students in planning their essay. The following student pointed out that she had learned to use the graphic organiser effectively and as a result, she was able to plan her essay well compared before.

> *So, aaaa... basically aaaa... nowadays aaaa... I had learned the delivery mode, I tend when I… before I write the essay, I tend to draw the graphic organiser first because maybe before this I don't draw the step-by-step, the graphic organiser well aaaa... and nowadays after I have learned the graphic organiser with our lecturers and facilitators... so ya, [yes] I... I tend to write the, the step-by-step graphic organisers step. So, it will helps me to plan my essay well and it is more structured than, before.* (GOIS12)

The subcategory 'create ideas' describes how the GOIS delivery mode had facilitated the students to create ideas in argumentative writing.

> *Mmmm… aaaa… .in my opinion, the use of graphic organiser… organisers, mmmm… it will help to aaaa.... will help the students to create more new ideas mmmm… more opinion because mmmm… the...because... oh... mmmm… okay. Mmmm... using the graphic organiser, mmmm... mmmm... by giving more interesting and motivating topics for the students to... to create more ideas and opinions.* (GOIS04)

> *Oh, ya [yes]. So, we have just to write we have say and… just like I said, our ideas, our reasons and our supporting details in my group discussion, aaaa… previously… we just*

do like that, so it helps me a lot to speak and… give idea more… in the discussion. (GOIS14)

Category c: Proffers support in learning

The category 'proffers support in learning' emerged from how the GOIS delivery mode proffered support for students in their learning. The GOIS delivery mode had supported and helped them to complete the argumentative writing task, linked their prior knowledge to their argumentative writing, and provided room for a better understanding of the writing task. Three subcategories emerged from the 'proffers support in learning' category; 'completing the writing task,' 'link to prior knowledge', and 'provides room for understanding.'

The subcategory 'completing the writing task' describes how the GOIS delivery mode had supported students to complete the argumentative writing task. One student stated that the delivery mode had helped her to complete the writing task given by the facilitator.

And also, for the group activity… group work activities, mmmm… the involvement of the teacher mmmm… mmmm… help the students more in doing their task because mmmm… the… because… mmmm… the lecturer gives a very clear explanation…. (GOIS04)

The subcategory 'link to prior knowledge' describes how the delivery mode of GOIS had persuaded students to use their prior knowledge to accomplish the learning task. The following statement clearly indicates how students had used their prior knowledge to create more ideas to accomplish the given task.

Aaaa…interesting topic aaaa… such as study at school or study at home… make me involve and mmmm… and produce more ideas relating to my prior knowledge which is, aaaa… before this in our previous group discussion aaaa… some of us choose to be studied at home and some of us choose to study at school. But at the end of the discussion, we get aaaa… one solid idea or conclusion which is, study at school is more aaaa… it's more… (GOIS14)

The subcategory 'provides room for understanding' describes how the GOIS delivery mode had given room for students to understand the learning better. The two students described their experiences.

Okay, mmmm… well for me aaaa… graphic organisers as instructional scaff… aaaa… scaffolding, mmmm… it's very easy to understand because mmmm… (GOIS04)

And also, mmmm… the help of the lecturer or teacher mmmm… in writing an argumentative essay mmmm… will make the students mmmm… will make the students… aaaa… yeah, understand better. Aaaa… and somehow, I think that this delivery mode is easier to understand and learn because…ya, [yes] you know the step-by-step, so easier for us to… for us like student to understand it and to use it in our writing essay. (GOIS12)

Category d: Room for collaboration

The category 'room for collaboration' emerges from how the GOIS delivery had provided students with opportunity for collaboration. The delivery mode had provided students a chance for interaction with their peers during group work. Only one subcategory emerged from the "room for collaboration" category and that was the 'chance for interaction'.

The subcategory 'chance for interaction' describes how the delivery mode had offered students an opportunity for more interaction. One student indicated that there was a question and answer session which offered more opportunities for interaction and drew her away from being an introvert person.

Aaaa… exchanging ideas mmmm… I could make my essay better and also mmmm… the questions and answer session provides mmmm… mmmm… opportunity… opportunity for more interaction because mmmm… questions aaaa… because mmmm… the… because mmmm… some students are not…are shy aaaa…. to… to aaaa…. tell about their aaaa… (GOIS04)

Category e: Commitment to accomplish the learning task

The category 'commitment to accomplish the learning task' emerged from students' involvement in the learning process and commitment to accomplish the written task. Commitment towards the written task is essential as it helped students to construct knowledge through independent learning and contribute ideas during group discussion. This category emerged in the two delivery modes but different subcategories emerged for the delivery modes.

The subcategory 'the need to contribute ideas' describes how the delivery mode had encouraged students to contribute ideas to accomplish the learning task. One of the students stated that she tended to contribute more

ideas during the group discussion in order to improve herself.

> *And aaaa... lectures aaaa... and the facilitators also you know aaaa... give us, encourage us to talk more, to give aaaa... to give more ideas, to give more conclusions aaaa... so that aaaa... ya, [yes] you know I tend, I tend, myself tend to aaaa... to contribute more because aaaa... because I know that I have to contribute and give more ideas to the group discussion so that I can improve myself aaaa... using the delivery mode.* (GOIS12)

The subcategory 'the need to ask questions' emerged in the NGNI delivery mode and explained: the necessity for someone to ask questions to students and assist them to accomplish their learning task. The following student pointed out that she required someone to ask her questions so that she could activate her ideas to accomplish the given task.

> *Somebody need to ask you questions, because the idea will not come easily from you. I need someone to ask me, what is the question aaaa… someone need to push me.* (NGNI04)

This indicates that the GOIS delivery mode is effective as students were able to accomplish the task without need for further guidance.

Category f: Challenges

The category 'challenges' emerged in the statements made by students about the challenges that they had experienced when they underwent the GOIS and NGNI delivery modes. Students from the GOIS delivery mode highlighted an issue under the following subcategory: 'prevent from thinking further'. However, students from the NGNI delivery mode identified the following seven subcategories: 'lesson not interesting,' 'lack of practice,' 'barriers to thinking,' 'unproductive pair discussion,' 'unclear explanation,' 'lack of feedback', and 'exam-oriented learning.'

The subcategory 'prevent from thinking further' describes how students experienced difficulties to think further from the graphic organiser. One student mentioned that she was not able to think further and therefore she was not able to elaborate more on the ideas in learning.

> *Aaaa… the challengers that aaaa… that I find in graphic organiser is mmmm… the… the chart… mmmm… the chart graphic, the graphic that they show nmmm… like example mmmm… we writing an argumentative essays, mmmm… they already give us the idea but mmmm… the idea will mmmm… somehow will make the students mmmm… make the students hard to elaborate more about the ideas because they might have another ideas but mmmm… but the graphic organiser mmmm… that they put in the…in writing an essay will stop them from aaaa… thinking further.* (GOIS04)

The subcategory 'lesson not interesting' describes how students were bored using the NGNI delivery mode. The following extract from one of the students' interview revealed that the delivery mode was boring because the lecturer was teaching the whole time without any discussion in groups.

> *Aaaa… so, sometimes if everyone is boring because aaaa… the lecturer just explains and sometimes using projector, I feel like using projector is boring. Because, I just look at the slide and sometimes, I just not pay attention to the slide, because sometime the slides is too boring and too, too long and, its not simple and it's like copy paste (giggles) slide.* (NGNI04)

Further, the student also revealed that the lecturer did not provide adequate examples and the lesson was boring. Thus, the students tended to lose focus on the lesson while listening and taking notes.

> *Aaaa… not many examples provided. Mmmm… it's not too attractive too. It's boring. Overall, aaaa… I think the students lose focus in the group… in the task. So, we only can ask them question after the class. And I just sit and listen and just take notes.* (NGNI04)

Another student from the same group shared her experience using the NGNI delivery mode. According to her, the NGNI delivery mode was not motivating because the lecturer used the same teaching method which she found not helpful in her learning process. The following extract explains her feelings:

> *Well, most of the time I find it's not motivating, but the lectures is really…less interesting but they are using the same method which is, may with that have exist long years ago and, it's kind of not helping me at all, because yes, because like people nowadays or students nowadays wants something that is more helpful, something that is more aaaa… like very simplest way method, and aaaa…. most of the time like I really have aaaa… problems in how to begin my essay writing ever since my high school.* (NGNI14)

Additionally, she also found the delivery mode boring because she had to sit in one place and just keep thinking on what to write and that was stressful for her. Furthermore, the lecturer's voice projection was poor

and the classroom was dull as everyone was quiet. The following extract from the interview details out the student's experience:

> *And then, I do feel mad when it comes to essay and I'm not really excited, because, it's boring and also…I have to seat in a place and just keep thinking what, what I have to write and it's really stressful. It's boring so, so it's not very much help since, they also the voice projection is not that loud. And, the classroom start to become very dull, and everyone just keep quiet and just aaaa… sometimes some of them be like "This class is so boring lah, we should go out" something like that. So, I understand because I'm also a passive student, I'm not participate any of the activities in that class. I would rather just keep quiet and do my own things.* (NGNI14)

In line with this, the delivery mode was not of much help as the lecturer did not explain well. Further, students had to sit for long hours which made them stressed and sleepy. The following excerpt explains the student's experience:

> *I find it very less helpful in essay writing, since during the lecture mode aaaa… the lecturer itself is not explaining things very well. Because, we have to seat for long hours and we become stress. So, the students become tend to be tired and the class… also aaaa… start at the evening. So, of course people gets sleepy and hungry, and cause boring.* (NGNI14)

Furthermore, the delivery mode was found to be lacking in terms of vigorousness for the students. The following student explains the situation:

> *Aaaa.... the lecture sometimes aaaa... I find it not very lively...maybe the lecturer can have question and answer session, so when the student asks... aaaa... ask any questions, so the lecturer will know the ability of the student, maybe they understand or not understand what the...or... the lecturer also can do more writing activities…* (NGNI115)

> *So, now in the college it's the same thing. So, we have less writing exercises and not much attention is given. Plus, aaaa… so many other subjects to catch up, and aaaa… of course I know the basic elements to use, such as introduction, mmmm… mmmm… body paragraph and conclusion. But, aaaa… sometimes I get stuck to write my essay.* (NGNI04)

The subcategory 'barriers to thinking' describes how students experienced difficulties in thinking using the NGNI delivery mode. One student faced problems in thinking and coming out with ideas. She stated the following:

> *Sometimes, it's quite difficult to think and come up with the ideas. But, maybe I have to read a lot of things. But, sometimes when I did my test, my writing test or anything, aaaa… I have aaaa… how do you say aaaa… blackout, it's not blackout but…blank. I become blank and I can't think of anything, so it's like even the simplest technique or simplest technique that lecturer say is like, it couldn't cross my mind.* (NGNI14)

The subcategory 'unproductive pair discussion' describes difficulties students faced during pair discussion in the NGNI delivery mode to produce productive tasks. The following student explained the situation:

> *Example, during the pair work, so we ended up discussing something else, instead of giving the aaaa… instead of given the task. Like we, like usual as we are, if we are in the...we are not discussing the task, we are discussing the something else.* (NGNI04)

The subcategory 'unclear explanation' describes how the two students in the NGNI delivery mode were unclear with the explanation given by their lecturer to accomplish the given task. The following excerpts explain the situation:

> *And then, sometimes the lecturer's explanation is not very clear to us because aaaa… Okay. Lecturer explain how to do, but I think that's not enough as the class is occupied with many aaaa… of the students. Aaaa... because sometimes we want to ask the lecturer, and then they, are aaaa… helping someone else.* (NGNI04)

> *Like I aaaa… it's hard for me to understand what the lecturer said, it's hard for me to understand what the lecturers try to teach. Aaaa… the lecturer's explanation is also is not very clear to me. Like he or she want to say, want to explain something but, it's like he want to explain but sometime not. It didn't gets me.* (NGNI14)

The subcategory 'lack of feedback' describes how in the delivery mode of NGNI, adequate feedback was not provided to the students. One student mentioned that she did not get back her written task and as a result, she could not identify her mistakes.

> *But not very often because, they have to aaaa… concentrate or focus to others too. But sometimes, the lecturer not enough time and never return back to the… to our writing. Because aaaa… yes. They did not give back our written task. They did not check our mistakes or something. And we don't know our mistakes.* (NGNI04)

The subcategory 'exam-oriented learning' describes how the delivery mode of NGNI has provided students with more exam-oriented learning. One student highlighted the following experience:

> *Their examples like personal problems, and then aaaa… we… we are, we are tend to more focus on getting good*

> *grade. Because sometime lecturer focus more on the exam instead of writing practise. They just want we have…they just want us to have a good grade I think. Because, they did not focus on our writing practise actually. They just want, okay, aaaa… you do this test, and then you have your grade.* (NGNI04)

Overall, the similarities (Table 2) and differences (Table 3) in categories and subcategories of the themes emerged from the semi-structured interview explain how students' experience learning differently in the two delivery modes namely, GOIS and NGNI. However, the findings from the interview data revealed that the GOIS group was found to experience more learning benefits and less learning obstructions compared to the NGNI group. The interview results also revealed that the GOIS delivery mode offered students a situation where they were able to contribute their ideas and as a result, students were able to be committed to accomplishing their learning task. In line with this, according to scholars, the instructional scaffolding comprises active learning through questioning and prompting so that students can build on their prior knowledge. Thus, through these collaborations, facilitators have the opportunity to provide positive feedback and motivation to their students for internalization to occur (Rodrigo, 2012). These findings are in line with the sociocultural theory that claims knowledge is learned through others and through that connection, students assimilate and internalize the knowledge into their personal values (Vygotsky, 1978). Nerf (2017) also stressed that the sociocultural theory encourages learners to learn in social contexts among students through discussion, collaboration, and feedback. Thus, these approaches mentioned by Nerf (2017) which were experienced by students in the GOIS condition (Table 3) could have been the reason for students in the GOIS group to have more positive experience compared to their counterpart in the NGNI group.

Additionally, other possible reasons for students in the GOIS group to have better experiences than the students in NGNI group can be connected to the teaching approach employed by the facilitator. The GOIS group adapted a simple step-by-step instructional scaffolding approach from Ellis and Larkin (1998) which is inclusive of four learning stages using various approaches. This is in line with the view of Obeiah and Bataineh (2015) who stressed that a step-by-step approach and the amount of help provided by the facilitator in various stages can help students become independent learners. In the GOIS condition, the facilitator employed the modeling and questioning approach at the beginning stage of the lesson to guide the students using the argumentative graphic organiser to write the argumentative essay. Therefore, the modeling and questioning approach could have helped students to stay active, focused, and concentrate on their learning throughout the lesson and thus, aided the students to accomplish their argumentative tasks from the actual to potential level through interaction (Shi, 2017). The findings of this study are also congruent with the findings of López et al. (2017) that modeling significantly improves writing skill although employed for a short duration. This is evident for the GOIS group, where the facilitator has provided appropriate modeling according to students' needs, interest and abilities to meet the expectations. In line with this, students in the GOIS delivery mode were also instructed to work in small groups with the presence of a facilitator, as evident in this study, who provided guidance and help for students to work collaboratively in accomplishing the learning task. At the same time, during these collaborations, students could have shared their ideas, renegotiated their opinions, and come to a conclusion (Noor, 2014) as evident in this study.

Furthermore, students went through various activities throughout their learning sessions, for instance, reading articles related to argumentative topics and completing the graphic organisers, drawing an argumentative essay graphic organiser and finally writing an individual essay. Thus, the facilitator could have applied his expertise in leading the learning process while students went through various activities and these could have transformed their interpersonal activities into inter-psychological activities gradually (Shi, 2017). Moreover, the role of students who are committed to contributing ideas to learn and the facilitator who provides encouragement and support to engage interaction between peers during group work (Webb et al., 2013) have been evident in this study (Table 3). Therefore, these may be the reason for the GOIS group to have more positive experience compared to the students in the NGNI group.

Additionally, the peer-review sessions where students had to read, review, and exchange their essays with their peers could have provided students opportunities to learn from each other and helped them to understand the mistakes that they may have overlooked. As a result, this would have provided opportunities for students to accommodate different levels of knowledge in order to progress in their learning to write the argumentative essay. Therefore, the researchers believe these activities might have benefited students in the GOIS group more compared to the students in the NGNI group.

Moreover, the effectiveness of the graphic organiser as instructional scaffolding in the argumentative writing

had most probably assisted the GOIS group to construct and produce a better piece of writing. Previous studies on graphic organisers, such as Higgins (2012)indicated positive perceptions among students using the graphic organiser. This is also consistent with the assertion made by Miller (2011) who claimed that although the graphic organisers are great tools to assist students in writing, very few of them were proven to increase students' writing skills and guide students towards better writing by themselves, but when provided with scaffold instruction using a graphic organiser, they actually scaffold students' thoughts into writing a fine piece of writing. In line with these claims, Hawkins (2011) too, asserted that the graphic organisers as instructional scaffolding promote a helpful teacher-student interaction as the structure of the genre allows students to pay attention to communicating their ideas without getting confused in structural procedures.

In line with these reasons, the group-work activity using the graphic organisers to accomplish the argumentative tasks might have guided the students to interact and develop their argumentative writing skills. The findings are contradicted with Kwon (2014) who claimed that students faced difficulties communicating with their peers during groupwork, but constant with Gagne and Parks (2013) who claimed that interaction during group-work is capable of fostering learning through shared scaffolding which enables students to accomplish a given task successfully. Finally, the researchers believe the GOIS group which is supported by the sociocultural theory had better experiences compared to the students in the NGNI group as it is strongly inspired by the sociocultural theory which emphasizes on social interactions that take place in meaningful contexts (Vygotsky, 1978).

Additionally, students in the GOIS group claimed to have experienced different aspects of learning where they were able to write more organized essays, gain new knowledge, had a chance to ask questions, and felt motivated to learn. In addition, they also claimed that the GOIS delivery mode had offered them a friendly environment for learning which had helped them to think during their group discussion. The interview results are consistent with Mahmudah's (2016) findings which indicated improvement in the writing skills, as well as in the students' motivation, when provided scaffolded instruction using graphic organiser.

In contrast, the findings from the interview data revealed that the NGNI group experienced less learning benefits and more learning obstructions compared to the GOIS group (Table 3). One thing which needs to be highlighted here is that students in the NGNI group obtained knowledge on the same topics as the students in the GOIS group but without instructional scaffolding and the use of graphic organisers. Students found the lecture method governs by the behavioral response to be more boring without any grouping and opportunity for them to discuss, as proven in this study and past research (Kelly, 2017). According to Harvey (2011), internalization through dialogue is vital for students' development in content and higher order thinking but the NGNI group could most probably experience less exploratory talk and guidance between students and instructor in the NGNI condition. That is why Brandon and All (2010) urged that educators had to change their role from the lecture method to a more social and friendly approach such as the GOIS delivery mode. Therefore, the absence of these opportunities could have been the reasons why the students in the NGNI group experienced less learning benefits and more learning obstructions compared to the GOIS group.

Two similar subcategories emerged for the GOIS and NGNI groups (Table 2) although both groups experienced different learning conditions. The subcategory "independent learning" and "uncertainty with information" emerging from the NGNI group could most probably relate to instructional scaffolding strategy that were not offered in the NGNI condition. As a result, the NGNI group may have experienced less exploratory talk and guidance with their instructor. In line with this, they have experienced being uncertain to accomplish the given task and this may have urged the students to construct knowledge through independent learning as evident in the study. However, as for the GOIS group, the facilitator plays an important role as a mediator in giving appropriate support so that students can move towards independent learning (Obeiah & Bataineh, 2015). But, although instructional scaffolding was offered, the subcategory "uncertainty with information" emerged for the GOIS group and this can be related to group members who did not know how to explain their points during groupwork as evident in this study. This is in line with Rodrigo (2012) who claimed that challenges can occur when students learn collaboratively and this can sometimes be related to the amount of time allocated for a learning task and difficulties meeting with each individual's need in a group.

Overall, the GOIS group perceived more positive experiences compared to the NGNI group in the overall learning process and this could be related to Vygotsky's sociocultural theory where the graphic organisers act as an instructional scaffolding tool and was helpful in students' argumentative essay writing while the facilitator was more of a mentor compared to being a dominant content

expert. Further, students also experienced a more positive learning where they felt free to ask questions, provide feedback, and support their peers in learning and these factors had provided an incentive for the students to take an active role in their own learning. Additionally, students were also able to share their responsibility to teaching and learning through scaffolded instruction in their groups and therefore through these interactions, students were able to take ownership of the learning and outperform their counterparts in the NGNI group.

Conclusion

In sum, the present study revealed that the GOIS delivery mode had effectively transformed students' learning to be better than the NGNI delivery mode, which is conventional and still dominates over other methods in disseminating knowledge among TESL undergraduates in the local context. The GOIS delivery mode has been found to be able to engage students in their learning and also promote students' argumentative writing performance better than the lecture mode (NGNI). The GOIS group had better experiences in the argumentative essay writing lessons compared to the NGNI group and had enabled students in the group-work activities to develop competencies such as cooperative learning, cognitive strength, and personal skills that are vital for TESL undergraduates. These were possible with the presence of interaction and graphic organisers as facilitation tools as well as strong mediation skills on the part of the facilitator who was able to provide systematic instructional scaffolding during the learning process. In fact, the use of graphic organisers and instruction scaffolding had also proven to be a better approach compared to the presently used lecture method in this institution where the study was conducted.

However, the potential of graphic organisers and instructional scaffolding to promote higher tertiary level students' argumentative writing performances compared to the lecture method have yet to be adequately proved, although as far as this study is concerned, the students from the GOIS group had more positive experiences compared to the students in the NGNI group. This study indicated that the GOIS method has stimulated and harnessed students' interactions and should be given consideration in the teaching and learning of argumentative writing among TESL undergraduates. Besides, as indicated in the interview results, although students from the NGNI group shared some common challenges, the issues brought up by the GOIS group regarding their learning experiences require additional attention from the facilitator. In this respect, a good measure would be to include the use of graphic organisers and instructional scaffolding and group-work activities in teaching argumentative writing among TESL undergraduates. Therefore, any university programs considering adopting the use of graphic organisers and instructional scaffolding in argumentative writing must weigh its benefits and disadvantages. Care should be taken in the implementation for a sudden shift in learning methodology could adversely affect the success rate of instructional scaffolding. Thus, the implementation of instructional scaffolding should be incremental in order to provide both teacher and learners with enough time to become familiar with the new instructional method. The research ends with a strong recommendation that the use of graphic organisers and instructional scaffolding in groups to cater to students' interaction process can become an ideal strategy to be adopted by academicians in the process of teaching argumentative writing. This implies not only for TESL undergraduates but also for all other graduates in higher academic institutions as the benefits would definitely enhance students' writing skills which is crucial for future employment.

Competing Interests Statement

No potential conflict of interest was reported by the author(s).

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ORIGINAL ARTICLE

Investigating the Stakeholder Engagement Indicators towards Renewable Energy Projects Success in Malaysia

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ABSTRACT

Stakeholder engagement has been acknowledged as being a vital approach in delivering successful project outcomes. However, there is a limitation of studies on how the stakeholder engagement can indicate the successful implementation of renewable energy projects. The purpose of this study is to fill the gap by investigating the influence of stakeholder engagement indicators towards renewable energy project success. This study suggests second-order model by extending stakeholder engagement indicators as hierarchical and integrating ten associated components. Data was collected through survey questionnaires applied to the Renewable Energy Power Providers (REPPs) in Malaysia, using stratified random sampling. SPSS ver.23 and Smart PLS 3.0 software was applied to test measurement and structural models of this study. The findings revealed that stakeholder relations, stakeholders' communication, stakeholders' learning and stakeholder integration were positively significant towards the renewable energy project success. It is apparent that this study allows contribution to the body of knowledge of project management and offers some important insights into limited literature on stakeholder engagement.This study also sheds light on the key stakeholders' groups in developing successful renewable energy projects.

Keywords: Malaysia, project management, project success, renewable energy projects, stakeholder engagement.

Introduction

Meaningful stakeholder engagement has become a central requirement in order to achieve successful project outcomes. Meaningful stakeholder engagement brings long-term project benefits such as sustainability and resilience, also developing fragile but powerful intangible assets requirement such as trust, ownership, and acceptability (Wehn, Collins, Anema, Basco-Carrera, & Lerebours, 2018). In a similar fashion, Sachs & Rühli, (2011) and later on Bellucci & Manetti (2019) analyzed that the implementation of stakeholder engagement is essential to a company's efforts through better-informed decisions and good practice in creating value to stakeholders. Meanwhile, ineffective engagement can lead directly to negative impacts through failure fulfilling the needs and expectations of various stakeholders early and effectively before they escalate(Agyapong, 2017). Although the stakeholder literature emphasizes that stakeholder engagement is highly critical for project success(Lynda Bourne, 2017; Mojtahedi & Oo, 2017; Mok, Shen, & Yang, 2015), many companies still face significant challenges in getting it right. Therefore, there is need for a substantial framework about how to conduct stakeholder engagement in an effective way.

In a context of current social and environmental concerns such as climate change and transition of sustainable energy, the role of stakeholder engagement in delivering project agility has drawn increasing attention in recent years. There is a trend and emerging practice in stakeholder engagement and since projects experience a high

degree of change and require active engagement, the element of stakeholder engagement has been considered for agile environments (PMI, 2017). Apart from that, as the broader definitions of stakeholders are being developed, stakeholder engagement is a significant approach to cope with a wider stakeholder community and complexity of stakeholder relationship, particularly in renewable energy projects. The high complexity of project stakeholders has been a barrier in establishing mutual stakeholder understanding and collaborations which lead to many challenges of deployment of renewable energy projects (Baudry, Delrue, Legrand, Pruvost, & Vallée, 2017). Since renewable energy projects are considered as national agenda initiatives, stakeholders are essential drivers of agility and critical factors to deliver a project successfully. Thus, engaging project stakeholder accelerates results and is considered a key success factor for the implementation of renewable energy projects.

In Malaysia, renewable energy projects are growing at a rapid pace. Since 2001, the government under the supervision of Ministry of Energy, Science, Technology, Environment and Climate Change (MESTECC) has taken various efforts to uptake and boost up the generation of renewable energy in the overall fuel mix. Energy Commission of Malaysia (2016) also reported that more than 300 renewable energy licenses were awarded to commence the renewable energy projects. However, despite many initiatives taken by the government, it is arguable that the development of renewable energy projects in Malaysia are under performaning. The statistical data shows there are significant gaps between current installed renewable energy capacity which is only 2% in 2018, compared to the government targets to achieve 20% in 2025 (MESTECC, 2019). Arguably, the data reflected that there are numerous barriers in implementing the renewable energy projects and most of the barriers are due to lack of integration among the renewable energy key players. Judging by the momentum of how the industry is going, it might take much longer for renewable energy projects to rise and taper the demand-supply gap in Malaysia, without simultaneous support coming from all project stakeholders (Hannan et al., 2018). Therefore, stakeholder engagement looks as a promising solution in ensuring the government target of renewable energy proportion is achieved.

Extensive literature has been carried out concerning stakeholder engagement in various fields, especially in manufacturing, business and construction, but very few studies have been conducted in renewable energy (Baudry et al., 2017; Bourne, 2015; Cuppen, Bosch-Rekveldt, Pikaar, & Mehos, 2016; Kahla, 2017; Mojtahedi & Oo, 2017; Mok et al., 2015; Xu et al., 2018). In Malaysia, Sawandi, (2014) mentioned that the application of stakeholder engagement is not new, however, there has been little empirical study on the means of company engagement with stakeholders. Meanwhile, there is still lack of a validated and reliable framework for stakeholder engagement from practice (Freeman, Kujala, & Sachs, 2017) particularly in complex projects such as renewable energy (Thomas et al., 2018). In short, the limitation of stakeholder engagement literature and the low performance of renewable energy projects in Malaysia set the research gaps of this study. Hence, the purpose of this study is to fill the gap by investigating the influence of stakeholder engagement indicators as a driver towards renewable energy project success.

This study will explore the indicators of stakeholder engagement in the context of projects and analyze the relationship between identified indicators of stakeholder engagement and renewable energy project success among renewable energy companies in Malaysia. This study addresses two main research questions: (1) What are the stakeholder engagement indicators in the context of projects? And (2), what is the relationship between identified stakeholder engagement indicators and renewable energy project success among key stakeholder groups in renewable energy market in Malaysia? To answer these questions, this study combines grounded and critical theoretical approaches with a quantitative research design allowing for a questionnaire survey process. This article is structured as follows: Section 2 presents key conceptual insights into the critical constructs of stakeholder engagement and the relationship between stakeholder engagement and renewable energy project success; and sets out the hypothesis of this study. Section 3 presents the research design and methodology of this study. In Section 4, the results of the data analysis are presented. Next, in Section 5, the results of the study are discussed. The article ends with a concluding section that includes the research implications in Section 6.

Literature Review

Theoretical Background

The stakeholder theory introduced by Freeman, Harrison, Hicks, Parmar, & Colle (2010)was used in this study to explain the extent of stakeholder engagement in leveraging the success of renewable energy projects. Freeman et al., (2010) has explained, since stakeholder theory has moved from the conventional management thinking in business ethics to a few management disciplines, there

is an increasing need to explore how businesses actually engage their stakeholders. Later, Freeman et al., (2017) further mentioned that stakeholder engagement is an important approach in practicing the idea of stakeholder theory. A study by Eskerod, Huemann, & Ringhofer (2015) emphasized that the stakeholder theory has recognized the continual engagement between stakeholders as being an essential component of the organization's success story. Likewise, within a project management discipline, the stakeholder theory recommends project managers to stay in constant touch with their stakeholders through the stakeholder engagement framework so that projects could avoid failure (Agyapong, 2017). Therefore, this stakeholder theory was used as the foundation of this study in order to help project managers learn how other companies choose to engage their stakeholders, to create as much value as possible, and lastly to achieve the development of renewable energy project successfully.

Stakeholder Engagement Indicators

Stakeholder engagement may be understood in a variety of different ways and from a variety of different scholars' perspectives. In this study, the term stakeholder engagement was adapted from (PMI, 2017). Considering the theoretical perspective, stakeholder engagement is defined as the process of meeting stakeholders' need or expectations in combating the issues, ensuring the stakeholder engagement activities are implemented throughout the project life cycle, and creating value to the stakeholders. Adapting a concept from the project-context will assist companies to have better example or good practice on how stakeholder engagement is implemented. Extant literature has determined various success factors in stakeholder engagement. Figure 1 illustrates the conceptual framework of this study, which is based on the literature reviews. Accordingly, this study has identified ten success factors of stakeholder engagement in literature and these factors were classified into four groups or indicators which are stakeholder relations, stakeholder communication, stakeholder learning, and stakeholder integration. These four indicators were dimensions of the stakeholder engagement framework adapted from (Freeman et al., 2017). Table 1 below shows the stakeholder engagement indicators and their attributes accessed in this study.

Stakeholder Relations (SR)

Recently, interest in stakeholder theory has moved from analyzing stakeholder attributes to examining the nature of stakeholder relationships. Global economy is a relational economy and in order to better understand the links between business, society and stakeholders, we need to comprehend what happens in stakeholder relations and how to create value with and for various stakeholders (Freeman et al., 2017). Previous scholars have determined few approaches in examining the stakeholders' relationships in complex environment. Firstly, understand the intentions and behaviors among different types of stakeholders involved in the project. Bourne (2015); (2017) has highlighted that in order to determine how project stakeholders wish to be engaged, project managers should take consideration to understand the underlying motives and intentions of different stakeholders involved. Since many stakeholders are likely to have personal agendas that might help against what should be prioritized. Similarly, previous literatures have emphasized that it is crucial to determine what is the stakeholders' 'real' intention during the engagement process so that project managers can more strategically integrate and incorporate the views of stakeholders about the practical approaches which can maximize the effectiveness of their involvement and help to achieve project success in implementing renewable energy initiatives (Jing, 2010; Yang, Shen, Ho, Drew, & Chan, 2009).

Table 1: Stakeholder engagement indicators and attributes assessed in thisstudy

Indicators	Attributes	References
Stakeholder Relations	Understand the intentions and behaviors	Molwus (2014); Heravi (2014)
	Build good relationships	Molwus (2014); Heravi (2014)
Stakeholder Communication	Effective communication	Heravi (2014)
	Continuous consultation	Heravi (2014); Sheriff (2012)
Stakeholders Learning	Implement strategies plan	El-Sawalhi &Hammad (2015)
	Analyze changes	Sheriff (2012)
	Risk mitigation	Sheriff (2012)
Stakeholder Integration	Compromise conflicts	El-Sawalhi &Hammad (2015); Sheriff (2012)
	Understand project success	El-Sawalhi &Hammad (2015); Heravi (2014)
	Good project governance	El-Sawalhi &Hammad (2015); Heravi (2014)

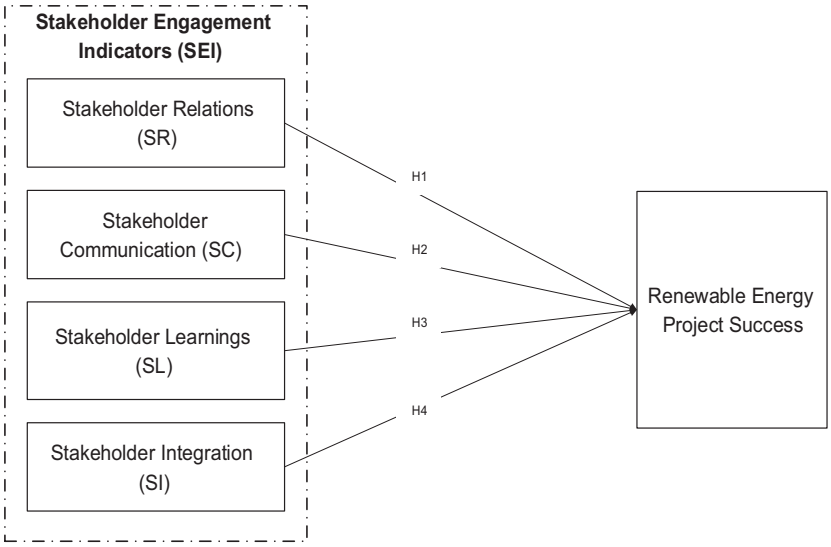

Figure 1: Conceptual framework

Secondly, in examining stakeholders' relationship, building and sustaining a good relationship among stakeholders is a very important strategy. Bal et al., (2013); Molwus (2014) further emphasized that building and sustaining good relationships between stakeholders will create positive project outcomes.It is very important that managers have a good relationship with key stakeholders since it is crucial in ensuring that stakeholders stick to the engagement process. Arguably, it is sometimes difficult to maintain good relationships among various stakeholder groups, especially with external stakeholders (A. H. Heravi, 2014). Pertaining to this study, it is necessary to examine the complexity and the dynamic nature of stakeholder relationships in renewable energy projects in ensuring successful deployment and as a source of social value creation. Compared to other developing countries, the renewable energy sector is still new in Malaysia, therefore, companies involved need to have a strategic approach in engaging stakeholders and enhancing a mutual relationship among project stakeholders (Joshi, 2018). The extant literature stresses that examining dynamic and complex stakeholder relations as well as promoting positive relationships is a success factor for engaging the stakeholders and how it remains critical in ensuring project success. Thus, the following hypothesis is developed:

H1: Stakeholder relations positively affect renewable energy project success

Stakeholder Communication (SC)

Communicating with stakeholders is an important part of stakeholder engagement. There is plenty of previous literature on stakeholder communicationin renewable energy projects (Bukarica & Robić, 2013; Dhanesh, 2017; McKinley & Ballinger, 2018; Pillay, 2010; Zhang, Loh, Louie, Liu, & Lau, 2018). However, in achieving meaningful stakeholder engagement, effective communication-and continuous consultation are crucial approaches in communicating with stakeholders. Effective communication is described as an important approach between project managers and all stakeholders either directly or indirectly involved in the project. Zhou, Cheung, & Hsu (2017) and Takim (2009) have emphasized that effective communication is required in ensuring adequate information is well transfered between project managers and relevant stakeholders internally or externally. However, it had been argued to make sure that the intended information is understood and the desired response is achieved, a clear communication requires relentless and also time-consuming effort especially in complex projects such as renewable energy projects (Sadhukhan et al., 2018; Chan & Oppong, 2017; Oppong, Chan, & Dansoh, 2017; Mok et al., 2015). Heravi, Coffey, & Trigunarsyah, (2015) pointed out that the effective communication in stakeholder engagement is significant in delivering the concept of 'effective'; which consists of delivering the right and precise information to the related stakeholders by using appropriate means of communication and clarifying the project objectives.

Meanwhile, continuous consultation is an effective method for gaining project stakeholders' support. A continuous consultation is an act of asking relevant people for their advice and how they feel in order to get useful information and ideas (El-Sawalhi & Hammad, 2015; Senaratne & Ruwanpura, 2016; Tang & Shen, 2013). Davidson, (2017) further explained that consultation

sessions with stakeholders should always be ongoing throughout the project life cycle. In her review, Davidson, (2017a) emphasized that continuous consultation between the project team and other stakeholders will provide a clear and consistent stakeholder analysis, and therefore, will also contribute to the successful delivering of the project. On the contrary, A. Heravi et al., (2015) explained that even though consulting with stakeholders and obtaining their feedback is necessary during the stakeholder engagement process, it does not mean that all of their needs and issues will necessarily be fulfilled. Bal, Bryde, Fearon, & Ochieng, (2013) argue that there is a need to continuous consultation whether all stakeholders are meeting their essential needs and responsibilities because it implies that their views can be considered during the crucial planning processes and can contribute to achieving a better outcome for the project. In the context of renewable energy projects, continuous consultation is a mechanism for deliberating the financial and funding issue between the project developer and financial institution (Upham, Shackley, & Waterman, 2007; Upham & Speakman, 2007; Xavier, Komendantova, Jarbandhan, & Nel, 2017). On the whole, considering the elements of communicating with stakeholders in achieving project success as mentioned above, the following hypotheses are formulated:

H2: Stakeholder communication positively affects renewable energy project success

Stakeholder Learning (SL)

Learning with and from stakeholders indicates the links of stakeholder theory in creating value of company. This approach suggests that the company that seeks internal and external information from the stakeholders will help to develop their routines and procedures further, and at the same time enhance their value creation opportunities. Stakeholders' learning can contribute to enlarge the body of knowledge that has incorporated into stakeholder research. A study by Anna Heikkinen in Freeman et al., (2017) emphasized that by learning from multi-stakeholders network it brings the usefulness of stakeholder engagement toaddress sustainability challenges. Likewise, Rühli, Sachs, Schmitt, & Schneider (2017) discussed and explored how companies and stakeholders learn from each other and can shed light on the wicked social issues and offering innovative solution. Again, pertaining to this study, by learning with and from stakeholders, the companies will be able to implement strategic plans for stakeholder engagement, analyzing changes, and mitigating risks. Jing, (2010); Mok, Shen, Yang, et al., (2017) further mentioned that in ensuring the project moving forward, the project managers should implement the planned strategies accordingly.The stakeholder engagement approaches need to be planned and should be deliberately and wisely resourced (El-Sawalhi & Hammad, 2015; A. H. Heravi, 2014); and towards the successful implementation of sustainable energy initiative, especially in developing renewable energy projects, each company should have a strong stakeholder engagement plan (Dusyk, 2013; Lee & Leal, 2014). Hence, it is important to have stakeholders'learning in order to get the best input and implement strategic stakeholder engagement plan towards the project.

Next, changes are unavoidable in the agile environment such as in the renewable energy projects. Extant research has indicated that analyzing changes in the stakeholder environment, for example, the information, influence, relationships, and behaviors, are necessary (Aaltonen & Kujala, 2016; Aaltonen & Sivonen, 2009; Cabrera-Nguyen, 2010; D. H. T. Walker, Bourne, & Rowlinson, 2008). In cooperating the project agile, providing high technology-applied solutions will benefit the project teams to analyze changes. Sherriff, (2012)argued that if the project teams failed to learn and adopt advanced technology into managing and analyzing changes, the project could not succeed. In the same way, risk mitigation is described as the solution on how well stakeholders can be engaged (Mojtahedi & Oo (2017). By understanding and potentially restraining uncertainty, related risks triggered by project stakeholders, especially during the early project phase will help project teams mitigating the risks (Bal et al., 2013; Molwus, 2014a; Sherriff, 2012). Pertaining to this study, renewable energy is considered as the national agenda and identified as a high-risk project which potentially interjects the successful implementation of the project. Therefore, learning with and from stakeholders is an essential approach during the stakeholder engagement process in order to implement strategic plans, analyze changes, and mitigate potential risks in project. Based on the literature discussed above, the following hypothesis is developed:

H3: Stakeholders learning positively affects renewable energy project success

Stakeholder Integration (SI)

Extant literatures have different views on the integrative stakeholder engagement. The contributors in this part offer new conceptualizations and managerial practices based on in-depth studies of empirical cases (Freeman et al., 2017). Astudy by San-Jose, Retolaza, & Freeman, (2017) founds that there are significant implications on value creation for stakeholders in business such as cooperation, the power of relationships, and the

interconnections among stakeholders by reinforcing integrative stakeholder engagement. Apart from that, stakeholders' integration can be done if the stakeholders are able in compromising conflicts, understanding project success, and lastly, adapting good project governance. Firstly, conflicts are the cause of disputes and litigations in projects (Senaratne & Ruwanpura, 2016). Moreover, identifying and analyzing possible conflicts among stakeholders is a critical approach in complex project environment; hence, compromising conflicts of interest and objectives through appropriate legal resolution is indicative of stakeholders integration and can lead to project success. (El-Sawalhi & Hammad, 2015; A. H. Heravi, 2014).

Next, understanding project success will objectively integrate the stakeholder cooperation and later, creating value on stakeholders. Project success not only can be measured through considering the final cost, time, and quality outcomes but also by examining the project stakeholders' value that contributed to the organizations that invested in it (Davis,2014; Bourne, 2017). Yu et al. (2017) mentioned that the value of the project stakeholders should be continuously evaluating stakeholder's satisfaction. Such evaluations will present the progress performance of the project and effectively inform the project teams. Besides, the literature confirmed that by understanding project success, project teams could assess the degrees of key stakeholder groups'specialties and evaluate the stakeholders' expectation in delivering project success. Lastly, good project governance during the stakeholder engagement process is currently seen as the main key in any project management. Previous studies identified that good project governance provides clarity of responsibility, accountability, lines of communication, and decision-making among project stakeholders involved(Aragonés-Beltrán, García-Melón, & Montesinos-Valera, 2017; J. Yu & Leung, 2015; J. Yang, 2014). Therefore, based on the literature discussed above, the following hypothesis is developed:

> H4: Stakeholder integration positively affects renewable energy project success

Renewable Energy Projects Success Criteria

There is a distinction between project success factors and project success criteria. Project success factors identified the specific elements within the project, or the independent variables that enhance the success of the project; meanwhile, project success criteria are the measures by which the final outcome of the project will be judged as either being successful, challenged, or a failure (Müller & Jugdev, 2012). Among the intangible nature of the project outcomes, certain researchers have recommended, and developed certain approaches and tools for classifying project outcomes (Rajablu, Marthandan, & Yusoff, 2014). Generally, as indicated in PMI (2017) a successful project as one that is on time, under budget, and on target with scope – thereby fitting the 'triple constraints' model. Using the triple constraint model, most project managers describe their project as being successful when it is completed on time, is under budget, and satisfies all the requirements within the scope (De Schepper, Dooms, & Haezendonck, 2014). (De Schepper et al., 2014) further explained that since the project is owned or impacted by different stakeholders, the success definition for the project will also be different,which then makes it quite challenging to easily obtain a success criterion for projects. Since stakeholder engagement has been found to be a critical component of the project success, it is practical for a project manager to identify the project's overall acceptance criteria before it begins (Agyapong, 2017).

In the context of renewable energy projects, the project success criteria are determined if the project objectives are achieved and the successful projects may lead to effective renewable resources distribution. This statement is supported by Maqbool & Sudong, (2018) where emphasized that there is a gap in literature in identifying the significant success factors and criteria that create successful renewable energy projects. Therefore, pertaining to this study the successful renewable energy project is the combination of fulfilling the scope, within the budgeted cost, on scheduled time frame, on desired quality, and lastly, to the stakeholders' satisfaction.

Methodology

This cross-sectional study applied a quantitative design and the measurements for each indicator were adapted and adopted from several recent works of literature on stakeholder management and renewable energy projects as depicted in Table 1. Data were collected by using a set of the close-ended questionnaire survey to indicate the influence of stakeholder engagement indicators towards the renewable energy project success. The survey questionnaires were primarily based on the Likert Scale of five ordinal measures from one to five according to the level of importance. The questionnaire comprised of three sections and assessed the respondents' background, the stakeholder engagement indicators (adapted from ; El-Sawalhi & Hammad, 2015; A. H. Heravi, 2014; Molwus, 2014a; Sherriff, 2012) and the attributes of success

criteria for renewable energy projects (adopted from (Maqbool & Sudong, 2018).

Pre-test and pilot test of the questionnaires were conducted in March 2019 for the purposes of content validity, reliability, and brevity. Face-to-face interviews were used to get fast and clear feedback from the respondents during the pre-testing phase, and six respondents were selected which came from academicians and practitioners well-versed in stakeholder engagement and renewable energy projects. Pilot testing was carried out with an actual group of respondents from renewable energy sector, notably called Renewable Energy Power Providers (REPPs). REPPs is the key stakeholders'group in renewable energy projects due to multi-disciplinary roles as project providers, energy service providers, technology providers, project consultant, and acts as the main contractor for interconnections. All data were collected, firstly using SPSS Version 23 software that was used to analyze the descriptive statistics. Secondly, the SmartPLS 3.0 software was used for testing the goodness of the model and hypothesis testing. The results of the pilot test provide an overall satisfactory depiction of the questionnaires. Majority of the participants found the survey questions clear and easy to respond. Nevertheless, few changes were required in some of the questions, and after modifications, the survey questions were finalized.

Sample and Data Collection

There were 390 of a total populationof Renewable Energy Power Producers (REPPs) which were mainly located in Peninsular Malaysia.The unit analysis is the organization in REPPs specifically from the groups of the management level who have been directly or indirectly involved in the decision-making process and have professional experience in managing the renewable energy projects. In selecting the respondents, stratified random sampling was adopted on the strata of decision making in companies (Fernando & Wah, 2017). List of respondents was provided in Energy Commissioning and Sarawak Energy official website. By using G*Power software version 3.1, 118 samples size was used in this study. Out of the 200 distributed questionnaires, 74 questionnaires were returned indicating a response rate of 37%. There were few reasons that existed for non-response which were due to the fact that some organization's policy was confidential and resisted to share information with outsiders and due to the person in charge not being interested in participating in the survey questionnaires. Using SPSS Version 23 software, Cronbach's alpha coefficient was used for reliability analysis and revealed that all measurement items have higher reliability values of p>0.70, which is 0.937.

Table 2 shows the demographic information of the respondents. The number of male respondents was higher than female respondents, with 46 male respondents (62.16%) and 28 female respondents (37.84%). Most of the respondents held a degree or professional qualification (48 or 64.86%), followed by a diploma (14 or 18.92%) and postgraduate degree (12 or 16.22%). In terms of years of experience in the renewable energy sector, 44 (59.46%) of them have less than five years of experience. Meanwhile, 25 respondents or 33.78% have 6–10 years of work experience (34.25%) and the other five respondents have 11–15 years of experience (6.76%). Most of the respondents work as project manager (43 or 58.11%), followed by senior manager (18 or 24.32%), CEO/Director of the organization (9 or 12.16%) and lastly, supervisor (4 or 5.41%). With regards to type of organizations, most of the

Table 2: Demographic Profile of Respondents

Demographic variables	Category	Respondents (N = 74)	
		Frequency	Percentage (%)
Gender	Male	46	62.16%
	Female	28	37.84%
Academic qualification	High school or below	0	0.00%
	Diploma	14	18.92%
	Degree or professional qualification	48	64.86%
	Postgraduate	12	16.22%
Years of experience	<5 years	44	59.46%
	610 years	25	33.78%
	1115 years	5	6.76%
	16–20 years	0	0.00%
	>20 years	0	0.00%
Job position	CEO/Director	9	12.16%
	Senior Manager	18	24.32%
	Project Manager	43	58.11%
	Supervisor	4	5.41%
Type of organization	Public utility	12	16.22%
	Private operator	54	72.97%
	Public-private partnerships	4	5.41%
	Associations	4	5.41%
Area of specialization	Biomass	19	25.68%
	Biogas	11	14.86%
	Mini-Hydro	6	8.11%
	Solar Photovoltaic	38	51.35%

respondents came from privately operated companies (54 or 72.97%). Secondly from public utility companies (12 or 16.22%) and from both public-private partnership and associations (4 or 5.41%). Lastly, in regard to the area of renewable energy specialization, most of the organizations were into solar photovoltaic (PV) sources with 38 numbers (51.35%), biomass with 19 numbers (25.68%), next is biogas sources with 11 number (14.86%) and mini-hydro with six number of organizations (8.11%).

Data Analysis and Results

Structural equation modeling (SEM) was used for data analysis and SmartPLS Version 3.0 software was chosen mainly due to its ability to model the latent constructs both formatively and reflectively (Sarstedt, Ringle, & Hair, 2018). The measurement model was first assessed, and this was followed by the assessment of the structural model.

Measurement Model Assessment

In assessing the measurement model, it is important to test the reliability, convergent validity, and discriminant validity of the measuring items. The convergent validity was assessed by considering the factor loadings, average variance extracted (AVE), and composite reliability (CR) Hair, Babin, & Krey, (2017). Table 3 indicates the details of convergent validity.The cut-off value for outer loadings are higher than 0.50, AVE values are more than 0.50, and CR values are above 0.70 (Hair Jr., Matthews, Matthews, & Sarstedt, 2017; Hair, Hollingsworth, Randolph, & Chong, 2017). The assessment of the measurement model shows that the outer loadings ranged from 0.732–0.884, AVE is 0.517–0.745, and CR is 0.768–0.896 values. However, as indicated in Table 3, the items for CC3, ISP1, RM1, CO1, and SUCC4 were removed because the constructs had not surpassed the cut-off value.

Besides, as this study proposed a second-order model, the convergent validity of the second-order construct was also assessed. The assessment on the second-order model shows that the outer loadings ranged from 0.600–0.832, AVE is 0.510–0.549, and CRis 0.842–0.906. The details of second-order constructs are illustrated in Table 4. Accordingly, based on the results, the convergent validity of both first and second-order constructs are satisfactory. Furthermore, in order to avoid the redundancy issues within each contracts, discriminant validity was utilized (Hair Jr., Matthews, Matthews, & Sarstedt, 2017). In this study, the discriminant validity was examined by using the Heterotrait-Monotrait (HTMT). HTMT is the ratio of the correlations that reflect the average of the heterotrait-heteromethod correlations relative to the average of the monotrait-heteromethod correlations (J. Hair et al., 2017). Henseler, Ringle, Rold´an, & Cepeda, (2015) suggested a threshold value of 0.90 if constructs

Table 3: Results of First-Order Constructs

Constructs	Items	Outer Loadings	Average Variance Extracted (AVE)	Composite Reliability (CR)
Understand Intention and Behaviours (UIB)	UIB1	0.771	0.617	0.829
	UIB2	0.755		
	UIB3	0.829		
Building Good Relationships (BSR)	BSR1	0.731	0.586	0.809
	BSR2	0.844		
	BSR3	0.715		
Effective Communication (EC)	EC1	0.783	0.628	0.835
	EC2	0.824		
	EC3	0.769		
Continuous Consultation (CC)	CC1	0.871	0.745	0.854
	CC2	0.855		
	CC3	Item Deleted		
Implement Strategies Plan (ISP)	ISP1	Item Deleted	0.751	0.858
	ISP2	0.876		
	ISP3	0.857		
Analyze Changes(AC)	AC1	0.800	0.672	0.860
	AC2	0.829		
	AC3	0.829		
Risk Mitigation (RM)	RM1	Item Deleted	0.754	0.860
	RM2	0.874		
	RM3	0.863		
Compromising Conflicts (CO)	CO1	Item Deleted	0.730	0.844
	CO2	0.824		
	CO3	0.884		
Understand Project Success (UPS)	UPS1	0.879	0.742	0.896
	UPS2	0.857		
	UPS3	0.847		
Good Project Governance (GPG)	GPG1	0.824	0.619	0.830
	GPG2	0.771		
	GPG3	0.765		
RE Project Success (SUCC)	SUCC1	0.868	0.517	0.768
	SUCC2	0.863		
	SUCC3	0.752		
	SUCC4	Item Deleted		

Table 4: Results of Second-Order Constructs

Constructs	Items		Outer Loadings	Average Variance Extracted (AVE)	Composite Reliability (CR)
Stakeholder Relations (SR)	Understand Intention and Behaviours (UIB)	UIB1	0.620	0.510	0.842
		UIB2	0.679		
		UIB3	0.772		
	Building Good Relationships (BSR)	BSR1	0.599		
		BSR2	0.739		
		BSR3	0.701		
Stakeholder Communication (SC)	Effective Communication (EC)	EC1	0.728	0.533	0.851
		EC2	0.752		
		EC3	0.708		
	Continuous Consultation (CC)	CC1	0.750		
		CC2	0.711		
		CC3	Item Deleted		
Stakeholder Learning (SL)	Implement Strategies Plan (ISP)	ISP1	Item Deleted	0.541	0.891
		ISP2	0.810		
		ISP3	0.757		
	Analyze Changes(AC)	AC1	0.600		
		AC2	0.651		
		AC3	0.713		
	Risk Mitigation (RM)	RM1	Item Deleted		
		RM2	0.811		
		RM3	0.780		
Stakeholder Integration (SI)	Compromising Conflicts (CO)	CO1	Item Deleted	0.549	0.906
		CO2	0.659		
		CO3	0.797		
	Understand Project Success (UPS)	UPS1	0.832		
		UPS2	0.778		
		UPS3	0.760		
	Good Project Governance (GPG)	GPG1	0.760		
		GPG2	0.565		
		GPG3	0.744		

are conceptually very similar and 0.85 if the constructs are conceptually more distinct. Table 5 shows the results of HTMT assessment indicating the highest HTMT values of 0.891which is below the threshold value of 0.90,thus implying that the discriminant validity was established. Overall, the measurement model of this study was considered acceptable with the evidence of satisfactory reliability, convergent validity, and discriminant validity.

Structural Model Assessment

Table 6 indicates the results of the structural model in this study. The results revealed that the stakeholder engagement indicators which were stakeholder relations, stakeholder communication, stakeholder learning and stakeholder integration were positively affecting the successful implementation of renewable energy projects. Chin, Jin Kim, & Lee, (2013) and Hayes & Preacher, (2014) suggested that the PLS bootstrapping based on 5000 bootstrap samples to derive a 95% bias corrected confidence interval are applicable to test the hypotheses. Table 6 shows that all the standardized β values relating to the independent variables and dependent variables are significant at p value <0.05 (t>1.650) with non-zero confidence intervals. This study also utilized the R-squared (R2) of regression analysis to determine how well the data collected fit with the regression model. The relationship between stakeholder engagement indicators and renewable energy project success was analyzed. According to Hair Jr. et al., (2017) the R^2 values of 0.25, 0.50, and 0.75 for targeted constructs are considered weak, moderate, and substantial. Table 6 shows the R^2 values for all endogenous latent variables in the structural

Table 5: Heterotrait-Monotrait ratio (HTMT) Results

	AC	BSR	CO	CC	EC	GPG	ISP	REPS	RM	SC	SI	SL	SR	UIB	UPS
AC															
BSR	0.863														
CO	0.853	0.804													
CC	0.387	0.525	0.525												
EC	0.670	0.669	0.728	0.841											
GPG	0.871	0.844	0.857	0.464	0.725										
ISP	0.702	0.830	0.858	0.810	0.570	0.754									
REPS	0.857	0.870	0.772	0.397	0.660	0.889	0.588								
RM	0.738	0.726	0.685	0.768	0.450	0.722	0.853	0.683							
SC	0.582	0.642	0.678	0.818	0.844	0.649	0.704	0.580	0.611						
SI	0.823	0.843	0.841	0.529	0.816	0.826	0.787	0.892	0.686	0.734					
SL	0.827	0.855	0.892	0.647	0.608	0.880	0.817	0.767	0.882	0.657	0.893				
SR	0.738	0.847	0.891	0.635	0.708	0.864	0.852	0.688	0.698	0.713	0.803	0.797			
UIB	0.554	0.848	0.883	0.680	0.680	0.709	0.796	0.455	0.608	0.716	0.744	0.670	0.814		
UPS	0.843	0.851	0.868	0.552	0.892	0.890	0.724	0.703	0.611	0.791	0.807	0.870	0.781	0.645	

Table 6: Summary of Hypotheses Testing of Structural Model

Hypotheses	Path	Standard Beta	t-value	R^2	Q^2	Supported
H1	SR → REPS	0.037	15.335	0.348	0.433	Yes
H2	SC →REPS	0.031	21.033	0.752	0.495	Yes
H3	SL → REPS	0.020	17.863	0.478	0.492	Yes
H4	SI → REPS	0.148	5.181	0.210	0.500	Yes

model. The R^2 values for stakeholder relations was 0.348 or 34.8%, and stakeholders' learning 47.8%, indicating medium effect towards renewable energy project success. Stakeholder integration presenting low effect with 21%. Meanwhile, stakeholder's communication indicates the substantial effects towards renewable energy project with R^2 value 75.2%.

Besides, blindfolding was applied to ensure the predictive relevance Q^2 of the model. The Q^2 shows the ability of a model in predicting endogenous variables. The results were extracted through the cross-validated redundancy and the model has a predictive relevance if the Q^2 values in all the endogenous variables are more than zero. The Q^2 values of 0.02, 0.15, and 0.35 signify small, medium, and large predictive relevance of certain latent variables(Hair et al., 2017). Referring to Table 6, it shows that all stakeholder engagement constructs had large relevancy toward the renewable energy project success.

Discussion

In order to provide insight and investigate the influence of the stakeholder engagement for delivering successful renewable energy projects in Malaysia, this study was conducted to examine the relationship between the indicators of stakeholder engagement and renewable energy project success. There were ten critical factors of stakeholder engagement identified in literature which were effective communication, continuous consultation, understand intention and behaviors, implement strategies plan, build good relationships, analyze changes, risk mitigation, compromise conflict, understand project success, and good project governance. These factors were grouped together into four elements which were stakeholder relations, stakeholders' communication, stakeholders' learning and stakeholder integration, which become the constructs of stakeholder engagement indicators.The details of the results are illustrates in Figure 2.

Firstly, the findings indicate that the stakeholder communication has the most significant impact towards renewable energy project success. This was proven with the highest estimated path coefficient β-value 0.810. Thus, it implies that for delivering successful renewable energy projects, the companies need to focus more on stakeholder communication during stakeholder engagement process. Consistent with previous studies, the development and deployment of renewable energy projects can

be successfully implemented if project managers emphasize effective communication among all key stakeholders involved (Heravi, Coffey, & Trigunarsyah, 2015). Apart from that, the importance of effective communication among stakeholders will help the project managers to identify the salient stakeholder's groups. The analysis also shows that continuous consultation has a positive impact on a renewable energy project. Since the renewable energy projects are known as national agenda, there may be situations where diverse expectations and various interpretations of project requirements create a controversial situation, which brings confusion and conflicts of what stakeholders primarily want. An essential step to overcoming this issue is to continuously consult the relevant stakeholders by getting their needs, requirements, and expectations.

Secondly, the results of this study presented that stakeholders' learning has a significant positive relationship towards renewable energy project success. This was supported with the estimated path coefficient β-value 0.780. The respondent agreed that in order to achieve successful development of renewable energy projects, the companies need to learn and get inputs from all stakeholders involved so that the strategic stakeholder engagement plan, systematic analyzing changes, and risk mitigation can be implemented. This, consistent with previous study by Aaltonen & Kujala, (2016) and Lehtinen et al., (2018), stated that by collecting needs and preferences from project stakeholders, conflicts to plans and other issues that sometimes happen in the execution and operation phase will be minimized. Apart from that, the results also agreed that analyzing changes and mitigation of risk are essential in determining the renewable energy project success. These results consistent with the extant literature that emphasized the needs of these approaches during the early stages of projects were crucial (Molwus,2014b; Sherriff, (2012). Similary, Cuppen, et al., (2016) elaborates that early action in managing risks and changes may result in the financial and technical benefits and achieved the project sustainability.

Thirdly, the significant positive relationship between stakeholder relations and renewable energy project success was proven with the estimated path coefficient β-value 0.702. The results indicate that renewable energy projects will be successfully developed and implemented if more endeavors are taken in strengthening stakeholder relationship. This is supported in literature that public perceptions convey important aspects in developing and deployment of renewable energy initiatives. Previous research also has strongly focused on the internal stakeholders while little attention has been given to the effect on the legitimate 'secondary stakeholders,' which is the public. (Mojtahedi & Oo,2017; Jami & Walsh, 2014; Richard & David, 2018; Di Maddaloni & Davis, 2017). In the context of renewable energy initiatives, Pagnussatt,

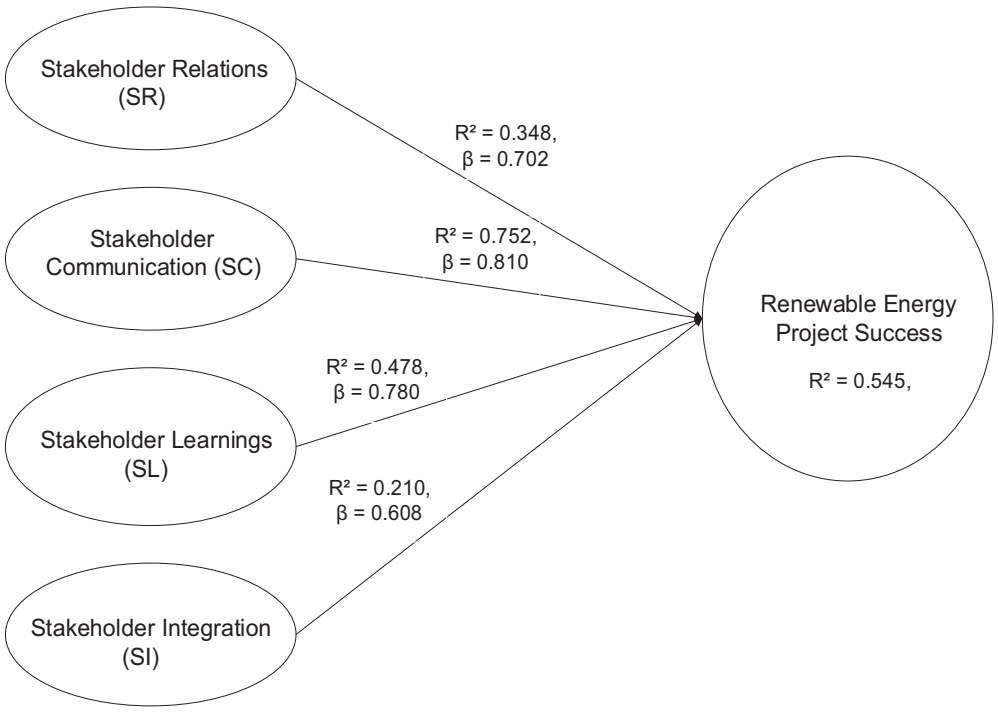

Figure 2: Results of model testing

Petrini, Santos, & Silveira (2018)found that building and sustaining a good relationship with the public will bring significant value to the initiated renewable energy projects in terms of economy, social and environment. Besides, the results pointed out that in order to deliver successful project outcomes, it is necessary to understand the underlying intentions and behaviors of stakeholders. Bal (2014) reinforced this view and stated that a proper identification process is an important step to distinguish different stakeholders' needs and expectations. If the project members are clearly identified, then it will be easier for the leaders to involve and communicate with them.

Lastly, the results of this study indicate the significant relationship between stakeholder integration and renewable energy project success. This is supported with the path coefficient β-value of 0.608. The findings confirmed integration of stakeholder engagement will create value and benefits to the project's stakeholders. Respondents agree that by considering stakeholder integration, stakeholders will be able to compromise conflict, better understand project success and good project governance. It is suggested that by compromising conflicts, project disputes will be resolved in proper mechanism such as facilitation, negotiation, mediation, and arbitration. These dispute resolutions will help to resolve differences among stakeholders before and after they reach the stage of a dispute(Heravi, 2014). Meanwhile the development of renewable energy projects brings a wide variety of economic, environmental, and social benefits; the challenges in implementing these projects are also inevitable. Therefore, understanding project success and good project governance is the proper mechanism for engaging all stakeholders involved.

Conclusion and Research Implications

This study considers stakeholder engagement in the context of renewable energy projects in Malaysia by providing insights into investigating the stakeholder engagement indicators as the important drivers on renewable energy project success. The results obtained from this study as the empirical testing of the conceptual framework indicate significant positive relationship between independent and dependent variables. Overall, the hypothesis of this study shows that stakeholder relations, stakeholders' communication, stakeholders' learning and stakeholder integration were positively significant towards the renewable energy project success. The findings of this study also reveal that the respondents were aware of the significance of stakeholder engagement, however, their level of understanding of the issues was constructed through experience, and not based on any framework, standards, or other formal instruction/documentation. Apart from that, the respondents agree that effective stakeholder engagement among companies and relevant stakeholders was an important approach for tackling the barriers and challenges in development of renewable energy projects in Malaysia.

From the discussion above, this study recognizes a few essential contributions to the theoretical and social perspectives. Firstly, it advanced the theoretical understanding of stakeholder theory by Freeman et al., (2010) by empirically validating an amplified conceptual model consisting indicators and critical factors of stakeholder engagement. Compared with the previous literature, the stakeholder engagement was considered as stakeholders management attributes, and no critical success factors were determined. Associated with that, this study contributed to stakeholder engagement and management literature by providing a measurement model that may be replicated within further research. Freeman et al., (2017) emphasized that stakeholder engagement is undoubtedly seen as practical approach of stakeholder theory, thus, the purpose of this study will provide examples and best practices on how companies should engage with the stakeholders. Apart from that, since renewable energy and sustainable development are trendiest agenda worldwide, the stakeholder engagement framework in this study may yield findings that contribute to bridge the knowledge gaps between the project management area and the uniqueness of renewable energy projects.

Secondly, the findings of this study are very relevant in the present time by offering significant input for projects decision-making. The findings of this research produced valuable information to the project professionals in their pursuit of improving sustainability and achieved project success. Mainly, this study will give benefits or societal contribution, specifically to the stakeholders involved in renewable energy projects in Malaysia. The results of this study will generate greater awareness among key players in the renewable energy sector especially to the Renewable Energy Power Providers (REPPs) on the importance of having useful stakeholder engagement framework for successful development of renewable energy projects in Malaysia. Lastly, this study is an attempt to highlight the roles of stakeholder engagement in development and deployment of renewable energy projects and helping Malaysian government in achieving the target of renewable energy generation up to 20% by year 2025.

Competing Interests

No potential conflict of interest was reported by the author(s).

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Understanding Coronavirus (COVID-19) as a Small Particle to Students with Special Needs

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ABSTRACT

The purpose of this study was to assess students with special needs' understanding of the size and shape of the COVID-19 as a particle. This study was conducted by giving 60 questions to the students to investigate their level of understanding. To ensure the evaluation precisely, the students from four special needs schools in Kuningan District in Indonesia were assisted by their parents when answering the questions. Different levels of the students' understanding were obtained. As many as 8 students (or 35% of students) scored below 70, while 15 students (or 65% of the students) scored more than 70. Students aged 15 years had the lowest average score of 4.7, while students aged 8 years had the highest average score of 9.2. Most of the students with special needs understood that COVID-19 is a small particle, however, the strategies for improving their understanding need special techniques. This study is important to give knowledge on how to prevent COVID-19 among students with special needs. Indeed, this can lower the spreading of the virus.

Keywords: coronavirus (COVID-19), particles, level of understanding, students with special needs.

Introduction

A virus is a microorganism that reproduces in living host cells. The viruses do not have cells and they form new viruses in the infected host cell (Sakurai *et al.*, 2015). Viruses can infect humans. The world nowadays has been experiencing the pandemic due to coronavirus. Coronavirus is a virus originating from animals (Omrani, Al-Tawfiq, & Memish, 2015). There are six types of coronaviruses that can infect the human body. One of them is the severe acute respiratory syndrome coronavirus 2 (SARS-COV-2) (Lai *et al.*, 2020). Nowadays, the disease comes as coronavirus disease (COVID-19). This virus can affect anyone and cause respiratory system disorders, acute pneumonia, and death.

The COVID-19 can be transmitted through coughing and sneezing and direct contact with the patients. This virus quickly spreads because of its very small size (Li *et al.*, 2020). Furthermore, this virus is tiny and it is invisible particles so it can only be seen using certain tools. The COVID-19 has a round shape and is surrounded by nails attached to it like a crown.

People infected by this virus have symptoms of fever, cough, and shortness of breath. Symptoms of COVID-19 will appear within 2 to 14 days after exposure to the coronavirus (Lauer *et al.*, 2020). We can prevent the spread of this virus in several ways by maintaining physical distancing (keeping a distance of at least 1 meter from others), using a mask when we leave the house, diligently washing hands with soap, applying hand sanitizers, boosting the body immune by taking vitamins and balancing diets, avoiding contact with the patients, maintaining cleanliness, covering our mouth and nose when sneezing and coughing, and not touching our nose and mouth before washing our hands.

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As this is one of the dangerous viruses, therefore, providing education about COVID-19 prevention is very important. At present, many inventions that explained the understanding of the COVID-19 (Tetro, 2020), the form of the COVID-19 (Tian *et al*., 2020), symptoms of people with COVID-19 (Shi *et al.*, 2020), the spread of the COVID-19 (Lai *et al.*, 2020), the data of infected people (Word Health Organization, 2020a), and the prevention in contracting the virus (Qian *et al.*, 2020). However, almost all the research explained about COVID-19 is for the general society. Up to the present, we have not found any researches discussing the comprehension of students with special needs about the coronavirus.

We believe that it is also very important to educate children with special needs about the COVID-19. In order to establish their knowledge on COVID-19 such as its size and its form, its transmission and also the prevention, in the same way we teach our students in general. As known, most of the children with special needs are very susceptible to be infectious, especially children with intellectual disabilities because they are less in maintaining personal hygiene (Giust & Valle-Riestra, 2017). The students with intellectual disabilities also have difficulties in performing daily living tasks (Kang & Chang 2019). Additionally, they have problems in life skills and independent personal hygiene in activity daily living, especially in hand and body hygiene (Cihak *et al.,* 2016; Cannella-Malone *et al.,* 2016).

Therefore, we examined how children with special needs understand the coronavirus and its relation to the smallest particle shape. We gave as many as 60 questions to students by empowering their parents. Some questions related to understanding particle size because when the students know and understand the shape and size of the virus as well as how its spread, they become more aware of the virus and its transmission.

Research Methodology

Sample

This study focused on limited research subjects (*i.e*., students' understanding of the comparison of the size and shape of the coronavirus as a particle). The research participants were students with special needs (students with autism, students with down syndrome, students with hearing impairment, and students with intellectual disabilities) from the four special schools (*Sekolah Luar Biasa*) in Kuningan Regency, Indonesia. The schools are specialized for students with special needs.

Variables

The variables in this study are the students' knowledge and COVID-19 as particles. The students are individuals who encounter problems in the developmental and academic aspects. They also have difficulties in understanding information and doing daily activities. There are several categories of the children with special needs, including the students with autism, down syndrome, the students with hearing impairments, and the students with intellectual disabilities. Generally, in the learning process, they need concrete learning media to grasp the idea of the lesson, clear and concise explanations, and repetitions. They also need special teaching methods and learning that can accommodate their diversed needs. Additionally, the learning environment is very much influencing the student's knowledge level (Nakayama, 2019). Therefore, during the current pandemic outbreak, providing knowledge about the COVID-19 is very important to students with special needs because it has been declared as a Public Health Emergency of International Concern. It is also one of the hideously destructive viruses and students with special needs are at a higher risk of getting severe COVID-19 disease. As per 21 April 2020, Indonesia reported 6760 laboratory-confirmed COVID-19 cases with 590 deaths (World Health Organization, 2020b).

COVID-19 is a coronavirus coming from animals or often called zoonotic diseases. The development began in December 2019, and originally appeared in Wuhan city with the name 2019-nCoV or Novel Coronavirus (Anggraeni *et al*., 2020). WHO has finally officially named it as COVID-19. COVID-19 stands for 'corona', 'virus', and 'disease', whereas 19 is the beginning year of the virus spreads (Ana, 2020). This virus has a round shape surrounded by crown-like spikes. This virus has a very small size or small particles, so it can only be seen using electron microscopes. Since the virus is a tiny particle, therefore, it gets into the human body easily. This virus causes lung damage and attacks the immune system. Being based on the facts, we think educating students with special needs about COVID-19 is essential to help them understand about the disease in order to help them prevent the transmission and to protect themselves and their families.

Instrument

In this study, we gave tests to the students by asking a few questions to assess their level of understanding of the COVID-19 size. We made 50 polar questions and

analyzed it as 0 for *no* and 1 for *yes* with a total score of 100 if students answered *yes* to all the questions. We also provided 10 multiple-choice questions with three answer choices (a, b, and c). We simplified the analysis of students' level of understanding and all information obtained was assessed using a scale score.

Table 1 shows the 50 polar questions related to the COVID-19 and particles given to students. Table 2 is 10 multiple-choice questions. For evaluation and analysis, we asked sixty questions. Each question scores 1. The maximum score is 60, then it is divided into 6 which equals 10 (the score obtained is divided by six).

Table 1: Question about coronavirus and particles

No	Question	Answer	
		No	Yes
1	Do you know what particles are?		
2	Do you know what atom is?		
3	Do you know that every material is made up of particles called atoms?		
4	Do you know that atoms cannot be damaged?		
5	Do you know that atoms cannot be destroyed and it created through chemical reactions?		
6	Do you know that particles are very small and cannot be subdivided?		
7	Do you know that the smallest particles of the same element have the same size and mass?		
8	Do you know what size viruses and particles are?		
9	Do you know corona is a virus?		
10	Do you know that there are 6 types of coronaviruses that can infect humans?		
11	Do you know what CoVID-19 stands for?		
12	Do you know what a C0VID-19 is?		
13	Do you know that the CoVID-19 originated from animals?		
14	Do you know that the CoVID-19 is caused by the zoonotic virus?		
15	Do you know that SARS, MERS, and SARS-Cov-2 are types of CoVID-19 viruses?		
16	Do you know the other name for CoVID-19?		
17	Do you know the form of the CoVID-19?		
18	Do you know that the CoVID-19 is round?		
19	Do you know the size of the CoVID -19?		
20	Do you know how coronavirus gets into the human body?		
21	Do you know what organs can be infected by the CoVID -19?		
22	Is the CoVID-19 transmitted by coughing?		
23	Is the CoVID-19 transmitted by sneezing?		
24	Is washing your hands an effective way to avoid CoVID-19?		
25	Is wearing a mask one of the effective ways to prevent the transmission of CoVID-19?		
26	Is keeping a minimum distance of 1 meter an effective way to prevent transmission of the CoVID-19?		
27	Is avoiding crowds one of the effective ways to prevent the CoVID-19 transmission?		
28	Do you know the CoVID-19 case that is currently becoming viral?		
29	Do you know why you need social distancing (stay at home)?		
30	Do you know why the CoVID-19 is spreading?		
31	Do you know why the CoVID-19 spreads so quickly?		
32	Do you know the symptoms of CoVID-19 infection?		
33	Will someone exposed to the CoVID-19 have a fever?		
34	Will someone exposed to CoVID-19 experience shortness of breath?		
35	Will someone exposed to the CoVID-19 experience a sore throat?		
36	Will someone exposed to the CoVID-19 cough?		
37	Do you know that CoVID-19 can be in mucus or droplets?		
38	Do you know what sneezing is?		
39	Do you know why we sneeze?		

(*continues*)

Table 1: (Continued)

No	Question	Answer	
		No	Yes
40	Do you know that sneezing contains water droplets?		
41	Do you know that cough also contains water droplets?		
42	Do you know the proper way to sneeze or cough?		
43	Do you know what red zone is?		
44	Do you know about *Orang Dalam Pengawasan* (people suspected to have contact with CoVID-19 patient)?		
45	Do you know about CoVID-19 suspect?		
46	Do you know about self-isolation?		
47	Do you know the importance of self-isolation after traveling from the red zone area?		
48	Do you know the incubation period for the coronavirus?		
49	Do you know which country was first infected by the coronavirus?		
50	Do you know which animal transmitted the coronavirus first?		
Total			

Table 2: Questions about Coronavirus and Particles

No	Question	Answer	
		False	True
1	What does coronavirus look like?		
2	What is the size of the coronavirus?		
3	Where does the coronavirus come from?		
4	How does the coronavirus get into the human body?		
5	How long is the coronavirus incubation period?		
6	Why do we need social distancing?		
7	What was done to prevent contracting the coronavirus?		
8	CoVID stands for ...		
9	The smallest particles of a material are called …and how does it relate to CoVID-19 virus?		
10	What is the combination of some of the smallest particles and how does it relate to CoVID-19?		
Total			

Procedure and Data Analysis

First, we conducted a field study and the literature study about COVID-19 and the student with special needs at the beginning of this research. Then, we gave an explanation about the COVID-19 that resembles particles to the students. Second, we conducted tests by giving test instruments to the students. The test was given in order to assess the student's level of knowledge regarding COVID-19 as a particle. We collaborated with the students' parents, asked them to help in asking students questions and after that, we collected the data. The obtained data then processed using qualitative and quantitative data analysis as presented in the results and discussion section.

Results and Discussion

Student Demographics

Figure 1 is the percentage of the students' data based on their age. Students who were the research subjects in this study range from ages 8 to 19. In general, 4% of students are 8 years old, 13% of students are 12 years old, 22% of students are 13 years old, 13% of students are 14 years old, 13% of students are 15 years old, 13% of students are 18 years old, and 22% of students are 19 years old.

Figure 2 is the students' data based on the types of disabilities they have. As many as 4% of subjects are students

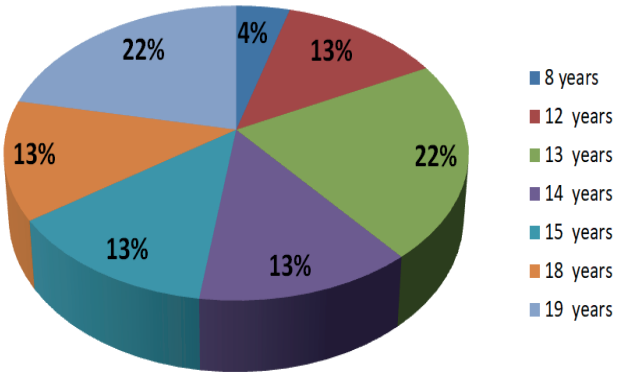

Figure 1: Percentage of subjects based on their age

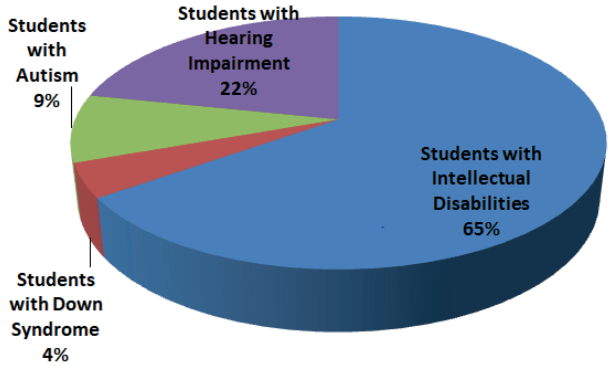

Figure 2: Presentation of the Types of Subject Disabilities

with down syndrome. Particularly, students with down syndrome have the physical characteristics of a thick tongue (Alesi & Pepi, 2017), resulting in unclear pronunciation, thick fingers, motor barriers, boredom, and difficulty understanding something complex. 9% of the subjects are students with autism. Students with autism have obstacles in interaction and communication (Toor, Hanley, & Hebron, 2020). They usually have difficulties in making eye contact, interact, and often upset. 22% of the subject are students with hearing impairment, and generally, they have problems in language, communication, understanding something abstract and learning visually (Handayani, Hufad, Tukimin, Rochyadi, & Nandiyanto, 2020; Hidayat *et al*., 2020; Komaladini, Hufad, Rochyadi, Shyhabuddin, & Nandiyanto, 2020). Furthermore, 65% of the subjects are students with intellectual disabilities. In general, they have problems in adaptive behavior, concentration, and intelligence. Students with intellectual disabilities have an intelligence quotient (IQ) below 70, and usually, they find it difficult to understand something in abstract and have problems in independence (Nordahl *et al*., 2016).

Phenomena in Learning and Teaching Process

COVID-19 is a threatening virus because when this virus infects humans it can cause respiratory problems and

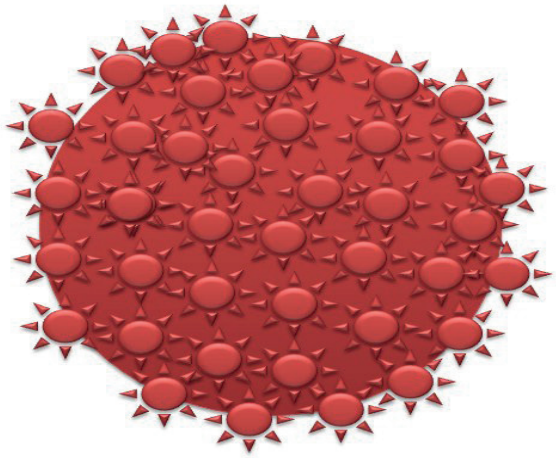

Figure 3: Illustration of a round coronavirus surrounded by crown-like spikes, shown to students.

death. COVID-19 comes from the zoonotic virus (Millan-Onate *et al*., 2020). This virus has a very small size such as the smallest particles, therefore this virus cannot be seen by the naked eye. We must use a tool or microscope to see this virus. The small size of the virus as a particle causes the virus to gets into the human body through the eyes, nose, and mouth easily. Figure 3 is an illustration of a round coronavirus surrounded by crown-like spikes when we explained about the virus to the students.

The students with special needs found it difficult to study and understand viruses and particles due to their small size and lack of visible appearance. During the lesson, students were taught that the smallest part of a particle is called an atom (Hatzoglou, Radiguet, & Pareige, 2017), and the combination of several atoms form an element. If several elements are combined, it will form a molecule. In molecular learning, students have difficulties to understand. Also, in this teaching and learning, viruses are explained as small-shaped which is similar to particles. During the lesson, the students with hearing impairment learn something by maximizing their sense of sight. However, students with intellectual disabilities, autistic, and down-syndrome need concrete learning media because they have difficulties in understanding the abstract concept (Taylor, Vasquez, & Donehoer, 2017).

Generally, students with intellectual disabilities learn something in repetitive situations. It means that when they often get information about the COVID-19 and they often see pictures on the news about the virus, they will most likely be able to understand what the COVID-19 is, its shape, and its size. Therefore, the teaching process for students with special needs requires special techniques (Nandiyanto *et al*., 2018). Specifically, teachers need to provide interesting methods to attract students'

concentration and focus. Otherwise, the level of students' understanding cannot be predicted. In the end of the lesson, a final test on the COVID-19 and particles was given to the students, constraints from elementary to intermediate level in order to ensure students' level of understanding during the teaching process.

Analysis Data

Figure 4 explains the average scores obtained by students based on their age. The average score for the students aged 8 years is 9.2 while the students aged 12 years had an average score of 8.4. The students aged 13 years had an average score of 7 and the students aged 14 years had an average score of 8.6 while the 15-year-old students had an average score of 4.7. Furthermore, the students aged 18 years had an average score of 6, and the students aged 19 years have an average score of 8.1. Meanwhile, the students aged 15 years had the lowest average score of 4.7, while students aged 8 years had the highest average score of 9.2. This is probably because students aged 15 have complex obstacles and issues. Also, they have limited knowledge, and have concentration issues.

Besides, student A is 8 years old receives a maximum score of 55 or 9.2. Students B, C, and D are 12 years old get a maximum score of 56 (or 9.3), 48 (or 7.7), and 50 (or 8.3), respectively. These students have poor knowledge about particle matter. Students E, F, G, H, and I are 13 years old get a maximum score of 44 (or 7.3), 42 (or 7), 38 (or 6.3), 50 (or 8.3), and 36 (or 6), respectively. These students have less knowledge about particle matter. Additionally, the students have the lowest score of 6 and the highest score of 8.3.

Students J, K, and L are 14 years old get a maximum score of 51 (or 8.5), 55 (or 9.2), and 49 (or 8.2), respectively. These students have the lowest score of 8.2 and the highest score of 9.2.

M, N, and O students are 15 years old get a maximum score of 28 (or 4.7), 14 (or 2.3), and 43 (or 7.2), respectively. The students have the lowest score of 2.3 and the highest score of 7.2. Students P, Q, and R are 18 years old get a maximum score of 58 (or 9.7), 39 (or 6.5), and 11 (or 1.8), respectively. These students have the lowest score of 1.8 and the highest score of 9.7.

S, T, U, V, and W students are 19 years old get a maximum score of 41 (or 6.8), 34 (or 5.7), 56 (or 9.3), 60 (or 10), and 52 (or 8.7), respectively. These students have poor knowledge about particle matter and they also have the lowest score of 6 and the highest score of 8.3.

From the data obtained, R student who is 18 years old has the lowest score of 1.8 because the student only answered 11 questions correctly. Being based on the data, students who get the lowest score are students with intellectual disabilities. As aforementioned, they have problems in behavior, concentration, easy to forget, and in understanding information (Maryanti, Hufad, Sunardi. & Nandiyanto, 2020; Hermawan *et al., 2020*). They also have difficulty in understanding something abstract. In addition, students seldom get stimulation and intervention from their community, whereas students with hearing impairments often do not experience intelligence barriers. However, students with hearing impairment usually have difficulties in understanding and accepting information because they have problems in their hearing or speaking organs. They learn something using the visual senses (Hidayat *et al*., 2020). Nevertheless, they will gain a low level of knowledge if the community does not support their development and maximize their potential. From the data, student V who is 19 years old has the highest score of 10 because the student answered all the questions correctly.

As many as 8 (or 34.78%), students scored below 70. Whereas 15 (or 65.22%) of students scored more than 70. This happens because students with special needs have limitations in understanding abstract and complicated theories (Hong, 2015). The community where students live affects the level of students' understanding. Students who get used to obtaining information from their community could continuously enhance their knowledge, specifically about the coronavirus, its sizes and its shapes which similar to particles.

Being based on the study we conducted, we found that the present study has specific objectives and the aims have been fulfilled. The first objective is to understand the students with special needs knowledge level on COVID-19 in Kuningan and the second objective is to give education on COVID-19 to students after gaining the results. We believe this present information shows the significance of education in preventing COVID-19 to all people in Indonesia regardless of their disabilities.

It is also expected that people will aware that educating students with special needs for knowing COVID-19 is very essential. Therefore, we conclude that attempts to improve students with special needs understanding and knowledge on COVID-19 must include some aspects. We need to provide concrete teaching media, give clear and

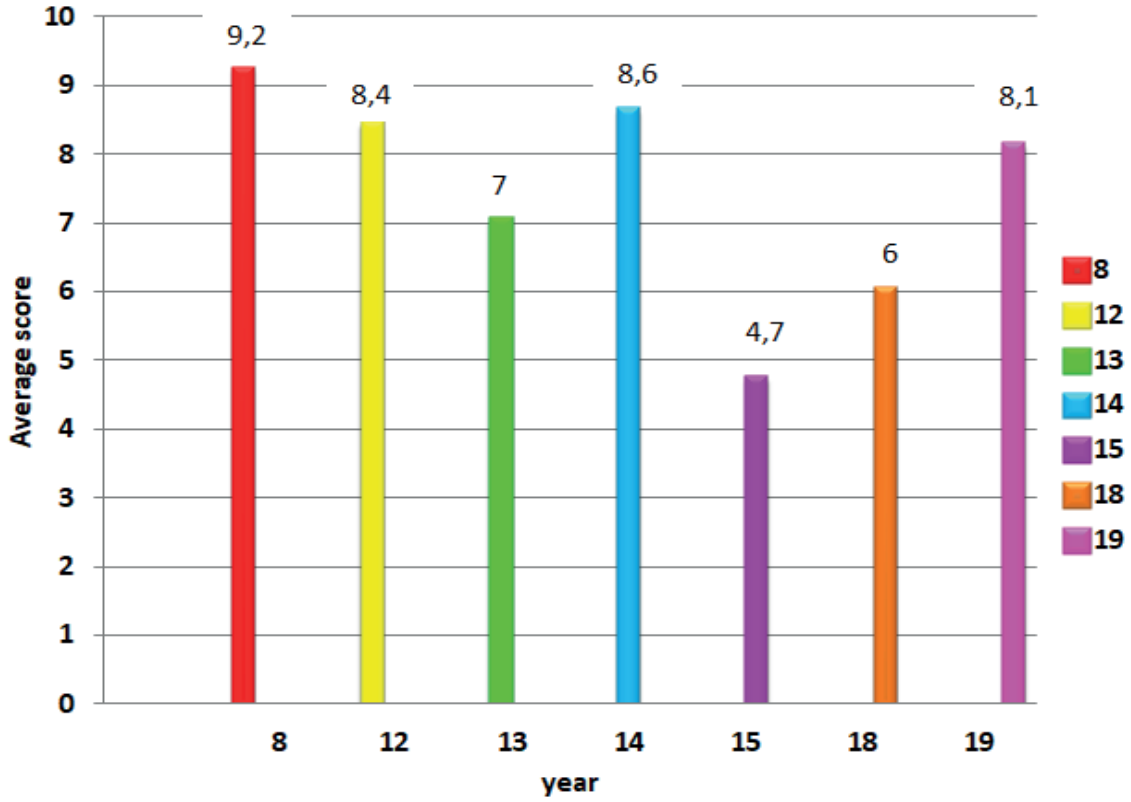

Figure 4: Percentage of average values obtained based on age

concise explanations, create supportive learning atmosphere, and do repetitions of the lesson. In addition, this research can be used as a reference for further research on how to educate and give information on COVID-19, including its transmission and prevention to students with special needs.

Conclusion

This study aimed to assess the knowledge level of students with special needs in the context of COVID-19 and its comparison to particles. The data was obtained from the tests given consisting 50 polar question and 10 multiple-choice questions to the students. We collaborated with parents and asked them to ask the questions to the students. The results showed that 78% of students level understanding is below 70, while the other 22% is greater than 70. The lowest score was obtained by R who is 18 years old while the highest score was obtained by V who is 19 years old. Therefore, we can conclude that age does not affect the level of students' knowledge. It also depends on the barriers and challenges that students experience and the support given by the community. Students with special needs gain more learning benefits based on repetition and using concrete objects as the teaching media. We also found that information that the students receive from their environment affects students' level of understanding.

Competing Interest Statement

All authors have read and approved the manuscript and take full responsibility for its contents. The authors have declared that no competing interest exists.

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JOURNAL OF HUMANITIES & SOCIAL SCIENCES RESEARCH (JHSSR)

January – July 2020

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(Manuscript Preparation & Submission Guide)

Revised: May 2020

Please read the guidelines below and follow the instructions carefully. **Manuscripts that do not adhere to the Journal's guidelines will not be put into the peer-review process until requirements are met**.

MANUSCRIPT PREPARATION

A well-formatted manuscript follows all journal instruction. All elements of the manuscript are printed in English with 1- inch margins at top, bottom, and sides. Right margins are unjustified. Horizon journals accept manuscript submissions which uses any consistent text— Format-free Submission! This saves you time and ensures you can focus on your priority: the research.

However, citations/ references must be formatted by you as per APA format.

Submission Preparation Checklist

As part of the submission process, authors are required to check off their submission's compliance with all of the following items, and submissions may be returned to authors that do not adhere to these guidelines.

- ✓ The submission represents an original work that has not been published elsewhere nor submitted to another journal in any language for publication;
- ✓ The submission cites current theoretical and empirically-based literature, including relevant articles published in the Horizon Journal of Humanities and Social Sciences Research;
- ✓ The submission is written in language that is engaging, lively, and direct, using active voice whenever possible;
- ✓ The submission includes a maximum of four tables and figures uploaded as separate files, if applicable;
- ✓ The submission adheres to word count and APA 7 stylistic and bibliographic requirements; and
- ✓ All identifying information has been removed from all documents and file names.

Checklist for Manuscript Submission

- Cover letter
- Declaration form
- Referral form
- Manuscript structure

(Title, Author details and affiliation, Abstract, Keywords, etc. using the **IMRAD** style). See below explanation.

Manuscript Types

Horizon accepts submission of mainly **four** types of manuscripts for peer-review.

1. **Regular article**
   Regular articles are full-length original empirical investigations, consisting of introduction, materials and methods, results and discussion, conclusions. Original work must provide references and an explanation on research findings that contain new and significant findings.

   Size: Generally, these are expected to be **around 6,000** words (excluding the abstract, references, tables and/or figures), a maximum of 80 references, and an abstract of 100–150 words.

2. **Review article**
   These report critical evaluation of materials about current research that has already been published by organizing, integrating, and evaluating previously published materials. It summarizes the status of knowledge and outline future directions of research within the journal scope. Review articles should aim to provide systemic overviews, evaluations and interpretations of research in a given field. Re-analyses as meta-analysis and systemic reviews are encouraged. The manuscript title must start with "Review Article".

   Size: These articles do not have an expected page limit or maximum number of references, should include appropriate figures and/or tables, and an abstract of 100–150 words. Ideally, a review article should be **around 3,000 words**.

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They are timely, peer-reviewed and brief. These are suitable for the publication of significant technical advances and may be used to:

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(b) Report/discuss on significant matters of policy and perspective related to the science of the journal, including 'personal' commentary;
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Size: These are usually **between 800 to 1,500 words** and have a maximum of three figures and/or tables, from 8 to 20 references, and an abstract length not exceeding 150 words. Information must be in short but complete form and it is not intended to publish preliminary results or to be a reduced version of Regular or Rapid Papers.

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Book reviews, Brief reports, case studies, comments, concept papers, Letters to the Editor, and replies on previously published articles may be considered subject to the discretion of the journal editors.

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- **Results and Discussion**: This section should answer the question you raised in the introduction.
- **Conclusion**: Here you should include your findings.
- **Results and Discussion:** This section should answer the question you raised in the introduction.
- **Conclusion**: Here you should include your findings.
- **Competing Interests Statement**: e.g. The authors have declared that no competing interest exists.
- **Acknowledgements**: This usually follows the Discussion and Conclusions sections. Its purpose is to thank all of the people who helped with the research but did not qualify for authorship.

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

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[1]Department of English Studies, Texas University, Dallas, USA., [2]Department of the Deputy Vice Chancellor, Texas University, Dallas, USA.

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Page 3: Abstract
This page should **repeat** the **full title** of your paper with only the **Abstract** and **Keywords**.

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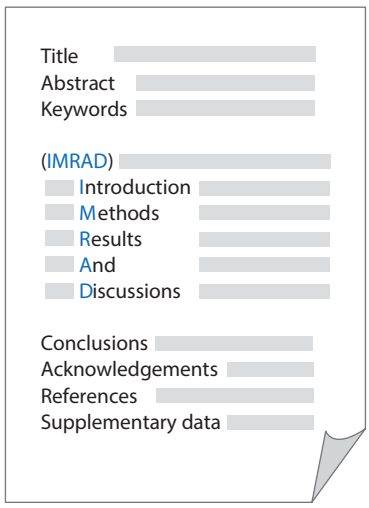

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The Introduction explains the scope and objective of the study in the light of current knowledge on the subject; the Materials and Methods describes how the study was conducted; the Results section reports what was found in the study; and the Discussion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

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