



Pertanika Journal of  
**SOCIAL SCIENCES**  
& **HUMANITIES**

**JSSH**

**VOL. 31 (3) SEP. 2023**



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## PERTANIKA JOURNAL OF SOCIAL SCIENCES & HUMANITIES

### About the Journal

#### Overview

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

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

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

The journal is available world-wide.

#### Aims and scope

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

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

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To publish journal of international repute.

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

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

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2. The Chief Executive Editor sends the article-identifying information having been removed, to 2 to 3 reviewers. They are specialists in the subject matter of the article. The Chief Executive Editor requests that they complete the review within 3 weeks.

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

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

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# Foreword

Welcome to the third issue of 2023 for the *Pertanika Journal of Social Sciences and Humanities (PJSSH)*!

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

This issue contains 20 regular articles. The authors of these articles come from different countries namely Bangladesh, China, India, Indonesia, Malaysia, Nigeria, Spain, United Kingdom and Vietnam.

Yan Huo and colleagues provide interesting research to compare one of Queen Elizabeth II's speeches, which was infused with virtue terms, with two similarly motivated speeches by Chinese President Xi and Chilean President Piñera in a study entitled "Virtue Language in the Time of the Coronavirus: A Cross-Cultural Triangulation Study Based on Speeches from Three National Leaders." The study explores to what extent the speeches reflect universal versus local values/virtues and how their selection of virtues fits into current taxonomies of positive character traits. The findings show that the analysis of the three speeches reflects universal and local values, as can be judged from the shared and differentiated virtue language employed in these speeches. Further details of the study can be found on page 1161.

A regular article titled "Cultivating 21st-century Learning Skills: A Quantitative Study on the Effectiveness of Song-based Music and Movement for Improving Children's Social Skills" sought to investigate the effectiveness of song-based music and movement intervention in improving social skills among sixty participants of elementary-age children. They were divided equally into three experimental groups and a control group. This study shows that the implementation of song-based music and movement (SBMM) can be an effective tool in educating elementary-age children and notably improve elementary school children's social skills compared to the other interventions. It provides insights to promote the implementation of song-based music and movement intervention for school teachers to improve young age children's social skills. The detailed information of this article is presented on page 1197.

A study entitled, 'Effects of Social Networking Sites Usage on Chinese Students' Life Satisfaction in Malaysia: Cultural Identity as a Mediator' discussed the mediating role of cultural identity in the relationship between social networking sites (SNSs) usage and life satisfaction among Chinese international students in Malaysia. The findings show that SNSs usage engagement contributes to life satisfaction, while acculturation usage has a negative and non-significant effect on life satisfaction. However, under the mediating

effect of host cultural identity, acculturation usage positively predicts the life satisfaction of Chinese international students in Malaysia. The results of this study can provide insights for Malaysian higher education practitioners and policymakers to introduce relevant policies to promote the life satisfaction of international students. Details of this study are available on page 1317.

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

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

We would also like to express our gratitude to all the contributors, namely the authors, reviewers, Editor-in-Chief and Editorial Board Members of PJSSH, who have made this issue possible.

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

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**Prof. Ir. Dr. Mohd Sapuan Salit**

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## **Prevalence and Factors Associated with Maternal Stress Among Mothers of Children with Cerebral Palsy in Rural Bangladesh**

**Hayati Kadir Shahar<sup>1,2\*</sup>, Sankar Chandra Debnath<sup>2</sup>, Norliza Ahmad<sup>2</sup> and Md. Nazrul Islam<sup>3</sup>**

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### **ABSTRACT**

This research aim to identify the prevalence and factors associated with maternal stress among mothers of children with cerebral palsy in rural Bangladesh. A cross-sectional study was performed among 200 mothers of children with cerebral palsy picked up from rural Bangladesh using a simple random sampling technique. A questionnaire divided into various sections and administered by the researchers was used for data collection. Descriptive statistics and logistic regression models were applied to summarize the respondents' characteristics, main outcomes (maternal stress levels), and factors associated with maternal stress. The overall prevalence of maternal stress among mothers of children with CP was 56.5%, and the median (*IQR*) age of respondents was 30 (14), whereas that of the children with CP was 6 (8). Factors associated with a higher prevalence of maternal stress were older mothers, divorced/separated, living in a nuclear family, income, male children, and higher negative family impact ( $p < 0.05$ ). The factors identified in this study could help to develop policies and strategies to minimize maternal stress associated with parenting children with cerebral palsy in rural Bangladeshi households.

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### **INTRODUCTION**

Cerebral palsy (CP) is the leading cause of childhood disability worldwide (Stavsky et al., 2017). The prevalence of CP worldwide ranges from 1.5 to 4 per 1,000 children

(Arneson et al., 2009; Chauhan et al., 2019; Oskoui et al., 2013). CP encompasses multiple clinical syndromes often associated with chronic and non-progressive motor dysfunction that affects muscle tone, posture, and motion (Rosenbaum et al., 2007; Stavsky et al., 2017). Spastic types of CP are reported to account for 50% of total disabilities among children worldwide (Arneson et al., 2009; Robertson et al., 2017).

Maternal stress is characterized as a situation in which the various parenthood elements lead to a perceived discrepancy between contextual expectations and personal resources (Holly et al., 2019). Caregiving is one of the critical tasks of raising children, and when a child is affected by functional motor disorders, this task will change considerably (Ang & Juhari, 2017; Omole et al., 2017). Women have more responsibility in most societies, raising children, and primary caregivers for children with disabilities are often mothers (Wijesinghe et al., 2014). The fathers play a less dynamic role in the regular hassles of raising a child with special needs, although they give enthusiastic back (Duvdevany & Abboud, 2003; Ribeiro et al., 2014). Some researchers have shown higher rates of parenting stress in parents of children with CP than other parents with typically developing children (Ahmadizadeh et al., 2015; Cheshire et al., 2010; Parkes et al., 2011; Ramanandi & Rao, 2015). Caring and responsibility for a CP child with specific needs may harm the parents' physical and psychological well-being (Ahmadizadeh et al., 2015; Katkic et al., 2017).

Besides, the positive family impacts on childhood disability are attributed to a positive sense that can act as cognitive coping in maternal adaptation for children with disabilities (Schlebusch & Dada, 2018), often associated with parental stress (Ang & Juhari, 2017; Thompson et al., 2013). Assistance from the government and social organizations is critical in reducing mothers' feelings of isolation and frustration (McIntyre & Brown, 2018; Uskun & Gundogar, 2010). The study highlighted the importance of social support in the form of family, friends, and social systems for mothers' well-being, including lower levels of mental and physical distress (Pfeifer et al., 2014; Sepa et al., 2004) and high levels of maternal satisfaction (Glenn et al., 2009). In addition, some authors have investigated the factors associated with maternal stress among mothers of children with CP in different parts of the world. These factors include but are not limited to age of children, gender of children, occupation of mothers, type of family, educational background, income, knowledge of CP, and other key factors related to social support and assessment (Kumari & Singh, 2013; Mouilly et al., 2017; Ribeiro et al., 2014; Thompson et al., 2013).

Specifically, previous studies have shown that CP is a significant health issue among children in Bangladesh (Mobarak et al., 2000; Shahrer et al., 2016). The demographic analysis found that the prevalence of CP was 3.4 per 1,000 live births and that 79.6% of children had CP spasticity with associated impairments, such



as speech problems, intellectual, visual, and hearing (Khandaker et al., 2019; Murthy et al., 2014; Power et al., 2019). The study highlighted that the prevalence of CP in Bangladesh was 3.7 per 1000 children between 1998 and 2018, and the result indicated a considerable increase compared to previous data (May et al., 2020; Murthy et al., 2014). Most Bangladeshi mothers are the core supporters of children with disabilities and are more likely to be affected by these children's problems (Power et al., 2019). Many children with disabilities are treated or managed at home using methods (wheelchairs and walking frames) that are not readily available (Khandaker et al., 2019; Maloni et al., 2010). One of the earliest data on maternal stress in Bangladesh was by Mobarak et al. (2000), in which a prevalence rate of 41.8% was reported among 91 mothers of children with the condition. Nevertheless, crucial factors, including knowledge of CP, informal social support, and positive family feedback, were not investigated. In Bangladesh, mothers of children with disabilities (affected by autism, ADHD, down syndrome, developmental delay, and CP) utilized a double ABCX model to measure maternal stress (Shahrier et al., 2016). Although the findings are significant, family support and institutional social assistance would explain the relationships and methods for reducing maternal stress (Shahrier et al., 2016). A study was conducted in the urban area of Bangladesh among mothers of children with CP to determine the level of depression, stress, and anxiety.

The significant findings were that the sociodemographic characteristics of mothers and the degree of severity using the GMFCS scale influenced the stress level. Results showed that the study did not conclude family and social support. The survey noted that it was necessary to investigate informal and formal support, knowledge, and family support to determine predictors of maternal parenting stress among mothers of children with CP (Power et al., 2019).

Maternal stress among mothers of children with CP has been studied in numerous parts of Bangladesh and other parts of the world (Dieleman et al., 2021; Kumari & Singh, 2013; McConachie et al., 2000; Yilmaz, 2019). Wijesinghe and his colleague (2014) stated that the prevalence of maternal stress was doubled in Sri Lanka compared to developed countries. The prevalence of maternal stress in developed countries such as Sweden and the UK was 26% (Glenn et al., 2009; Parkes et al., 2011). However, maternal stress was 43% in India among mothers of children with CP (Moideen & Mathai, 2018). There have been few studies in Bangladesh that have focused on maternal stress, CP in children, and the factors that contribute to it (Maloni et al., 2010; McConachie et al., 2000; Mobarak et al., 2000; Power et al., 2019; Shahrier et al., 2016). Factors like family support, formal social support, knowledge of CP, and maternal appraisal have not been considered potential predictors of maternal stress. The results of this study will give data on the prevalence of maternal stress and its risk factors among mothers of children with CP in Satkhira, Bangladesh.

The objectives of this study were: (1) to determine the prevalence of maternal stress among mothers of children with CP in rural Bangladesh, (2) to describe the sociodemographic characteristics of mothers and children with CP, including knowledge of CP, maternal appraisal, and formal social support, and (3) to identify maternal stress predictors among these mothers of children with CP.

## METHODOLOGY

### Study Design, Settings, and Participants

From November 2019 to February 2020, a cross-sectional study was conducted at Rishilpi International Onlus in Satkhira, Bangladesh. Satkhira is in the southwestern region of Bangladesh. There are 2.8 million people living there, and it has a total area of 3858.33 square kilometers (Bangladesh National Portal, n.d.). The institution is a non-profit organization that provides rehabilitation and education services on a global scale. They have a particular focus on children with cerebral palsy. This organization has several sections for children with CP, followed by departments for specialized education, physiotherapy, occupational therapy, speech therapy, and medication. Physiotherapists and physicians evaluate and assess new patients. The physiotherapy department refers patients to other sections for treatment. Every day, 42 patients, mostly children with CP, seek treatment and rehabilitation services from the physiotherapy department. Therapy and rehabilitation treatments are also provided to new patients two to three days later. The

patient is given a twice-weekly therapy program (Tosi, 2023). This institution has data on registration and special education among mothers of children with CP. There were few activities and facilities in government and private rehabilitation centers for children with cerebral palsy (Nuri et al., 2019).

The proforma was designed to collect detailed clinical information on children with CP, such as hospital number, sampling number, diagnosis, and admission. Besides, public health experts (two associate professors and one senior lecturer) evaluated the content validity of the questionnaires. At the same time, 10% of respondents were recruited for the pre-test to check the reliability and face validity of the instruments. The researcher determined the face validity of each item in the questionnaires. The validated questionnaires were back-to-back-translated from English to Bengali. A simple random sampling method was used to select the respondents in this study. Respondents were randomly nominated from a list of all registered children with CP at the physiotherapy department at Rishilpi International Onlus. A computer random number generator was used to select 200 eligible respondents. The Lemeshow formula estimated the sample size (Lemeshow et al., 1990). Furthermore, the researchers provided the questionnaires and assisted the participants in understanding the questionnaires. The mothers were given the respondent's information sheets and consent forms during the study. The questionnaires took an average of 25 minutes to complete. Before and after

treatment, questionnaires were distributed to the mothers of children with CP. The mothers who visited the physiotherapy department have been carefully selected for the following inclusion criteria: (1) the age group of children with CP was between one year and twenty-one years, (2) mothers directly involved in caring for the child with CP, and (3) mothers who have written permission to participate in the study.

### Measures

A guided questionnaire was divided into five sections. Sociodemographic variables of mothers and children with CP were the mother's age, educational qualification, occupational status, marital status, types of family, family income, age of children, child's gender, cost of treatment, and the number of children. The age groups of mothers were selected above 30 years because this institution could allow only mothers to be caregivers of children with CP. During data collection, most of the mothers preferred to take the treatment for their children, and they were from different age groups. Besides, mothers' knowledge of CP was evaluated using the Knowledge of Cerebral Palsy Questionnaire (KCPQ; Dambi et al., 2016). The KCPQ consisted of 20 items, and responses were presented in three options: yes, no, and not sure. Correct answers were accorded a score of 2 points, while incorrect answers were accorded 0 points. Also, four subscales were included: the definition of CP (3 items), the etiology of CP (6 items), the clinical symptoms of CP (5 items), and the management of CP (6 items).

The maternal appraisal was assessed using the Family Impact of Childhood Disability Scale (FICD; Trute et al., 2007). The segment involved 20 items, 10 positive and negative, respectively. The specific FICD items were categorized under six aspects: time, cost, community relationship, family relationship, perception, and stress. Responses were submitted using a 4-point Likert scale ranging from 1 (*not at all*) to 4 (*substantial degree*). The Family Support Scale (FSS) was used in assessing social support (Dunst et al., 1984). The FSS presented respondents' perceptions of formal social support (professional agencies, medicine specialists, daycare centers, clubs, and parent groups). The level of FSS included eight items based on a 5-point Likert scale ranging from *not available* (0) to *extremely helpful* (5). The ranking score for formal social support was between 8 and 40 (Dunst et al., 1984).

Maternal stress was measured using the Parental Stress Scale (PSS; Berry & Jones, 1995). The PSS can measure the parenting efficacy of mothers or carers of children with CP across a wide age range (Berry & Jones, 1995; Thompson et al., 2013). The section consisted of 18 items, further classified into positive items ( $n = 8$ ) and negative items ( $n = 10$ ). The positive items were based on emotional profits and personal improvement, whereas examples of negative items included demands on resources and limitations. A 5-point Likert scale was used to preset the responses, with 1 representing *strongly disagree* and a score of 5 representing *strongly agree*. For the

negative terms, the 10 items were coded accordingly, whereas those of the positive terms were reverse coded (1 = 5, 2 = 4, 3 = 3, 4 = 2, and 5 = 1).

### Statistical Analysis

The IBM Statistical Package for Social Sciences (SPSS, Chicago, USA) version 25 was used. The assumption of normality was checked using the Shapiro-Wilk test and histograms graphically. The sociodemographic characteristics, explanatory and dependent variables were summarized using descriptive statistics. Continuous data not normally distributed were described in the median, interquartile range (*IQR*), and percentages were applied for categorical data.

Median scores were computed for each construct: knowledge of CP, maternal appraisal, social support, and maternal stress. Based on the score obtained by each respondent and the overall median score, the KCPQ was divided into two groups: good and poor knowledge. The Cronbach's alpha of the KCPQ in the present construct was 0.74 (Dambi et al., 2016). Positive family impact (PFI) and negative family impact (NFI) scores were measured by summing up the ten items in each subscale, and the range of each subscale was between 10 and 40 (median score = 24). Respondents with 24 and above scores were regarded as having a higher positive family impact, whereas scores below 24 had a lower positive family impact (Trute et al., 2007). For maternal appraisal, the median score of 22 was used to categorize the FCID to higher and

lower negative family impact. Reliability analysis was conducted by assessing the internal consistency, and the alpha of 0.74 and 0.81 was obtained for the positive subscale (PFI) and negative subscale (NFI), respectively (Trute et al., 2007). The Cronbach's alpha was consistent with the earlier study (Ang & Juhari, 2017). Social support was categorized using median scores into two groups: high and low formal social support. The internal coefficient alpha of formal social support was 0.73, similar to the previous study (Dunst et al., 1984; Glenn et al., 2009). For maternal stress, a median score of 50, according to the PSS, was used to categorize the level of maternal stress. Respondents with scores of 50 and above were considered as experiencing maternal stress. The reliability of PSS was 0.79, thus corresponding to an acceptable level of internal consistency (Berry & Jones, 1995; Ribeiro et al., 2014).

The association between independent and dependent variables has been calculated using the Chi-square test. The assumption of logistic regression was followed in this study. The simple logistic regression model was constructed for each variable and outcome (maternal stress), and the values significant at  $p < 0.25$  were selected for the next multiple logistic models. In the multiple logistic regression models, all the significant factors were introduced into the model. A forward procedure was applied to determine the final predictors of maternal stress with  $p < 0.05$ . Estimates of parameters were presented in odds ratios and 95% confidence intervals. The model fit

was assessed using the goodness of fit and Hosmer Lemeshow tests.

### Ethical Approval

Ethical permission was acquired from the Ethics Committee for Research Involving Human Subjects, Universiti Putra Malaysia, Ref. No UPM/TNCPI/RMC/JKEUPM/1.4.18.2 (JKEUPM). Written informed consent was obtained from all participants before data collection.

## RESULTS

### Descriptive Analysis

The sociodemographic information of mothers is shown in Table 1. The age range

of mothers was between 18 and 58 years old, and the median age was  $30 \pm IQR (14)$ . The majority of the mothers (120; 60%) were in the older age group. Half of the participants (100; 50%) had primary qualifications compared to other groups, while 74.5% ( $n = 149$ ) were homemakers. For the child characteristics, the age of the children ranged from 1 to 21 years, with a median age ( $IQR$ ) of 6 (8). Most children (103; 51.5%) were under seven, of which 120 (60%) were male. Around 74 (37%) mothers of children with CP revealed that they spent between BDT 3000 to 5000 per month for treatment purposes. Other characteristics of the respondents and children are summarized in Table 1.

Table 1  
*Sociodemographic characteristics of mothers and children (N=200)*

Variables	Median $\pm$ IQR	Frequency (n)	Percentage (%)
Age of mothers	30 $\pm$ 14		
<30 years		80	40
>30 years		120	60
Education of mothers			
Primary		100	50
Secondary		69	34.5
Bachelor/above		31	15.5
Occupation of mothers			
Employed		51	25.5
Housewife		149	74.5
Marital status			
Single		14	7
Married		167	83.5
Divorced/Separated		19	9.5

Table 1 (Continue)

Variables	Median $\pm$ IQR	Frequency (n)	Percentage (%)
Types of family			
Nuclear family		78	39
Extended family		122	61
Family income			
< BDT10,000		57	28.5
BDT 10,000 to 20,000		89	44.5
>BDT 20,000		54	27
Age of children	6 $\pm$ 8		
<7 years		103	51.5
>7 years		97	48.5
Gender of child			
Male		120	60
Female		80	40
Cost of treatment			
<BDT 3000		70	35
BDT 3000 to 5000		74	37
> BDT 5000		56	28
Number of children			
1-2		116	58
3-4		73	36.5
>4		11	5.5

Note. IQR = interquartile range, BDT = Bangladeshi taka

Based on the cut-off point of 50  $\pm$  8 (median  $\pm$  IQR), the scale of PSS was used to identify respondents with maternal stress. The prevalence of maternal stress was 56.5% (113), whereas 43.5% had a lower stress level (Table 2). The median (IQR) knowledge score on CP was 23 (6), as shown in Table 2. Overall, based on the median score of 23, a higher proportion of the respondents (57%) had poor knowledge of CP than those considered to have good

knowledge of CP (43%). Among the respondents, 111 (55.5%) had a higher positive family impact, while 44.5% (89) of the mothers had a lower positive family impact. Besides, 47% (94) of the mothers reported a lower negative family impact, whereas 53% (106) reported a higher negative one. In the study, around 54.5% (109) received higher formal social support, while the remaining 45.5% (91) had lower formal social support.

Table 2  
*Distribution of mothers' knowledge, maternal appraisal, social support, and maternal stress (N=200)*

Variables	Median $\pm$ IQR	Frequency (n)	Percentage (%)
Knowledge on CP	23 $\pm$ 6		
Poor		114	57
Good		86	43
Maternal appraisal			
Negative family impact	22 $\pm$ 7		
Low		94	47
High		106	53
Positive family impact	24 $\pm$ 8		
Low		89	44.5
High		111	55.5
Social support (formal)	21 $\pm$ 6		
Low		91	45.5
High		109	54.5
Maternal stress	50 $\pm$ 8		
Low		87	43.5
High		113	56.5

### Bivariate Analysis

The chi-square test showed that mothers' education, occupational status, child's age, cost of treatment, number of children, knowledge of CP, and positive family impact were found to have no association with maternal stress. The crude odds ratio (simple logistic regression model) of the variables

significantly associated with maternal stress is presented in Table 3. Factors associated with maternal stress included mothers' age, marital status, family types, family income, child's age, and gender. Other factors in the simple logistic model were negative family impact.

Table 3  
*Crude odds ratio and 95% CI of maternal stress and associated factors among mothers of children with CP*

Variables	Beta	Wald	df	Crude OR	95% CI		p
					LL	UL	
Age of mothers							
<30 years					ref		
>30 years	1.412	21.256	1	4.103	2.252-7.478		0.001***

Table 3 (Continue)

Variables	Beta	Wald	df	Crude OR	95% CI		p
					LL	UL	
Marital status							
Single					ref		
Married	0.156	0.079	1	1.169	0.393-3.480		0.779
Divorced/Separated	1.674	4.112	1	5.333	1.058-26.898		0.043*
Types of family							
Nuclear family	0.784	6.709	1	2.191	1.210-3.965		0.010*
Extended family					ref		
Family income							
<BDT 10,000	-0.842	4.616	1	0.431	0.200-0.929		0.032*
BDT 10,000 to 20,000	0.848	5.466	1	2.335	1.147-4.753		0.019*
>BDT 20,000					ref		
Gender of child							
Male	0.611	4.356	1	1.842	1.038-3.269		0.037*
Female					ref		
Negative family impact							
Low					ref		
High	0.921	9.896	1	2.512	1.415-4.458		0.002**

Note. OR = odds ratio, CI = confidence interval, df = degree of freedom, ref = reference group, LL = lower limit, UL = upper limit

\* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$

### Multivariate Analysis

In the multiple logistic regression models, compared to the age of mothers below 30 years, mothers above 30 years ( $OR = 2.995$ ,  $95\% CI = 1.414-6.342$ ,  $p = 0.004$ ) had higher chances of experiencing maternal stress. Mothers of children with CP who were either divorced or separated ( $OR = 33.056$ ,  $95\% CI = 4.462-244.899$ ,  $p < 0.001$ ) and living in a nuclear family ( $OR$

$= 3.742$ ,  $95\% CI = 1.702-8.231$ ,  $p < 0.001$ ) had higher odds of maternal stress relative to single mothers and those living with an extended family, respectively. The odds for maternal stress were higher among mothers who earned from BDT 10000 to 20000 ( $OR = 2.712$ ,  $95\% CI = 1.143-6.433$ ,  $p = 0.024$ ) than those with above BDT 20000 and male children ( $OR = 2.184$ ,  $95\% CI = 1.061-4.497$ ,  $p = 0.034$ ) relative to female children.



The odds of maternal stress were higher in mothers with higher negative family impact ( $OR = 2.395$ ,  $95\% CI = 1.168-4.908$ ,  $p = 0.017$ ) than those with lower negative family impact in Table 4.

Table 4  
*Adjusted odds ratio and 95% CI of maternal stress and associated factors among mothers of children with CP*

Variables	Beta	Wald	df	Adjusted OR	95% CI		p
					LL	UL	
Age of mothers							
<30 years					ref		
>30 years	1.097	8.210	1	2.995	1.414-6.342		0.004**
Marital status							
Single					ref		
Married	0.721	1.073	1	2.056	0.526-8.044		0.300
Divorced/Separated	3.498	11.722	1	33.056	4.462-244.899		0.001***
Types of family							
Nuclear family	1.320	10.769	1	3.742	1.702-8.231		0.001***
Extended family					ref		
Family income							
<BDT 10,000	-0.197	0.179	1	0.821	0.329-2.047		0.672
BDT 10,000 to 20,000	0.998	5.122	1	2.712	1.143-6.433		0.024*
>BDT 20,000					ref		
Gender of child							
Male	0.781	4.497	1	2.184	1.061-4.497		0.034*
Female					ref		
Negative family impact							
Low					ref		
High	0.873	5.689	1	2.395	1.168-4.908		0.017*

Note. OR = odds ratio, CI = confidence interval, df = degree of freedom, ref = reference group, LL = lower limit, UL=upper limit

\* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$

## DISCUSSION

The present study was carried out to determine the prevalence and factors associated with maternal stress among mothers of children with CP in Bangladesh.

The prevalence of maternal stress was 56.5% among the respondents. It means that very high maternal stress among mothers of children with CP is more common than in the general population (Kulsoom & Afsar,

2015; Maloni et al., 2010). The likely explanation for the high percentage of maternal stress among mothers of children with CP could be that most respondents in the study stated low-income resources with inadequate support from family and professionals. Some studies reported that the government provided affordable health care and rehabilitation services that were poorly implemented and planned. These findings are consistent with those reported in Bangladeshi, Sri Lankan, and Brazilian studies (Mobarak et al., 2000; Parkes et al., 2011; Power et al., 2019; Ribeiro et al., 2014; Wijesinghe et al., 2014).

The present data showed that the median age of mothers was 30, relatively similar to the previous study (Power et al., 2019). There was a significant association between the age of mothers and maternal stress. Research in Bangladesh, Morocco, and Turkey confirms this study's findings, which stated that older mothers of children with CP were more likely to have maternal stress than younger mothers. It was concluded that mothers were more responsible for daycare (feeding, sleeping, bathing, and prolonged exercise). Such care could make it difficult for mothers to simultaneously manage their child's health problems and day-to-day needs (Mouilly et al., 2017; Panditha & Wickramasinghe, 2016; Yilmaz, 2019). In other words, the chances of maternal stress were higher among divorced/separated mothers than single counterparts. This result contradicted prior studies reporting that married mothers were more likely to have maternal stress (Glenn et al., 2009; Katkic

et al., 2017; Mouilly et al., 2017). The main reason could be that divorced mothers were already emotionally traumatized, coupled with the primary caregivers for children with CP, and worried about their child's future. These events heighten the likelihood of experiencing maternal stress when compared to mothers without such challenges. It was found from the present study that the level of education and occupation of mothers was no significant association with maternal stress (Neece et al., 2012; Ribeiro et al., 2014).

In the current study, types of family influenced the prevalence of maternal stress, with mothers from a nuclear family experiencing higher maternal stress than those from an extended family. Similarly, studies conducted in Sri Lanka and India exposed that mothers with core families were more likely to have maternal stress than the extended family. Findings established that mothers from core families faced overtime family functioning and more challenges with fulfilling the general needs of the families (Ramanandi & Rao, 2015; Wijesinghe et al., 2014). Such a condition hinders support from other family members, as observed in the extended family (Christopher et al., 2020). The status of family income revealed that there was statistically significant maternal stress. The empirical findings reported that most mothers earned an average monthly income, which aligns with earlier studies (Kumari & Singh, 2013; Omole et al., 2017). Financial difficulties may negatively affect the child and family's effective social integration. It may lead to restricting access to health

care services, purchase of equipment, and communication. Previous scholars have accepted this declaration that family income was an independent predictor of maternal stress (Mouilly et al., 2017; Yilmaz, 2019).

The child's age, the cost of treatment, the number of children, and knowledge were not significantly related to maternal stress. Our findings exposed that the child's gender was a significant predictor of maternal stress. Male children with CP had a greater influence on maternal stress than female children. The finding contradicted the previous studies (Mouilly et al., 2017; Panditha & Wickramasinghe, 2016). It could be related to the fact that male children are highly treasured in Bangladeshi families, which may increase the emotional and psychological downturn experienced by mothers. These events may contribute to the stress faced by parenting mothers (Shahrier et al., 2016). However, the negative family impact was significantly associated with maternal stress. The study's findings are consistent with a survey conducted in Malaysia and Canada (Ang & Juhari, 2017; Mouilly et al., 2017). The negative family impact is characterized by poor relationships between caregivers and family members, restriction and isolation, having a negative view of raising children with CP, and disruption of the regular family routine. These events may increase the stress experienced by a couple with the fact that they have to care for a child with CP (Trute et al., 2007). Formal social support was not a significant predictor of maternal stress.

In the present analysis, we consider the strengths and limitations. The strengths include a high response rate in Bangladesh. Besides, the respondents were randomly selected, and the instrument was validated. The pre-test consisted of recruiting 10% of the total respondents to verify the reliability and face validity of the instruments. Nevertheless, the study has a few limitations. Using guided questionnaires assisted the respondents in writing and reading while considering the possibility of respondent bias. The study was cross-sectional. As there have been mothers of children with the extreme type of CP, there are chances of over-representing findings, while some respondents may be reluctant to reveal complete information. The study was conducted in one district of Bangladesh, which may not represent the population of mothers in general. Fathers may be involved in parenting the CP child; thus, future studies might consider enrolling both fathers and mothers. An educational intervention program is recommended for future research among caregivers of children with CP. This study recommended further study in rural and urban areas using coping strategies and quality of life among mothers of children with CP.

## CONCLUSION

The present study was carried out to determine the prevalence and factors associated with maternal stress among mothers of children with CP in Bangladesh. The prevalence of maternal stress was

56.5% among the respondents. It means that very high maternal stress among mothers of children with CP is more common than in the general population. Moreover, the factors influencing maternal stress among mothers of children with CP in rural Bangladesh were older mothers, types of family, income, child's gender, and negative family impact. This study will assist the government in developing policies and strategies to minimize maternal stress associated with parenting children with CP in rural Bangladeshi households. Moreover, the study's findings will help the various communities and organizations understand and effectively handle the supportive responsibilities for mothers of children with CP.

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## **An Acoustic Analysis of Penang Malay Monophthongs Among the Jawi Peranakan Community**

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### **ABSTRACT**

This study examines the acoustic features of the monophthongs of Penang Malay (PM) based on the frequencies of the first (F1) and second (F2) formants as produced by five selected female speakers who are of the Jawi Peranakan (JP) community in Penang, Malaysia. This study is significant as it describes the monophthongs of PM because previous studies have focused on the acoustic analysis of Standard Malay (SM) and analyzed PM from impressionistic and phonological aspects. The target vowels are [a], [i], [u], [ɛ], [ɔ], [ə], [e], and [o]. A series of words were used to elicit data from the speakers. The tokens produced by the speakers were recorded and analyzed using Praat version 6.0.50. The two formants were analyzed using the Formant Frequency Model, and independent samples *t*-tests were conducted. The findings reveal that the PM participants mostly produced vowels following impressionistic studies of past researchers. However, PM speakers did not distinguish between [ɛ] and [e] as the sounds were conflated as one vowel. These results challenge past claims of homogeneity between PM and Kedah Malay (KM). This study expands knowledge on PM's phonetics and highlights avenues for future research.

*Keywords:* Acoustic analysis, Formant Frequency Model, monophthongs, Penang Malay

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### **INTRODUCTION**

Malaysia is a multi-ethnic and multilingual country with about 32.69 million inhabitants (Department of Statistics Malaysia, 2020). It is geographically divided into West Malaysia and East Malaysia. As a multilingual and multi-ethnic country, Malaysia has around 140 historical languages (Lewis et al., 2016). According to Omar (1985), the dialects found in Peninsular Malaysia

have been grouped into seven main areas, namely the Northwestern dialect, also known as the Northern Dialect or Kedah Dialect (covering Kedah, Perlis, Penang, and north of Perak), Perak Dialect (covering the center of Perak), Southern Dialect (covering the south of Perak, Johor, Melaka, and Selangor), Kelantan Dialect (covering the Kelantan state and the borders of Pahang and Terengganu), Terengganu Dialect, Pahang Dialect and lastly Negeri Sembilan dialect. In this study, Penang Malay (henceforth PM), which belongs to the Northern Malay Dialect, will be of focus, and the objective of the study is to analyze the acoustic features of the monophthongs of PM based on the frequencies of the first (F1) and second (F2) formants.

Linguistically, native speakers of Malay in Penang speak a subdialect of Kedah (Omar, 1985, 1993, 2015). Kedah Malay (henceforth KM), or Kedah Malay Dialect, is a dialect with unique properties, and it is spoken from Perlis down to the north of Perak (Omar, 2015). Even though Perlis and Penang (the Island and Seberang Perai) are the states that have their governance in the Constitution of Malaysia, historically, they were part of Kedah. In 1786, Penang ceded to the British East India Company in exchange for military protection from Burmese and Siamese armies who were threatening Kedah then. Seberang Perai followed suit in 1800.

Omar (2015) argues that the Penang subdialect is the variety found and spoken on the island. The subdialect spoken in Seberang Perai is part of the Kedah Persisiran

(henceforth KP) subdialect. On the notion of PM, if it is analyzed carefully, it can be further divided into two other subdialects: Balik Pulau (hereafter BP) and Tanjung (present-day Georgetown) subdialects. The main difference lies in producing prevocalic and intervocalic /r/. In the BP subdialect, it is produced as a uvular fricative [ʁ], while in the Tanjung subdialect, it is produced as a velar fricative [ɣ].

Radzi et al. (2018) have also noted that different variations of PM resulted from cultural and artistic influences. In the present discussion on dialectology, Rahim (2015) has also characterized PM as *Bahasa Tanjong* (Tanjong language). *Bahasa Tanjong* emerged because of the language contact between two cultures: Malay and South Indian Muslims. Consequently, intermarriages between these two communities have produced an Indo-Malay community known as Jawi Peranakan (henceforth JP), the native speakers of PM (Rahim, 2015). Y. A. Merican (n.d.) argued that JP's dialect is harsher-sounding than Malay in the same locality.

Many researchers have studied the Northern Malay dialects because of their linguistic uniqueness (Ahmad, 1969; Collins, 1986; Omar, 1993; Radzi et al., 2018). Studies in dialectology have concentrated primarily on syntactic and sociolinguistic aspects (Ong et al., 2016). Regarding acoustic analyses of the Malay language, those performed on PM are scarce, as many studies are based only on Standard Malay (henceforth SM) (Hamid & Aman, 2010; Hamid et al., 2012). Ong

et al. (2016) have conducted a study on Penang subdialects from a phonological point of view; however, their study does not explicitly cover the acoustic properties of Penang subdialects. Research into Malay phonetics is still in its early stages. Only several studies have analyzed the vowels in Malay dialects, namely Perlis, Kelantan, Terengganu, and Kedah, instrumentally (see Azli, 2017; Jamil et al., 2019).

This study is of significance as it describes the acoustic properties of monophthongs of PM using the Formant Frequency Model because previous studies have focused on SM's acoustic analysis and analyzed PM from impressionistic and phonological aspects.

### Literature Review

#### Characteristics of Standard Malay.

Malay is the native language in Peninsula Malaysia and surrounding areas, including Singapore and southern Thailand, central and eastern Sumatra, Riau Islands to the west coast of the island of Borneo (Omar, 2005). Previous studies, as done by Maris

(1980), Onn (1980), Dain (1985), Karim (1989), Teoh (1994), and others, described the nature of the vowel sounds of SM (i.e., [i, e, a, o, u, ə]) through the impressionistic approach. Zahid and Omar (2012) have proposed the same set of vowels with the addition of three vowels: [ɛ], [ɔ], and [ɒ]. These studies described the vowel sounds without distinguishing the production of vowel sounds by gender, and they have led researchers to have varying opinions on the vowel sounds of Malay. The literature generally agrees that men and women have different vowel-specific formant patterns (Bradley, 2018; Leung et al., 2020; Maurer & Suter, 2015; Weirich & Simpson, 2014). Figure 1 shows the traditional diagram Maris (1980) developed to illustrate the approximate tongue positions during the production of the vowels.

In what can be called the standard pronunciation of Malay, there are six pure vowels, i.e., [i, e, a, o, u, ə]. Maris (1980) used the following terms in defining them: front, back, and central, depending on which part of the tongue is raised in the mouth; close, half-close, and open, depending on the distance between the related parts of the raised tongue and the palate; rounded and unrounded, depending on the location of the lips, i.e., the presence or absence of lip-rounding during the production of the vowel sounds. The front and central vowels in Malay are always unrounded, while the vowels in the back are always rounded.

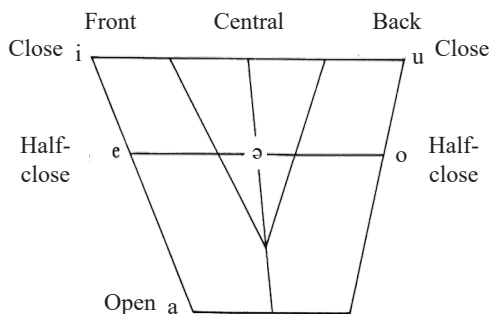


Figure 1. Diagram of pure vowels in Standard Malay (Maris, 1980)

**Characteristics of Penang Malay.** Omar (2015) stated that there are eight vowels in

KP, the standard subdialect of Kedah. The vowels are /a/, /i/, /u/, /ɛ/, /ɔ/, /ə/, /e/, and /o/. PM has the same set of vowels as PM is part of KM. She has divided the KM dialect into several subdialects, particularly Perlis-Pulau Langkawi, Kedah Persisiran, Kedah Utara, and Penang. Omar (1993) has also divided the KM dialect into five subregions:

1. Perlis
2. Langkawi Island
3. Lembah Kedah-Seberang Perai, covering Kubang Pasu to Bandar Baharu, and the northern part from the west coast to Baling
4. The border of Padang Besar to the east and south, which covers Padang Terap and Sik
5. Penang (the island itself)

Ismail (1971) divided KM into three main divisions. According to him, in the northern area, near the Malaysia-Thailand border, KM is influenced by Thai, especially regarding pronunciation. This dialect is best known as the KM dialect with a Siamese twist. In the eastern part, a variation of KM is comparable to that of Kelantanese Malay, known as the KM dialect with a Pattani twist. Meanwhile, KM is less influenced by the Thai or Pattani dialect on the coastline, which covers the lowland (including Penang Island). Speakers of Malay in this area speak more neutrally than speakers of other Malay varieties in the districts mentioned earlier. The Malay dialect in this area is known as the “Kedah language” (Ismail, 1971). Hussein (1973) affirmed that KM

stretches the whole north-western coast of the Peninsula from the south of Perlis to Dinding in Perak, including Penang Island. Collins (1986), on the other hand, argues that the classification of KM includes the coasts and islands of three countries: Malaysia, Indonesia, and Thailand.

Even though PM is classified as part of KM, the features and properties of PM are not always similar to KM. This phenomenon is acknowledged by Omar (1979):

A dialect area need not necessarily be uniform throughout. It is impossible to expect a space covering several thousand square miles to show uniformity at any single level of the language system. There are bound to be differences at a lower level of the system, particularly at the level of phonology, between the speech of one district and that of another. (p. 5)

According to Omar (2015), the first significant difference between BP and Tanjung subdialects lies in the production of prevocalic /r/ and intervocalic /r/. In the BP subdialect, the production of /r/ is uvular fricative [ʁ], identical to that of KP. The production of /r/ in the Tanjung subdialect is velar fricative [ɣ] as found in the Southern dialects. However, there could be two variations of /r/ among Tanjung speakers, some may use the velar fricative [ɣ], and some may use the alveolar trill [r]. Table 1 shows the prevocalic and intervocalic /r/ in BP and Tanjung subdialects.

The second difference between these two subdialects can be seen in the word-final vowel /a/. In this instance, the Tanjung subdialect shows a similarity in the sound

production as that of KP, which is low-mid and lips are stretched in producing the sound. In the BP subdialect, however, the word-final vowel /a/ is produced as a

back vowel, and the lips are a bit rounded in producing the sound. Table 2 shows the word-final vowel of /a/ in Tanjung and BP subdialects.

Table 1  
*Prevocalic and intervocalic /r/ in Balik Pulau and Tanjung subdialects*

Tanjung	Balik Pulau/Kedah Persisiran	Standard Malay	English translation
[buʝoʔ]	[buʝoʔ]	<i>buruk</i>	ugly
[ʝibot]	[ʝibot]	<i>ribut</i>	storm
[mayah]	[maʝah]	<i>marah</i>	angry

Note. Adopted from Omar (2015)

Table 2  
*Word-final vowel of /a/ in Tanjung and Balik Pulau subdialects*

Tanjung	Balik Pulau/Kedah Persisiran	English translation
[apa]	[apɑ]	what
[dʒala]	[dʒalɑ]	fishing net

Note. Adopted from Omar (2015)

On the other hand, Ong et al. (2016) conducted a study on the phonology of PM subdialect. Based on their acoustic analysis of BP participants, it is found that this subdialect is phonologically different as compared to the standard KM dialect. For example, differences include vowel deletion

and nasal-obstruent assimilation. Vowel deletion also occurs in PM, but based on the findings of their study, the tendency for vowel deletion among the BP participants is not as significantly high as nasal-obstruent assimilation. Table 3 shows some examples of vowel deletion in PM.

Table 3  
*Vowel deletion in PM*

Standard Malay	Penang Malay	English translation
<i>lain</i>	[len]	different
<i>main</i>	[men]	play
<i>daun</i>	[don]	leaf
<i>jauh</i>	[dʒoh]	far

Note. Adopted from Ong et al. (2016)

This process refers to the nasal and plosive consonants that are homogenized in terms of places of articulation, such as “m-p” and “m-b” ([kampuŋ], [lampu], [sembaŋ], and [dzampi]). Speakers of PM have acoustically highlighted some

significant and unique differences with KM. Ong et al. (2016) have laid out the following examples in Table 4 to further illustrate the process of nasal-obstruent assimilation in Penang Malay.

Table 4  
Nasal-obstruent assimilation in PM

Standard Malay	Kedah Malay	Penang Malay	English translation
<i>mandi</i>	[mandi]	[mandi]	bathe
<i>tunggu</i>	[tuŋgu]	[tuŋgu]	wait
<i>cangkul</i>	[tʃaŋkoj]	[tʃaŋkoj]	shovel
<i>lembu</i>	[ləmmū] / [ləmū]	[lembu]	cow
<i>kambing</i>	[kambin]	[kambin]	goat
<i>tinggi</i>	[tiŋgi] / [tiŋi]	[tiŋgi] / [tiŋi]	tall/high

Note. Adopted from Ong et al. (2016)

**Jawi Peranakan.** As this study explores the acoustic analysis of the monophthongs of PM as produced by the speakers of PM who are of JP origin, an overview of JP will be provided to understand this community better. The JP community has long existed in Penang, and some theories have even suggested that they have existed since the 1770s (Yusoff & Mohamed, 2010). According to A. M. Merican (2018), people who inhabited Penang in the late 1700s or the early 1800s were called “*orang Tanjong Penaga*” or “the people of Tanjong Penaga,” and Tanjong Penaga was the name given to it earlier before it was changed to Georgetown, Penang. Today it is a multicultural island of people of different ethnicities; however, the Malay and JP communities were said to have explored Penang much earlier (Yusoff & Mohamed, 2010). In the Malay

Archipelago, the JP is said to have existed since the seventh century, especially during the reign of Srivijaya. In addition, the JP was already in existence when Kedah became an essential port for trading routes between India and China, dating back to the third century (Eusoff, 1997). Thus, the assumption is that this is probably the beginning of the formation of the JP community in Malaya (Yusoff & Mohamed, 2010). The opening of a trading port in Penang by the British boosted the arrival of this community from Kedah to Penang, which continued until the 17th century (Eusoff, 1997).

On the notion of terms, *Jawi Pekan* (henceforth JPn) refers to the community formed as a result of mixed marriages between migrants and traders from outside the country with local Malay women (Crawford, 1820; A. M. Merican, 2018).

Winstedt (1935) explains, “Indian Muslims have married the children of the Sultan and Treasurer in Melaka” (p. 18). In the 18th century Penang, this community had settled in urban areas; therefore, the British government used the term JPn to distinguish between foreigners or non-Malay Muslims who lived in the city and the Malay Muslims who lived in rural areas (Crawfurd, 1820). However, JPn is a rather vague term concerning its meaning. The term JPn was not only used to refer to Malays of mixed Arab, Indian, Bengali, Punjabi, Gujarati, Afghan, and Indian Muslims (both parents were Indian Muslims) who were born in Malaya and have gone through the process of assimilation into the Malay culture but the term was also used to refer to any person who is not a descendant of the local Malay community (Nasution, 2002). The ambiguity of this definition has made it difficult and challenging for scholars to provide the exact meaning of JPn (Crawfurd, 1820). However, starting from 1870, JPn was no longer used in the

Annual Report of the Straits Settlements, and the term was replaced by JP, which is a reference to the Malays of mixed heritage (Arab, Indian, Bengali, Punjabi, Gujarati, and Afghan; Mahmud, 1972; A. M. Merican, 2018; Vaughan, 1857).

The definition by Mahmud (1972) shows that JP is a more specific term to refer to Malays of mixed heritage (Arab, Indian, Bengali, Punjabi, Gujarati, and Afghan). The term JP was first used in 1871, and it no longer acknowledged or defined Indian Muslims who were born in Malaya to Indian Muslim parents and have taken on the Malay culture or any groups of Muslims who did not have a local Malay origin as JP. These changes were implemented to facilitate the division of groups in the Annual Report of the Straits Settlements (Nasution, 2002). In Singapore, this community is commonly known as JP, while in Melaka, they are known as *Peranakan Keling*. Table 5 shows several examples of Tamil words used in *Bahasa Tanjong*.

The previous examples of words represent the influence of the Tamil language in the dialect spoken daily among the JP community. Since the JP are of mixed heritage, there is some form of influence from their mother tongue, Tamil, in their spoken Malay (Yusoff & Mohamed, 2010). This influence may be somewhat apparent for the early generations of JP, but the influence of Tamil on the PM dialect is rather subtle for later generations. According to Yusoff and Mohamed (2010), one of the main causes of Tamil’s influence on PM is the direct interference between the two languages. *Bahasa Tanjong* has been

Table 5  
Examples of some Tamil words in Bahasa Tanjong

Tamil word	Meaning in Bahasa Tanjong
<i>achi</i>	older sister
<i>aniayom</i>	problem/difficulty
<i>atta</i>	father
<i>auta</i>	bluff
<i>karipullai</i>	curry leaves
<i>karpayi</i>	dark-skinned
<i>kacra</i>	dirty
<i>kerke</i>	crazy/mad
<i>korunggu</i>	monkey

Note. Adopted from Rahim (2015)

described as a “pidgin language that has become the mother tongue of a community” or “a creole that is a contact language” (Crystal, 2003, p. 346). The idea that *Bahasa Tanjong* is a creole may have originated from the fact that many different linguistic groups of speakers used it to communicate in early Penang. Considering that the diverse immigrant community in George Town spoke Malay as a common language, a pidgin language emerged among them was a possibility. It is incorrect to claim that the form is *Bahasa Tanjong*, though, as *Bahasa Tanjong* is a stable Northern Malay dialect and the native tongue of a specific Malay community, unlike a creole, which has its roots in a pidginized variety (Rahim, 2015). Archival evidence shows intermarriage between Indian Muslim settlers and local women and the emergence of the hybrid community that occurred even before the arrival of the British in Penang further disproves the claim that *Bahasa Tanjong* is a creole. It indicates that the community’s language predates both the cosmopolitan George Town’s existence and the British colonization of Penang.

## METHODOLOGY

### Participants

For this study, five PM speakers in the age range of 50-60 were selected. There were difficulties in getting more participants in that age range residing in the chosen area, and most were unavailable during the data collection process. All of them are JP, homemakers, and have completed high school. NORF (non-mobile, old, remote,

female) criteria were selected following Kob (1985). NORF criteria are more suitable for eliciting dialectal data in Malaysia than NORM (non-mobile, old, remote, male) due to the expressive nature of female participants. There are four characteristics of the NORF criteria that have to be taken into consideration when selecting these participants. The first characteristic is ‘non-mobile,’ meaning the participant lives permanently in her hometown or any given area. The second characteristic is ‘old,’ which requires the participant to be in their 40’s to 60’s. The third characteristic is ‘remote,’ meaning the participant has to live far away from the city center. The last characteristic of these criteria is ‘female,’ which requires only female participants. Only female speakers were chosen to take part in this study. It was done to lessen the impact of specific speaker effects (Jacobi, 2009).

Adult males and females have varying voice tract lengths. Adult female voice tracts are approximately 13 cm long, but adult male vocal tract lengths might vary by up to 18 cm (Maragakis, 2008). In addition, females’ vocal tracts have resonance frequencies greater than men’s (Flynn, 2011), resulting in formant frequencies that are 10% to 15% higher in females than in males (Simpson, 2009; Wang & van Heuven, 2006). A questionnaire was distributed to the participants. The questions include their occupation, place of birth, the primary language spoken at home, and the length of residency in the current location. The significance was to ascertain that the



participants are native PM speakers, speak Malay as their first language at home, and have been living in Penang throughout

their lives. Table 6 shows the demographic background of the PM participants.

Table 6  
*Demographic background of Penang Malay participants*

Penang Malay speakers	Age	Occupation	Place of birth	Period of residency	Level of education	Primary language
PM1	54	Housewife	Penang	Since birth	SPM	Bahasa Malaysia
PM2	68	Housewife	Kedah	38 years	SPM	Bahasa Malaysia
PM3	63	Housewife	Penang	Since birth	SPVM	Bahasa Malaysia
PM4	67	Housewife	Penang	Since birth	SPM	Bahasa Malaysia
PM5	65	Housewife	Penang	Since birth	Senior Cambridge	Bahasa Malaysia

Due to the rapid urbanization that takes place on Penang Island in general, all participants were selected from the community of JP at Masjid Jamek Lebu Acheh, George Town, Penang, because the JP in the surrounding area still converses in PM dialect daily and also to keep the geographical variable consistent. They are also actively involved in preserving the PM dialect and JP identity. The participants were all born in Penang except for Participant 2 (PM2) who born in Kedah. Besides, she was married to a Penang-born man and had been living in Penang for 38 years. Notwithstanding, further auditory and acoustic analyses reveal that PM2’s realizations were similar to other participants, and her Kedahan roots did not influence her.

**Instruments**

The participants were given a word list to read without being informed of the target vowels to prevent them from being cautious of their pronunciation. The words were written using the spelling normally used by PM speakers in everyday speech. Krapp (1926) and Bowdre (1964) labeled this phenomenon as Eye Dialect, which refers to using nonstandard spelling for speech to emphasize pronunciation. The rationale behind this method was to ensure that the participants’ reading of the word list would be more natural. Eight vowels were analyzed for PM, namely [a], [i], [u], [ɛ], [ɔ], [ə], [e], and [o]. Each participant was asked to repeat the word list three times to determine the consistency of their pronunciation. To

minimize the possibility of co-articulatory effects on the target vowels, all vowels that occurred after approximants /j/, /w/, /r/, or before /l/ were avoided (Deterding, 1997). Table 7 shows the word list used for PM.

Table 7  
The word list used for PM

Target vowel	Word	Phonetic transcription	English translation
[a]	<i>bakaq</i>	[bakaʔ]	burn
	<i>bakui</i>	[bakoʃ]	basket
	<i>bahu</i>	[bahu]	shoulder
[i]	<i>kipaih</i>	[kipajh]	fan
	<i>pikiaq</i>	[pikjaʔ]	think
	<i>pikat</i>	[pikat]	flirt
[u]	<i>pudaq</i>	[pudaʔ]	fade
	<i>pukui</i>	[pukoʃ]	hit
	<i>bukak</i>	[bukaʔ]	open
[ɛ]	<i>sepak</i>	[sɛpaʔ]	kick
	<i>besok</i>	[bɛsoʔ]	tomorrow
	<i>meja</i>	[mɛdʒa]	desk
[ɔ]	<i>sotong</i>	[sotɔŋ]	squid
	<i>pokok</i>	[pokɔʔ]	tree
	<i>potong</i>	[potɔŋ]	cut
[ə]	<i>besaq</i>	[bəsəʔ]	big
	<i>kecik</i>	[kɛciʔ]	small
	<i>kebah</i>	[kəbajh]	numb
[e]	<i>pesta</i>	[pesta]	festival
	<i>sate</i>	[sate]	satay
	<i>hemah</i>	[hemah]	polite
[o]	<i>katok</i>	[katoʔ]	knock
	<i>soto</i>	[soto]	soto (food)
	<i>mohon</i>	[mohon]	apply

### Data Collection Procedures

The participants were given one to two minutes to review the word list before the recording sessions. The rationale was to ensure the participants were familiar and comfortable with the words they had to pronounce. All the words were presented in a carrier frame: *ulang PERKATAAN semula* (say WORD again). The main reason was to ensure the participants read the words at a stable and normal pace. Ladefoged (2003) conceded that if ‘say and again’ are used in the same context, it can be assumed that the speaker is speaking at a constant rate. The recordings were set to mono and sampled at 22050 Hz, as Ladefoged (2003) recommended. The Marantz PMD661MKII handheld solid-state recorder was used to record all the tokens. The software used to analyze the vowels was Praat version 6.0.50 (Boersma & Weenink, 2019). Praat is an open-software tool used to analyze speeches in phonetics.

### Data Analysis

The tokens collected from PM participants were 360 tokens (24 words x 3 recordings x 5 participants). The tokens were then imported to Praat version 6.0.50 (Boersma & Weenink, 2019) to be analyzed. The software was used to listened to the sound files and viewed the spectrograms and waveforms. The Formant Frequency Model was used to analyze the vowels as this model is commonly used in the instrumental analysis of vowels (Deterding, 1997; Hawkins & Midgley, 2005; Watt & Tillotson, 2001).

Based on the Formant Frequency Model, the midpoint of each vowel was measured to get the first (F1) and second (F2) formant values. The midpoint of a vowel is considered the steadiest state of the vowel and the least influenced sound (Adank et al., 2004; Ladefoged, 2003; Pillai & Yusuf, 2012; Watt & Tillotson, 2001). After every vowel was measured, the values of the formants in Hertz were converted into a Bark scale because “it is thought to be a good approximation of the actual frequency analysis performed by the ear” (Pillai et al., 2012, p.115), and it would help in the plotting of vowels on the scatter plot. The formula used to convert Hertz into a Bark scale was reproduced from Zwicker and Terhardt (1980):

$$Z = 13 \arctan (0.00076F) + 3.5 \arctan (F/7500)^2$$

This study also conducted an independent samples *t*-test to examine the significance between /ɛ/ and /e/ and /ɔ/

and /o/. The primary goal of adopting this statistical analysis was to determine the significance of the vowel quality of these vowels. This study used GraphPad Prism version 8.0.0 for Windows to analyze the independent samples *t*-test.

## RESULTS AND DISCUSSION

The averages of F1 (Hz) and F2 (Hz) values for all eight vowels of PM, standard deviations of F1 and F2 values, and averages of F1 (Bark) and F2 (Bark) values are presented in Table 8.

Figure 2 shows the monophthongs of PM on a vowel quadrilateral. Based on the findings, the positioning of six out of the eight vowels on a vowel quadrilateral follows Omar’s (1993) and Maris’ (1980) initial impressionistic study of vowels. The vowels [ɛ] and [e] were found to be conflated in vowel quality. Based on the independent samples *t*-test, there were no significant differences between the F1 and

Table 8  
Averages of F1 and F2 values for Penang Malay monophthongs

Tokens	Ave F1 (Hz)	SD F1 (Hz)	Ave F2 (Hz)	SD F2 (Hz)	Ave F1 (Bark)	SD F1 (Bark)	Ave F2 (Bark)	SD F2 (Bark)
[a]	761.4	97.8	1446.1	170.7	6.8	0.7	10.9	0.8
[i]	336.6	45.8	2477.4	224.2	3.3	0.4	14.4	0.6
[u]	392.4	45.8	912.8	182.8	3.8	0.4	7.9	1.1
[ɛ]	445.7	64.8	2368.3	315.2	4.2	0.6	14.1	0.9
[ɔ]	620.4	49.5	1063.2	95.0	5.7	0.4	8.9	0.6
[ə]	475.4	65.5	1680.1	311.7	4.5	0.6	11.8	1.3
[e]	467.1	64.6	2298.8	362.8	4.4	0.6	13.9	1.1
[o]	550.9	67.2	993.9	164.6	5.2	0.6	8.4	1.0

Note. Ave = Average, SD = Standard deviation

F2 average values of the said vowels (F1:  $t(90) = 1.57$ ,  $p = 0.120$ ; F2:  $t(90) = 0.97$ ,  $p = 0.335$ ), indicating that these vowels were produced similarly. This study's vowel [ɛ] is in a close-mid front position. On the other

hand, the vowel [e] in this study is in an open-mid front position. It should also be noted that this study's vowels [o] and [ɔ] moved further toward the central position.

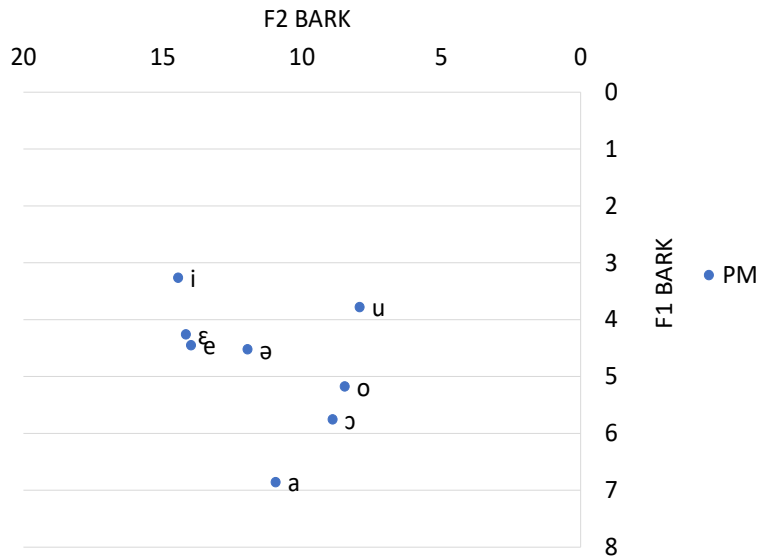


Figure 2. Vowel quadrilateral for PM monophthongs

### Penang Malay [a]

Figure 3 shows the distribution of [a] by the PM participants. Here, there is an overlapping distribution of [a] among the PM participants except for PM3, as her vowel production is distant in the vowel space compared to the other participants. PM3's realization is further fronted and lower than other PM participants' near-front, open position. In addition, the distribution of [a] in this study is scattered.

### Penang Malay [i]

Figure 4 shows the distribution of [i] by the PM participants. It shows a high overlapping

distribution among the PM participants except for a minor inconsistency and deviation made by PM3 in one of her realizations. The distribution of [i] in the vowel space is distributed in a close, front position (Figure 4).

### Penang Malay [u]

Figure 5 shows the distribution of [u] by the PM participants. Here, there is a considerable overlapping distribution of [u] in the vowel space despite the few inconsistencies and deviations made by the participants. The distribution of [u] in Figure 5 moves towards the central position instead

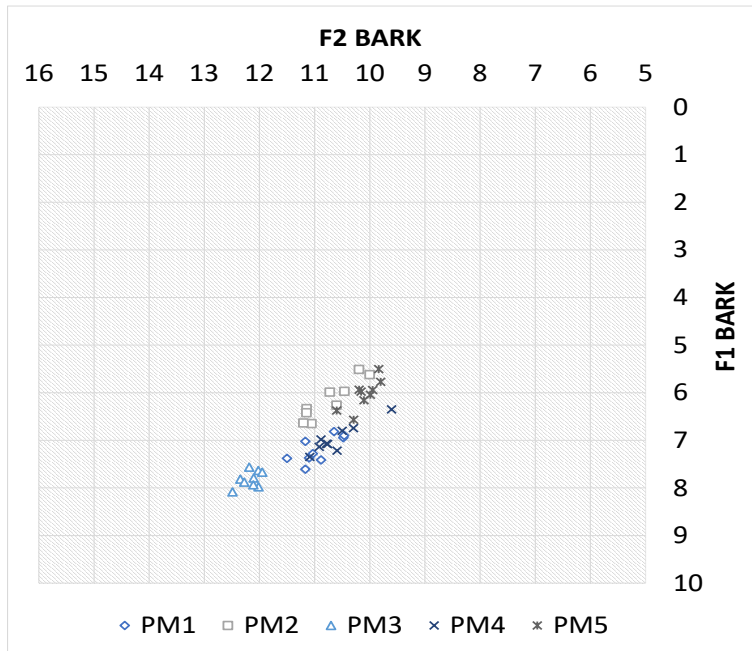


Figure 3. Scatter plot for [a] of PM monophthong

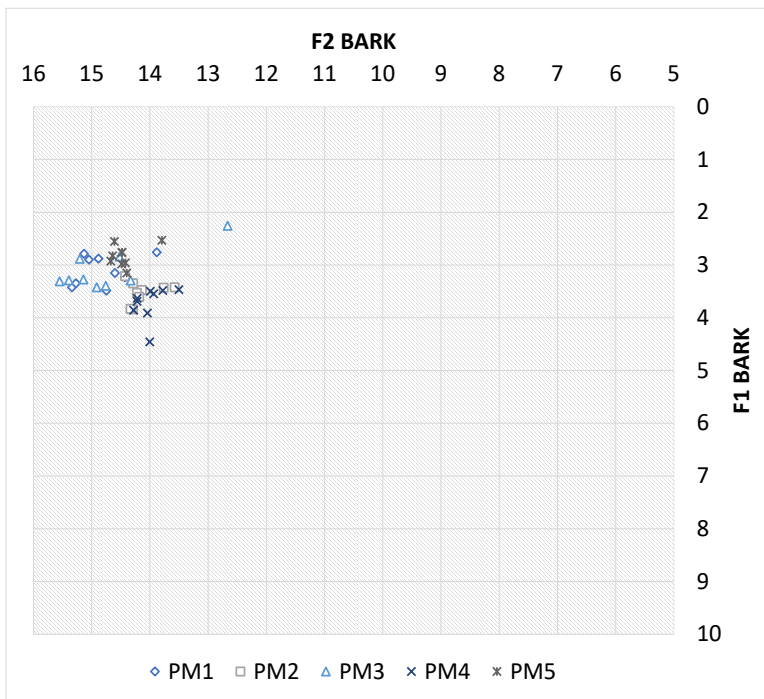


Figure 4. Scatter plot for [i] of PM monophthong

of in a close, back position. According to Figure 5, several inconsistencies and deviations are made by PM2, PM3, and

PM5; however, the rest of the realizations have still closely scattered one another.

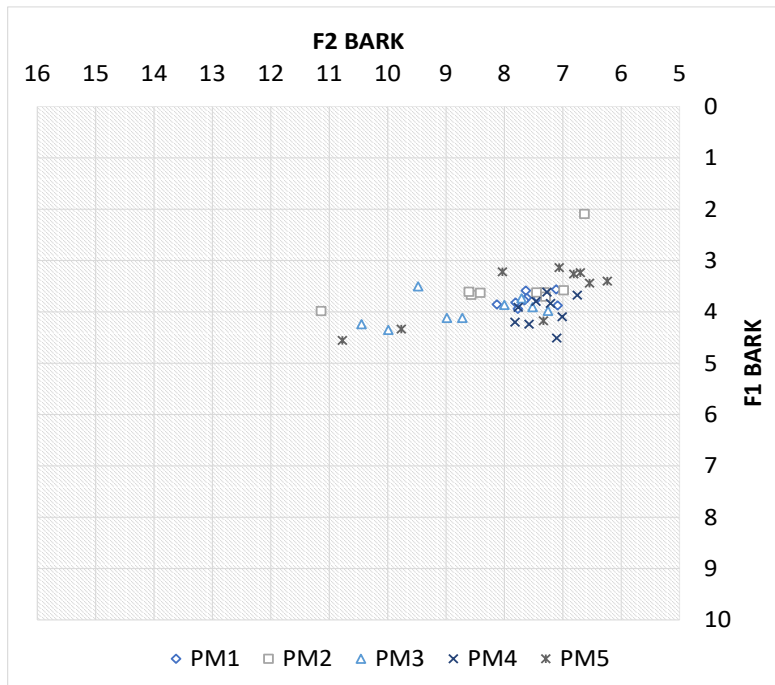


Figure 5. Scatter plot for [u] of PM monophthong

**Penang Malay [ɛ] and Penang Malay [e]**

Figure 6 shows the distribution of [ɛ] by the PM participants. There is a high overlapping distribution of [ɛ] in the vowel space among the PM participants, except for several inconsistencies and deviations made by PM1 and PM4. Based on the average values of F1 (445.7 Hz) and F2 (2368.3 Hz) for all participants, the vowel [ɛ] in this study moves towards the mid-front position. PM1’s vowel production moves towards the mid-open front position, while PM4’s production moves toward the open mid, front position. However, PM1’s and PM4’s realizations overlapped

considerably with the other PM participants. Based on the convention of vowels from an impressionistic approach as proposed by Omar (1993), Maris (1980), and Teoh (1994), the vowels [ɛ] and [e] in this study were found to be inverted in terms of their positions on the vowel chart and conflated in vowel quality with each other.

Figure 7, however, shows the PM participants’ distribution of [e]. Based on the figure, there is considerable overlapping in the distribution of [e] in the vowel space among the PM participants, except for a minor inconsistency from PM1 in one of her realizations. In contrast, the rest of her

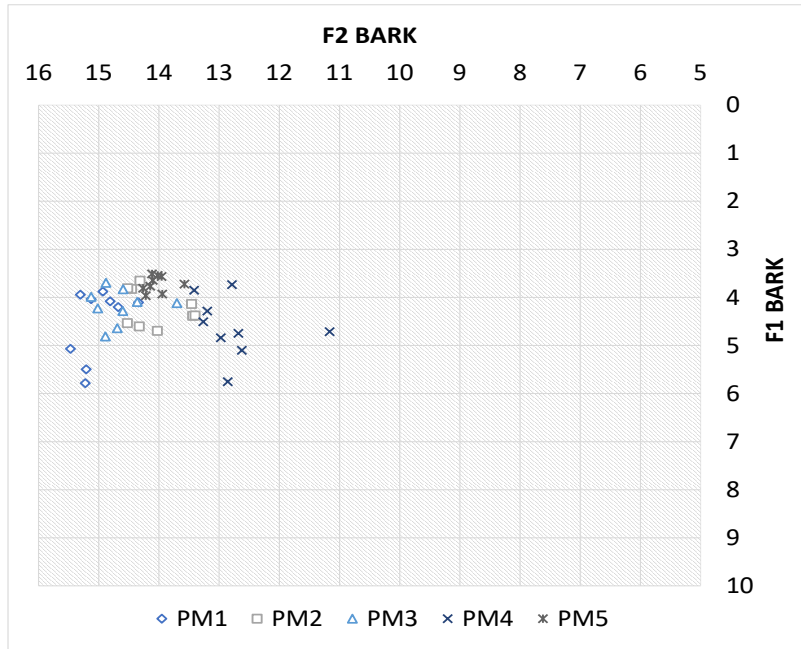


Figure 6. Scatter plot for [ε] of PM monophthong

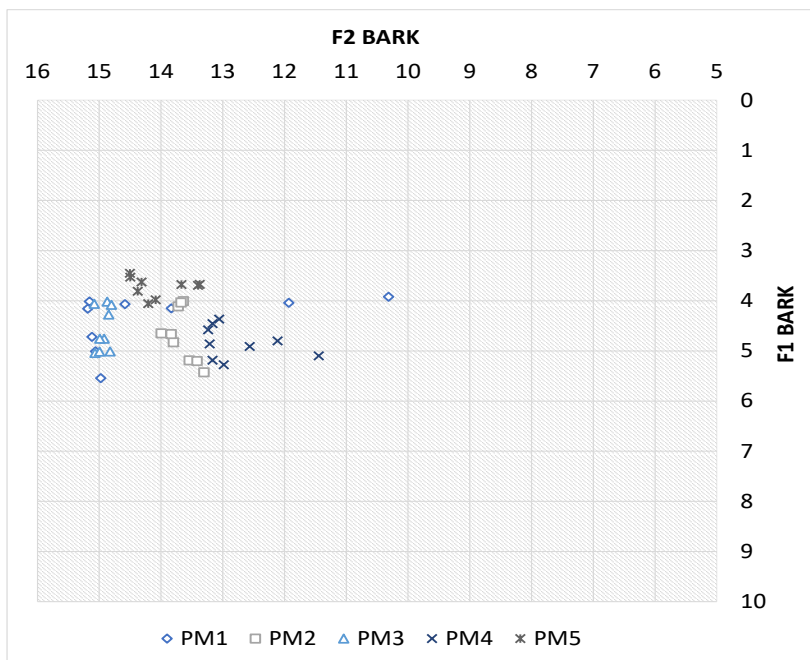


Figure 7. Scatter plot for [e] of PM monophthong

realizations were consistent with the other speakers. The production of [e] in this study is in an open-mid, front position.

Figure 8 shows the distribution of the vowels [e] and [ɛ] on a scatter plot. Based on the findings of this study, vowels [ɛ] and [e] were found to be conflated in quality and inverted in terms of their positions on the vowel chart. Based on the independent samples *t*-test, there were no significant differences between the F1 and F2 average

values of the said vowels (F1:  $t(90) = 1.57$ ,  $p = 0.120$ ; F2:  $t(90) = 0.97$ ,  $p = 0.335$ ), indicating that these vowels were produced similarly. This phenomenon is not in agreement with the initial proposition of vowels from an impressionistic approach by Omar (1993), Maris (1980), and Teoh (1994). However, based on the findings from this study, this conflation can be best represented by [e] because this vowel exists in PM and SM.

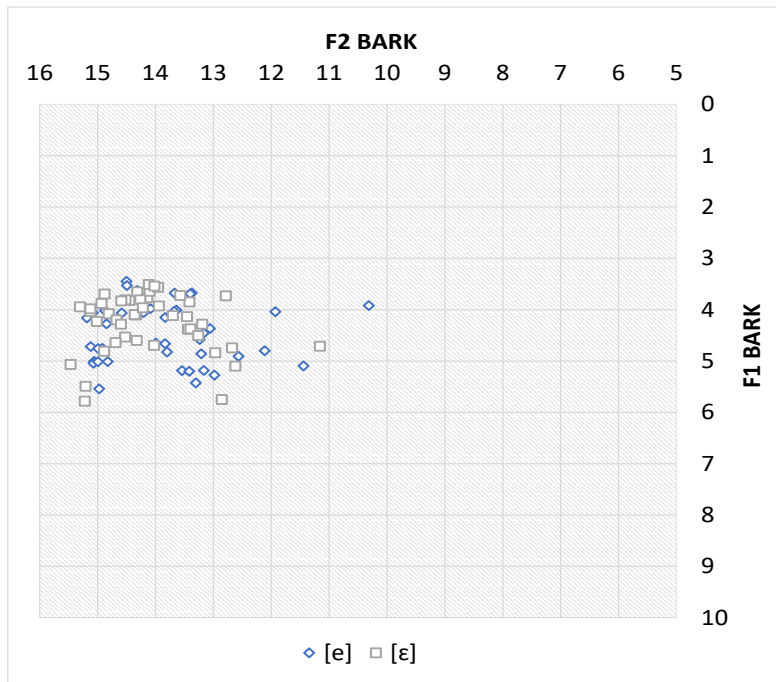


Figure 8. Scatter plot for [e] and [ɛ] of PM monophthongs

**Penang Malay [ɔ]**

Figure 9 shows the distribution of [ɔ] by the PM participants. Here, there is a high overlapping distribution of [ɔ] in the vowel space by the PM participants despite some inconsistencies from PM5. PM5's

realizations moved towards the mid-back position as opposed to other participants. Based on the average values of F1 (620.4 Hz) and F2 (1063.2 Hz) for all participants, the vowel [ɔ] in this study moved towards a near-open, central position.



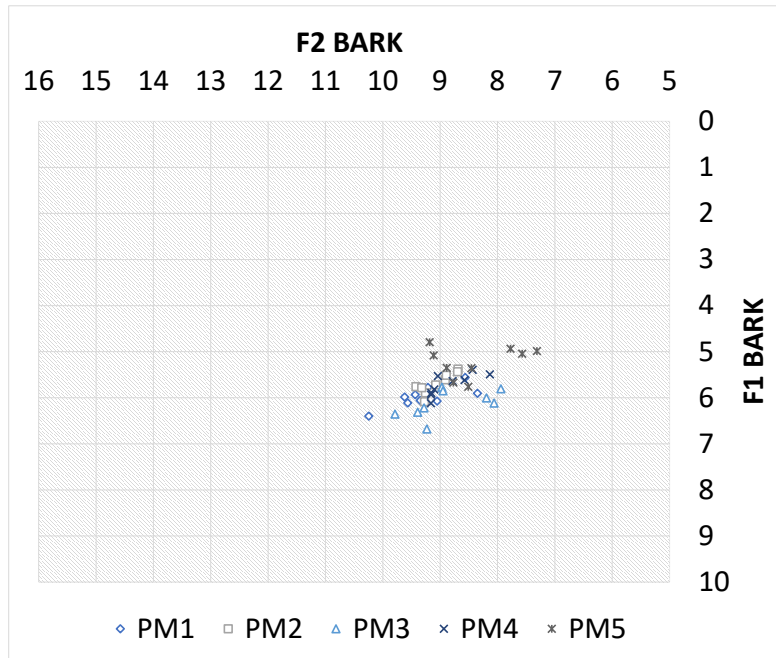


Figure 9. Scatter plot for [ə] of PM monophthong

### Penang Malay [ə]

Figure 10 shows the distribution of [ə] by the PM participants. The results for [ə] in this study are inconclusive as all participants had produced different realizations, which caused the plotting to be scattered everywhere. This phenomenon is supported by Bates (1995), who concurs that the [ə] articulatory is “inherently unspecified for tongue position” (pp. 266-267), while Teoh (1994) assumes that the schwa lacks any distinctive height and backness specification, and thus denotes the schwa as an empty vowel.

### Penang Malay [o]

Figure 11 shows the distribution of [o] by the PM participants. There is a noticeably high overlapping distribution of [o] among the PM participants despite a minor

inconsistency and deviation from one of PM4’s realizations. Based on Figure 11, this study’s vowel [o] moved towards an open-mid, central position.

Based on the acoustic analysis of PM monophthongs, it was found that only seven of the eight vowels, as suggested by Omar (1993), were present in the study. The PM participants did not distinguish between the production of [ɛ] and [e] and conflated the two vowels. It is supported by the findings of Ramli et al. (2020), who found [ɛ] to be more of a front vowel instead of a central vowel. The independent samples *t*-test of the two vowels also confirmed that their statistical difference was insignificant. In addition, based on the findings from this study, this conflation can be best represented by [e] because this vowel exists in PM

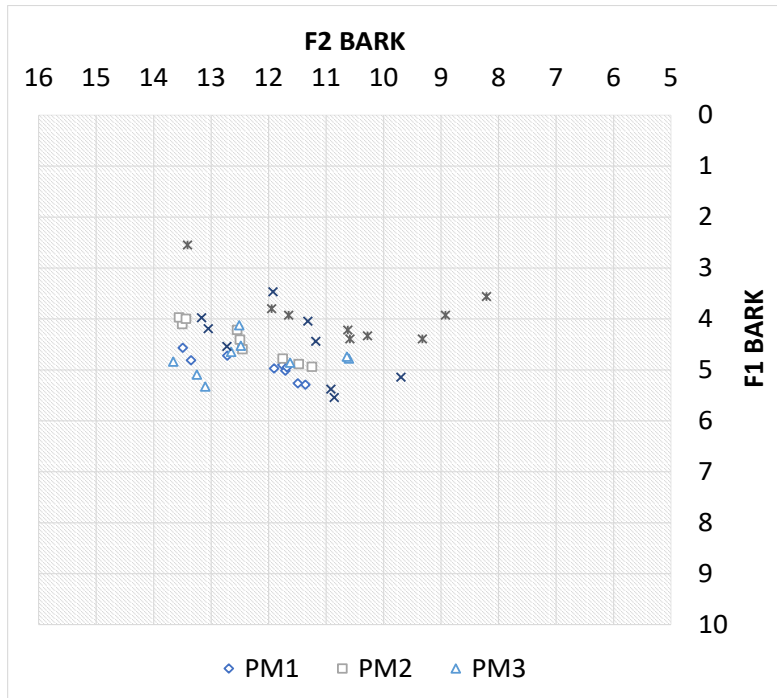


Figure 10. Scatter plot for [ə] of PM monophthong

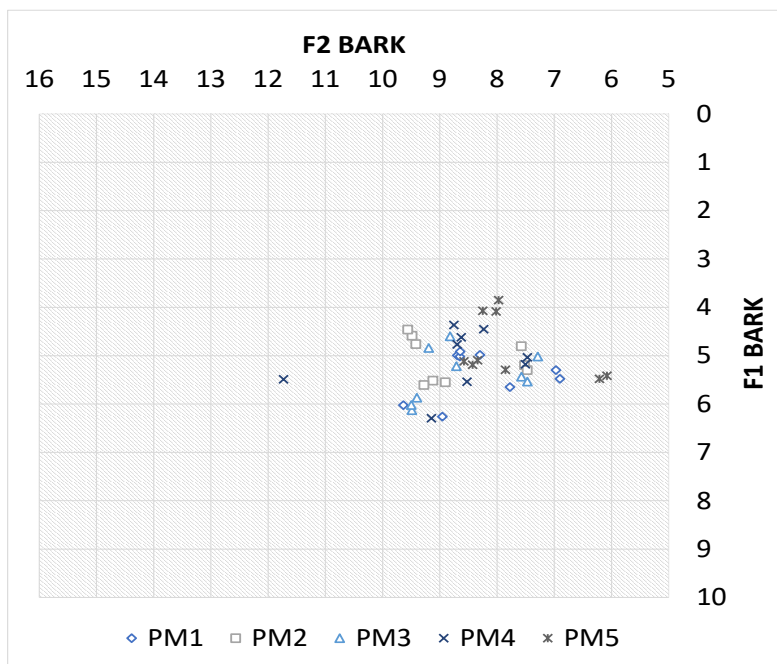


Figure 11. Scatter plot for [o] of PM monophthong

and SM. The vowels [ɛ] and [e] in this study were produced differently as well as compared to the ones in Azli's (2017). The vowel [ɛ] in this study is in a close-mid front position, whereas in Azli's (2017) study, it is in an open-mid front position.

On the other hand, the vowel [e] in this study is in an open-mid front position, whereas in Azli (2017), it is in a close-mid front position. It should also be noted that the vowels [o] and [ɔ] in this study moved further towards the central position, whereas in Azli (2017), the vowels [o] and [ɔ] remained as back vowels. The distribution of [a] in Azli moved towards a half-close, near-front position. In addition, the distribution of [a] in this study was closely scattered as opposed to Azli's (2017) distribution of [a], which was more scattered. The distribution of [i] in this study was distributed in a close, front position. The findings of [i] in this study were following the findings of Yusuf (2013) and Azli (2017). The schwa [ə] results in this study were inconclusive as all participants had produced different realizations, which caused the plotting to be scattered everywhere. The inconsistent results for this vowel were similar to what Azli (2017) had found in her study, in which the elicitation tokens were greatly scattered on the scatter plot. This phenomenon is supported by Bates (1995), who concurs that schwa [ə], articulatory, is "inherently unspecified for tongue position" (pp. 266-267), while Teoh (1994) assumes that schwa lacks any distinctive height and backness specification, and thus denotes schwa as the empty vowel.

## CONCLUSION

In conclusion, the PM speakers did not differentiate between the vowels [ɛ] and [e]. The two vowels were conflated as one vowel. In terms of the distribution of the vowels, the results of this study show similarities with the distribution of vowels in impressionistic studies of past researchers.

It should be noted that the results of this study cannot be generalized to represent the monophthongs of PM, as this study did not include data from male speakers or speakers from other age groups. Additionally, to obtain a more comprehensive understanding of PM, future researchers should consider different age groups, genders, and ethnic populations. The findings of this study not only challenge and complement the initial impressionistic approach in the study of acoustic phonetics of Malay dialects but also contribute to the preservation and promotion of the PM dialect.

This study has implications for both research and practice. Researchers should use a different method to elicit participant data, such as using a wider range of words or conducting interviews. Future researchers may also want to focus on the production of [ɛ] and [e] in PM to determine if the two vowels are now conflated as one vowel. For practitioners, the results highlight the importance of understanding the nuances of PM when communicating with native speakers. It is particularly relevant for language education, speech therapy, and language technology professionals. Overall, this study contributes to the growing knowledge of PM and is a foundation for further research and practical applications.

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## **From Utopian Dream to Dystopian Nightmare: A Protopian Response to *A Connecticut Yankee in King Arthur's Court***

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### **ABSTRACT**

This article examines the idea of protopia as propounded in Kevin Kelly's *The Inevitable* (2016), which is anticipated in Mark Twain's novel *A Connecticut Yankee in King Arthur's Court* (1889). Contrarily, Hank Morgan, the protagonist, feigns to achieve utopia, to secure power and privilege, not to realize utopia itself. However, Kelly's suggestion of technology as the center of civilization takes us toward the state of protopia. Unfortunately, it is misused for mass extermination in the novel. Drawing critical insights from Fick, Hansen, Lieberman, Dobski, and Kleinerman, this article investigates the scope of protopian response through reader-response theory and attempts to highlight how Hank's technopolitics (pure) is in resonance with Twain's protopian vision. It further reveals how it is corrupted by practical politics (impure) for power and comfort, for which Twain criticizes Hank. This research provides a blueprint for thinking through and avoiding the abuses of technoscientific power that the novel so horrifically puts on display for future readers. It endeavors to unearth the protopian reading scope to re-read this dystopian novel as a narrative of progress. This paper argues that to achieve the quintessential goal of humanity, protopia appears to be an appropriate model since utopia is unachievable.

*Keywords:* Dystopia, electricity, post-political, protopia, techno-theodicy, utopia, violence

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### **INTRODUCTION**

This research is an unprecedented attempt to introduce a new-fangled term of protopia in Mark Twain's novel *A Connecticut Yankee in King Arthur's Court* (1889), and extend the domain of utopian/dystopian studies by incorporating a protopian perspective. Indeed, a utopian society is a distant dream because neither people nor society is perfect.

Even though the utopian idea is easily conceivable, this paper highlights the futility of such a model as it could unleash immense violence in its execution if it does not resonate with people's desire for freedom and choice. The impossibility of utopia<sup>1</sup> understood as a perfect creation necessarily leads to dystopia.<sup>2</sup> If an attempt is made to establish it, that could result in possible aggression, violence, and bloodshed.

Apart from highlighting the persisting problem in the utopian project, this article deals with the conceptual paradigm of protopia, created by the futurist Kevin Kelly in *The Inevitable* (2016). He defines protopia as "a state of becoming, rather than a destination. It is a process. In the protopian mode, things are better today than yesterday, although only a little better. It is an incremental improvement or mild progress" (Kelly, 2016, p. 26). The 'pro' in protopia stands for progress and prosperity. However, "the idea of 'protopia' came from the word 'pronoia' (the opposite of 'paranoia'), an exuberant feeling that the entire world is rooting for you," not against you (Bielskyte, 2021, para. 24). In the protopian world, people are connected by a common consensus to decide and work toward what they think is crucial for the betterment of society.

The concept of protopia demonstrates the relevance of dreams in designing a better

future, which is always considered a political act where technology plays a decisive role. It is essential to examine the impact of technology on society since technological progress without humanitarianism would inevitably lead to a dystopian future. Moreover, protopia is a state or situation that deals with a realistic society, unlike utopia and dystopia, where humans are no longer in crisis for survival (dystopia) or accepting perfection (utopia). Humans are somewhere in a liminal space, in anticipation, to perpetually chase for betterment. Therefore, protopia is a more effective form of social dreaming that allows for less pernicious interventions into social reality.

This article re-reads Mark Twain's novel *Connecticut Yankee* with a protopian approach. It investigates the trajectory of how the "techno-utopian vision" of Hank Morgan, the protagonist, fails in the novel and turns into dystopia (Lieberman, 2010, p. 64). Furthermore, it reveals how Twain anticipates the protopian model from the novel's beginning (in contrast to Hank's utopian dream), since the utopian model is no longer achievable. When Hank's society is heading toward protopia, it resonates with Twain's desire to use technology for the betterment of society. However, when his political dream to live in a utopia surpasses technological progress, the situation worsens and eventually becomes dystopia. The reason for the disastrous ending is made ostensible by the pseudo-humanitarianism of Hank's personality. Indeed, this article argues that his desires to achieve utopia by vicious means lead to the

1 Merriam-Webster (n.d.-b) dictionary defines utopia as "a place of ideal perfection especially in laws, government, and social conditions."

2 Dystopia in the same source is defined as "an imagined world or society in which people lead wretched, dehumanized, fearful lives" (Merriam-Webster, n.d.-a).



abolition of utopia in its essence. Therefore, protopia, as Kevin Kelly defines it, as a slow and gradual movement toward improving the existing condition, should be understood as a better choice.

In the broad spectrum of reader-response theory, this research creates a paradigm for future readers to choose either Hank's destructive (utopian) or Twain's progressive (protopian) path by considering both consequences while designing their future society. However, Twain distances himself from Hank because of his sheer corrupted nature, who, as a utopian ruler, emanates a desire for power and comfort. It takes the narrative toward a catastrophic ending, and for this, Twain criticizes him. The key objective of this research is to demonstrate that Kelly's idea of protopia has been present in earlier utopian writings, which illustrates a much larger concern with determining whether policies and advancements should aim at revolutionary and systematic changes (like Hank) or take smaller 'baby steps' over a more extended period. Twain's protopian narrative anticipated this to achieve a better future.

## LITERATURE REVIEW

This study creates a vast panorama of scholarly responses to Mark Twain's novel *Connecticut Yankee* to demonstrate how it is an unparalleled attempt to introduce protopia in his narrative. It shows how Twain anticipated the protopian reading of the novel before Kelly coined the term 'protopia' in *The Inevitable* (2016). Johnson

(1990), in his article, "Future as Past, Past as Future: Edward Bellamy, Mark Twain, and the Crisis of the 1880s," argues that Twain's *Connecticut Yankee* (1889) is a dystopian novel in contrast to Edward Bellamy's utopian *Looking Backward* (1888). Both novels deal with social and political reforms and display the urge to restructure values and practices that prevailed in the 1880s by going beyond the present reality. Twain's *Connecticut Yankee* sets in the past, and Bellamy's *Looking Backward* looks forward to the future to demonstrate what is lacking in the present. In contrast, O'Neill (2007), in her article, "Twain's *A Connecticut Yankee in King Arthur's Court* and U.S. Imperialism," presents the novel as a critique of American imperialism in Hawaii. She also traces Twain's journey from pro-imperialist to becoming anti-imperialist, evident in his lectures and letters to denounce the motives behind the colonization of Hawaii. Moreover, Fick (1988), in his article, "Mark Twain's Machine Politics: Unmetaphoring in *A Connecticut Yankee in King Arthur's Court*," dwells on Twain's employment of technology and politics to achieve his desired society. He highlights how Hank's 'techno-politics' (pure) at the beginning is better than the later 'practical politics' (impure) of nineteenth-century America. By calling the Catholic church a 'political machine,' Twain consolidates the relation between a practical politician and Catholicism to demonstrate the corrupt nature of both. Fick argues that Hank acknowledges the limit of his vision based on technology, while Twain has not lost faith in the potential of the same.

Dobski and Kleinerman (2007), in their article, “‘We Should See Certain Things Yet, Let Us Hope and Believe’: Technology, Sex, and Politics in Mark Twain’s ‘*Connecticut Yankee*,’” explicate Hank’s attempts to find the physical permanence through technology (merely provide earthly comfort) first, which he accomplished afterward through his daughter. Hank initially focuses on the body and ignores the soul. In contrast, Arthurians are vice versa in their behavior. Abstinence from bodily desire fails to satisfy their soul since they ignore the bodily urge. Yankee ultimately achieves his soul’s desire for physical permanence through his daughter, which clergies cannot achieve, because it promises by sex. Hansen (1973), in her article, “The Once and Future Boss: Mark Twain’s *Yankee*,” argues that Twain’s *Connecticut Yankee* is an episodic narrative of Hank’s domination by fraud, fear, and force. He is a humanitarian on the surface of his personality, but he is selfish. All his acts are driven by self-centeredness from whom Twain distances himself to criticizing him. Lieberman (2010), in her article, “Hank Morgan’s Power Play: Electrical Network in *King Arthur’s Court*,” demonstrates Hank’s misuse of electricity to achieve comfort and power, which has been invented for the welfare of society. Hank’s electrified revolution reveals his sadist personality, apparently killing thousands of people in a few minutes.

Rohman (2009), in his article, “Mark Twain’s ‘*A Connecticut Yankee in King Arthur’s Court*’: Serio-Comic and Carnival Prospects Unfulfilled,” shows Yankee as a

seriocomic persona (like Twain) satirizes socio-political condition with a touch of humor. However, Twain differentiates himself by acting as a frame narrator. The scope of carnivalesque reading stems from Twain’s serio-comic intentions. In contrast, Yankee fails to turn his circus sentiments into required serious actions since his utopian project is infected by self-interest. Therefore, the novel eventually results in a failed carnival. Kaplan (2022), in her article, “Realism and Power in Mark Twain’s: *A Connecticut Yankee in King Arthur’s Court*,” explicates the novel as a re-enactment of Robinson Crusoe’s story. Hank’s constructions of social reality through objective language and scientific realism are more an attempt to dominate than to reform medieval society.

From the literature review, different scholars have employed different approaches to studying Mark Twain’s novel *Connecticut Yankee*. However, the novel has never been analyzed from a protopian perspective, which remains the focal interest of this research. Drawing critical insights from Fick, Hansen, Lieberman, Dobski, and Kleinerman, this article unfolds the scope of protopian reading. It highlights how Hank’s techno-politics (pure), in resonance with Twain’s protopian vision, is corrupted by his practical politics (impure) for power and comfort, for which Twain criticizes him. The idea of ‘techno-theodicy’ and ‘post-political’ can also be seen as an extension of protopian ideals since it denounces those selfish acts of Hank, which are based on the sacrifices of humanity performed in the name of politics

by misusing technology. Kelly (2016) in *The Inevitable* suggests that technology will help us to achieve a protopian society, but Hank (a practical politician) uses it for mass extermination in the novel. By doing

so, Hank departs from Twain’s anticipated protopian narrative to a dystopian ending because of his insistence on living in a utopia for power and comfort.

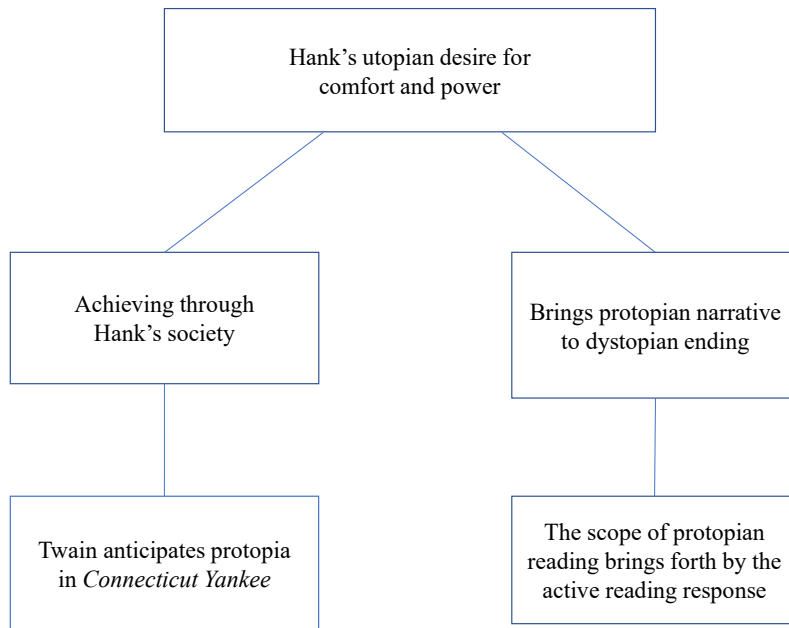


Figure 1. Conceptual framework showing how Twain’s anticipated protopia turned into a dystopia

**METHODOLOGY**

Referring to his contemporaries, Moore (1551) describes the term ‘utopia’ in his book *Utopia* as “Nowhere,” which means a place that does not exist (p. 8). Feminist utopians introduce ambivalent elements into their utopia, denying perfection as something to strive for. Moreover, Ernst Bloch (1954/1995), the German philosopher, insists on the feasibility of daydreams, thus, excluding the possibility of the realization of perfect towers in the air. Therefore, the idea of utopia is impossible to realize, and attempts to achieve it shall lead to the

destruction of society. Hence, the need to fill the utopian void has arisen with a protopia since utopias are unachievable. Protopia is not just a new term, but indeed a new perspective, or even it has the potential to become a new genre that has already existed in utopian/dystopian studies since the possibility of its fulfillment/defeat is based on the choices made by the people.

By doing a protopian reading of Twain’s novel, this article creates a paradigm for future readers to unearth the scope of protopian reading in utopian/dystopian narratives by looking at the choices that

lead to the failure of the desired narrative. Indeed, “the future is decided on the choices [people] continually make; it is also decided on the choices [they] do not make” (Google Design, 2019, 13:45). The choices made by Hank bring tremendous violence to Camelot.

Honestly, the decisions made are of utmost importance in determining whether policies and developments have taken smaller ‘baby steps’ over a longer period, as Twain predicted in the narrative, or have been intended to bring about radical and systematic changes (like Hank). At the novel’s beginning, Hank’s society is an appropriate example of a protopian society since technology and society co-exist within it, which Twain expects to evolve for a better future. However, Hank’s desire to live in a utopia for bodily comfort and power digresses the protopian narrative toward a dystopian ending.

In the broad spectrum of reader-response theory, the present study attempts to employ the paradigm of protopia for re-reading Twain’s *Connecticut Yankee* as the narrative of progress since passive reading has concluded the novel as a narrative of failure for more than a century. Furthermore, this article explores the possible desirable avenues that Twain anticipates but are barred by Hank’s arbitrary choices, thus, failing the protopian narrative. Future readers can use this study as a reference to evaluate and avoid the abuses of technoscientific power that Twain’s novel so horrifyingly exposes.

## RESULTS AND DISCUSSION

### **Techno-Theodicy After Liberalism: A Trajectory in *Connecticut Yankee***

Twain’s *Connecticut Yankee* is about a nineteenth-century American, Hank Morgan, who returns to sixth-century medieval England in reverie. In Camelot, he intends to implement the “techno-political vision” of nineteenth-century America, but it fails and turns into a dystopia because of his personality traits (Lieberman, 2010, p. 64). Kelly (2016) articulates that “every utopian scenario contains self-corrupting flaws. My aversion to utopias goes even deeper. I have not met a utopia I would want to live in” (p. 18). The ‘self-corrupting’ nature of the utopian model is conspicuous in the character of the utopian ruler (Hank), who deviates from the protopian narrative scope to become a dystopian tyrant to achieve power and comfort. This results in violence on an enormous scale because Hank wants to live in the utopia he has created, in contrast to the protopia anticipated by Twain. Indeed, utopia is not an appropriate model to follow as it cannot be achieved. Instead, protopia should aspire. The novel shows the journey of Hank from desiring to live in a utopia to becoming a dystopian tyrant in the end. In contrast, the protopian model aims toward progress rather than to aspire toward something ideal that ultimately culminates in dystopia.

The novel is about the collision of “the vernacular cultural tradition of progress,” which represents the nineteenth-century American culture brought by Hank Morgan in England, and the “reactionary counter

impulse of medievalism,” which represents the sixth-century medieval culture of England (Fermanis, 2007, p. 94). The impulse of culture and counterculture is inherent in Merlin, the magician, who represents superstition and the Old World, while Hank represents the magic of science and civilization in England. Therefore, there ensues a rivalry between them. Twain sets the novel in medieval England to display the superstition of the Old World, representing the rural America of his time. It also demonstrates how communities still run, as they do under British rule, also reflected in other nineteenth-century American writers like Washington Irving and Nathaniel Hawthorne. Twain juxtaposes medieval England and nineteenth-century America to deride Americans’ belief in magic and superstitions of his time, which is evident in presenting Jim as a conjuror who predicts Huck’s future through ‘hairball.’ However, Twain is the greatest conjuror of his time, forging the nation’s cultural memory by setting the novel in pre-Civil War society. He creates future remembrance of the past through past misremembrance to achieve a better future for black people in *Adventures of Huckleberry Finn* (1884). In *Connecticut Yankee*, Hank first intends to bring the ‘techno-political vision’ of nineteenth-century America into sixth-century England by introducing electricity, telephone, patent office, mail service, newspaper, typewriter, telegram, and man-factories, in which people need “to be brought up by education to ‘revolution grade’” to support his desired society (qtd. in Strout, 2012, p. 338).

Secondly, Hank creates his society, which is more rational, based on scientific temperament and logic, “Reflect: we are well equipped, well-fortified, we are fifty-four. Fifty-four what? No, minds—the capablest [sic] in the world” (Twain, 1889, p. 260). In his society, no one is beyond seventeen and less than fourteen. He has chosen them because their mind is free from the church’s influence. In contrast, the other people of Camelot have not been given a chance to understand Hank’s project. However, the monks in the fountain restoring scene have comprehended the working mechanism of the pump. It contradicts Hank’s belief that Camelot’s people are dull-headed under the church’s influence. If monks can understand the whole mechanism of who is the propagator of church beliefs, then why not others? Thus, it validates that Hank has been very biased and selective in his approach. His utopian ideals are apparent in the following statement when he announces his whole plan:

First, a modified monarchy till Arthur’s days were done, then the destruction of the throne, nobility abolished, every member of it bound out to some useful trade, universal suffrage instituted, and the whole government placed in the hands of the men and women of the nation there to remain. Yes, there was no occasion to give up my dream, yet awhile. (Twain, 1889, p. 181)

Hank wants to substitute the monarchy of England with the liberal democratic apparatus of nineteenth-century America, evident in his desire to propose universal suffrage.

Indeed, the abolition of the monarchy and the introduction of universal suffrage and democracy have historically not resulted from peaceful and gradual (protopian) change but from the revolution that falls in the line of utopia. Twain has a strong distaste for anti-democratic forms of government (whether monarchy, slaveocracy, or empire). However, he is critical of Hank's republican and the killing of thousands of people to achieve the desired state. Moreover, Twain has shown the possibility of social reform if Hank's decisions are taken by giving precedence to social concerns over selfish desires. After becoming a 'Boss,' Hank utters, "My power was colossal . . . yes, in power I was equal to the king . . . there was another power that was a trifle stronger than both of us put together. That was the church" (Twain, 1889, pp. 37–38). He corroborates the church as the biggest hindrance in fulfilling his dream to achieve a republican state. Therefore, Hank's "investment in technology marks the divergence from God" (Evans, 2021, p. xv). It could be seen as an attempt to substitute the established religion with "techno-theodicy" to achieve a better world (p. 159). At the 'Valley of Holiness,' he manipulates the people of Camelot since he "is also reinforcing their belief in the church. Nor does he mind using his power to reinforce the monarchy" (Hansen, 1973, p. 65). He portrays monarchy and the church as his biggest obstacle in fulfilling his project; however, he has no personal animosity with either. Indeed, he is diplomatic in maintaining his humanitarian self to obscure his selfish desires. Hank's

pseudo-humanitarianism to civilize Camelot divulges his double personality, "I would boss the whole country inside of three months; for I judged, I would have the start of the best-educated man in the kingdom" (Twain, 1889, p. 11).

Hank's dream to bring nineteenth-century civilization to Camelot corresponds to his selfish desire to bring order because the people of the same society are seen as animals, "there were people, too; brawny men, with long, coarse, uncombed hair that hung down over their faces and made them look like animals" (Twain, 1889, p. 8). Even those he has been fighting for are named "human muck" (p. 256). Throughout the novel, the people of Arthur's England are called "animals, children, savages or white Indians" (Hansen, 1973, p. 68). Hansen (1973) accentuates Hank's biased personality by stating that "Yankee a humanitarian... is very much on the surface of his personality. But at the bottom he enjoys the spectacle of acres of people" (p. 64). Thus, Hank's image of being a vanguard of civilization is a sham because his idea of civilization is not wholly kindled for the well-being of people but to fulfill his latent hope to live a comfortable life.

Hank's interest in technology arises from bodily comforts, "it is little conveniences that make the real comfort of life" (Twain, 1889, p. 32). For these comforts, he must "invent, contrive, create, reorganize things; set brain and hand to work, and keep them busy" (p. 33). He becomes blind to such an extent that he "ignores what is good for his soul" (qtd. in Dobski & Kleinerman, 2007,

p. 607). His fascination with electric power reflected in “the potential for networks to foster social progress is of lesser central to the novel than the allure of using power (electrical and otherwise) for personal gain” (Lieberman, 2010, p. 67). Hank describes his vitality when he discovers telephone lines at the Valley of Holiness, “I was breathing the breath of life again after long suffocation. I realized, then, what a creepy, dull, inanimate horror this land had been to me all these years” (Twain, 1889, p. 136). Lieberman (2010) demonstrates Hank’s love for power by stating that “The Yankee’s technological vision is federalist, not socialist... because it simultaneously distributes and centralizes power, incrementally improving social relations for many while allowing him... to remain in control at the center” (p. 64).

Hank demolishes his power network and civilization because he knows its potential danger, which can turn against its inventor when he says, “They will turn our science against us” (Twain, 1889, p. 250). However, the problem is not in the technology but in manipulating it by the people to fulfill their yearning. Future dreaming is not only a political act; using technology to achieve the same comes under the political category. Hank bestows the benefits of technology whenever he wishes, but when people confront him, he demonstrates the destructive nature of the same. Twain (1889) describes the horridness of an electrocution incident:

He was near enough, now, for us to see him put out a hand, find an upper wire, then bend and step under it and over the lower one. Now he arrived at the first knight—and started slightly when he discovered him. He stood a moment—no doubt wondering why the other one didn’t move on; then he said, in a low voice, “Why dreamest [sic] thou here, good Sir Mar—” then he laid his hand on the corpse’s shoulder—and just uttered a little soft moan and sunk down dead. Killed by a dead man, you see—Killed by a dead friend, in fact. There was something awful about it. (p. 262)

The invention of electricity has become deadly because it has been misused. Although killing people with the current is not very cost-effective, Clarence delineates:

You don’t want any ground connection except the one through the negative brush. The other end of every wire must be brought back into the cave and fastened independently and without any ground connection. Now, then, observe the economy of it . . . You are using no power; you are spending no money, for there is only one ground connection till those horses come against the wire. (Twain, 1889, p. 252)

By using technology contrary to its objective, Hank has shown how political technology can become; and how by creating havoc, it has deviated from the path of humanitarianism, for which it is invented.

The relation between politics and technology becomes crucial because Hank initially sees politics as a veil to achieve technological progress and comfort. Later, his political dreams (as a practical politician) to live in a utopia surpass technological progress, and the situation worsens and eventually culminates in dystopia. In the battle of Sand-belt, Hank has been compared to Hitler; his “personality prefigures the careers and the personalities of twentieth-century dictators” (Hansen, 1973, p. 67). Like Hitler, he has been performing his selfish acts in the name of the people, wherein “The motto of Hitler’s Germany—*Ein Volk, Ein Reich, Ein Führer*—it was the people who came first . . . as the Yankee is inclined to do, and yet respond to actual persons with contempt, and hatred, and a distrust” (p. 67). The problem is not in the dream of having a Republican state but in misusing technology to achieve it. He does not realize that his path to fulfill his dream is destructive. In Hank’s case, violence at an enormous scale is made possible by “a new adversary that appeared—the modern mind” using electricity for mass extermination (Evans, 2021, p. 63). It shows something fundamentally modern about the violence wielded by a person who has been more dominant over thousands of people. He does not even think that people as humans constitute humanity; ironically, he has been sacrificing the same humanity for the welfare of humanity itself. In the battle of Sand-belt, “within ten short minutes after we had opened fire, armed resistance was totally annihilated, the campaign

was ended, we fifty-four were masters of England! Twenty-five thousand men lay dead around us” (Twain, 1889, p. 264). The mass incarceration of the people was performed to achieve a noble cause so that a certain kind of life could thrive in medieval England.

The utopian dream has set Hank on a civilizing mission for which he sacrifices the life of thousands of people. It would be wrong to compare Mark Twain with Hank Morgan since Twain has been criticizing him for his selfish decisions, leading the text to a dystopian ending, anticipated as a protopian narrative. Twain writes to Dan Beard, “this Yankee of mine . . . can build a locomotive or a Colt’s revolver, he can put up and run a telegraph line, but he’s an ignoramus nevertheless” (qtd. in Hansen, 1973, p. 69). Like a satirist, Twain “[channels] his indignation into an appropriate literary form . . . distancing himself from the object of critique, one of those objects being Hank Morgan” (Sanchez, 2007, p. 23). Hansen (1973) states that Twain has “separated himself from Hank Morgan by employing a narrative frame, the western humorist’s favorite device for separating his own personality from that of his vernacular character” (p. 69). Thus, Twain establishes enough distance to condemn him for his reckless acts.

Indeed, “to understand violence, one must first understand its sacred claims” (Evans, 2021, p. 18). By doing so, Hank shows the loftiness of his project and the relevance of people’s sacrifice, “Yankee is continually inviting us to weep over the



victims of medieval brutality—that earn him a reputation for humanitarianism” (Hansen, 1973, p. 70). He has been compared to Hitler, and the mass incarceration in the battle of Sand-belt “is reminiscent of a fascist regime where sacrifices of people are about the disposability of human populations, those countless, nameless, and faceless victims, who experience violence” (Evans & Lennard, 2018, p. 21). Like Hitler, Hank has killed people for an idea; he has no personal animosity toward them, nor is he troubled by the aristocracy. Therefore, it is crucial to ponder over the self-corrupted nature of the utopian model apparent in Kateb’s (1963) statement:

Give up the vision of utopianism, though it may be a worthy vision because there is no way to go from the real world to utopia; or if there is a way, it could be none other than the way of violence; and that is either too costly or too unreliable. (p. 18)

Hank’s declaration of his utopian project before the battle of Sand-belt is to defend his pseudo-humanitarian facade so that he is not seen as someone awaiting the war and his victory. Hank’s utopian ideals are based on the assimilation and exploitation of others; if they disagree with his vision, their complete annihilation would also contribute to it. Indeed, Hank does not want to realize utopia; his goal is to secure power and privileges and not utopia itself. He is very shrewd in his behavior and knows how to manipulate these people, whom he sees as an ignoramus, “these animals didn’t reason,” while Hank had

no reason (Hansen, 1973, p. 69). He looks at the future before his eyes because the future is always now. Although he knows what happened in America, he has not learned anything from the past, a future in medieval England. Eventually, Hank defeats his enemy, but his failure lies in the failed social experiment of his civilization and the pervading “stench of their dead bodies” (qtd. in Andersen, 1969, p. 21). Even though they have wiped out the whole church army, in a postscript chapter, Clarence acknowledges that “we had conquered; in turn, we were conquered” (Twain, 1889, p. 265). Thus, Hank’s utopian project has turned into a dystopian nightmare.

### **(Un)making of Protopia in *Connecticut Yankee***

The battle of Sand-belt has shown that it is impossible to impose utopia on people, but it could have been envisioned and pursued with indomitable zeal. However, it subsequently lost track in the process of being achieved concretely. Utopia is a layout of a perfect society, where imperfect humans strive for perfectibility but fail. Fredrick Polak argues that “the image of the future affects the actual future” because, keeping in mind a blueprint of a perfect society, a society cannot prosper (qtd. in Sargent, 1982, p. 574). Further, a series of questions arise, like what should people do to improve society? What strategies should be employed? If the utopian model is no longer possible, then what? This research proposes a conceptual paradigm of protopia, designed by Kevin Kelly in *The Inevitable*,

to fill the void created by unachievable utopia. Furthermore, a question arises why protopia is better than utopia. Indeed, because it precludes the possibility of failing like a utopian model; therefore, it is worth aspiring for. Kelly suggests that technology will take us toward the state of protopia, but its treatment in the novel under scrutiny is destructive. It leads to the dystopian ending of the novel, initially anticipated as a protopian narrative.

The violence resulting in achieving a utopian model in the battle of Sand-belt shows that liberalism is dead. From the devastating ashes of liberalism, a new order of 'techno-theodicy' has arisen. It means that technology has emerged as a new religion that proved to be the only salvation for social progress, and what is being sacrificed in that process of achieving salvation is humanity itself. Hank demonstrates himself as a benign tyrant who uses technology for "its methods and its new antireligious worldview, to create vast killing machines that can remain wholly blind to their moral evils precisely because they promise such tremendous moral goods" (Dobski & Kleinerman, 2007, p. 613). Hank is also blind to the evil side of his utopian project, apparent in the destruction it unleashed in the battle of Sand-belt. He controls the utopian fantasy and thus controls the future. The people of his society are just puppets in his hands who kill their people to endorse Hank's project. His idea of humanity is "meant to be realized through the wars fought to prove its very existence" (Evans, 2021, p. xi). However, there is a

need to understand that "for individuals to be humane, they must aspire to humanity," unlike Hank, who pursues his dream without giving any thought to killing a thousand people (Evans, 2021, p. xiii). Indeed, for the welfare of society, the people of Camelot do not need a technology-driven experience ruler (like Hank) but someone who knows how to use it for social welfare.

Why has Hank kept his civilization hidden from the eyes of common people; is it not for their benefit? Instead of proclaiming, he should have shown what progress, like electricity, schools, factories, and newspapers, can bring for the betterment of society, as anticipated by Twain's protopian narrative. Had he shown them the benefits of his civilization and what else it could bring, it might have been possible to accept his techno-political project. It could have brought modernity and civilization to medieval England, but he did not care because his selfish desires preceded social welfare. Everyone to whom he has shown the benefits of technology and civilization accepts it. Like the monks for whom he restores the holy fountain well, "To those monks that pump was a good deal of miracle itself" (Twain, 1889, p. 131). They understand the working mechanisms when he "taught them the mystery of pump" (p. 131). Later, other monks are also astonished to see the newspaper, which they have never seen before.

In the beginning, Hank's society is an appropriate example of desired protopian society, which Twain expects to evolve by incorporating all because they believe

in technology and society to co-exist to achieve a better world. However, Hank does not expand that circle. Therefore, a question arises, why does he not illuminate the dark land of England when he is just a step behind, “I stood with my hand on the cock, so to speak, ready to turn it on and flood the midnight world with light at any moment” (Twain, 1889, p. 48). Instead of doing that, he first wants to “have had the Established Roman Catholic Church” on his back (p. 48). It shows that Hank’s ideals are utopian; had they been protopian, he would have used electricity to enlighten Camelot instead of retreating from that opportunity. If electricity has been invented for the masses, why does not he reveal his project to the church and stop Camelot from descending into hell by killing a thousand people?

Hank does not even try to convince the church because he believes that “no people in the world ever did achieve their freedom by goody-goody talk and moral suasion: it being immutable law that all revolutions that will succeed, must begin in blood” (Twain, 1889, p. 103). Without a second thought, he says, “I would take fifty assistants and stand up against the massed chivalry of the whole earth and destroy it” (p. 237). Therefore, the idea of ‘liberalism’ is dead in the novel since his true intentions have been revealed to secure power and privileges, not utopia itself. Had Hank been thinking about the welfare of society, he would have tried to convince the church about his project. Although he tries to persuade the nobility about the petty soap, “If the lords and ladies were afraid of it, get them to try it on a

dog... that could convince the nobility that soap was harmless”, he is actually trying to convince them about it and not about the nobility of his project (p. 79). He is making his stand stronger to have the upper hand in the impending war.

The people of Hank’s society are reluctant to kill their people, evident in their words, “Do not ask us to destroy our nation” (Twain, 1889, p. 257). Hank is teaching them the moral lesson of duty by showing the nobility of his project and the irrelevance of people’s sacrifice, “None but the nobles and gentry are knights... we shall have to fight nobody but these thirty thousand knights” (p. 257). He makes them believe that the “future can be enriched by sacrifices in the present” (Evans, 2021, p. 42). His act of “violence is not an act of spontaneous rage, but a controlled, reasoned, and calculated” step toward the fulfillment of his dream (Evans, 2021, p. 138). However, a series of questions arise; are the nobility and the gentry classes not a part of the nation? Why have they been seen as a scapegoat to achieve a desirable state? Is there no alternative to achieving a better future than sacrificing humanity? Protopia is an appropriate way to achieve a better society, which Twain anticipates from the novel’s beginning. However, Hank debunks it because it does not resonate with his desire to live in a utopian world. Thus, he becomes the object of Twain’s indictment and a corrupt dystopian tyrant himself.

Hank fears that the people of Camelot “will turn our own science against us” (Twain, 1889, p. 250). Therefore, he

demolishes his whole civilization to save himself. However, a question arises, how can these people use civilization against him, who are not even aware of how it works, and for what purpose it has been created? If Hank had established that civilization for people, he would not have demolished it quickly. What is the point of achieving a republican state that makes him mindless to such an extent that killing thousands of people does not ache his heart? The republican state (Twain's desired protopian) could have been achieved by taking adequate actions to bring reform since King Arthur had already died. Instead of choosing war, a step must have been taken to create a progressive nation that Protopia always aims at. Thus, Hank's liberalist utopia fails and turns into dystopia since it is not heading from worse to better but worse to worse. It is contingent, apparent in his decisions to achieve his utopian ideals. It corroborates that the "future is decided on the choices [people] continually make, it is also decided on the choices [they] do not make" (Google Design, 2019, 13:45). The novel brings tremendous violence at the end because of Hank's choices.

From the beginning of the text, it has been projected as a protopian novel, evident in Hank's declaration of his dream of a republican state and the plan he charts out to achieve the same. However, his progressive society and the technology invented for humanitarian evolution have not been used appropriately to achieve desired objectives. Therefore, by highlighting the flaws in Hank's narrative, it has already been pointed

out what wrong decisions he has made and how the narrative has deviated from the expected protopian ending to a dystopian one. This study reinforces the belief that choices matter; it is not about what people are capable of but what people do with what they are capable of. It is also evident in what Hank has done and what he could have done to achieve the protopian state. The future cannot be predicted, but it can be created. Although what Hank has created is not something commendable.

Protopia aims to decenter the dominance of a privileged worldview (like Hank) to establish an egalitarian society as Twain has planned out. However, Hank's selfish motives hinder realizing the desired world. Protopia resonates with the idea of "post-political," in which politics ceases to exist when technology surpasses politics by engineering (Evans, 2021, p. 157). However, this study is not denying the political aspect of technology in general but criticizes Hank's practical politics (impure form) since techno-politics (pure form) could have achieved the protopian society. It seems within reach when Hank initially focuses on technological progress; his society is heading toward protopia. Nevertheless, the situation worsens when his political dreams of living in a utopia surpass technological progress. The idea of 'techno-theodicy' and 'post-political' can also be seen as an extension of protopian ideals since both transcend practical politics and support Twain's techno-politics to achieve a better future. In the name of politics, Hank is perpetrating cruelty with little justification

or regret. Hence, a question arises, what legacy would the protopian model leave behind for future generations? It would certainly create a more peaceful society based not on humanitarian sacrificial principles but on technology as the center of its existence to use for social welfare. As a corrupt politician and sadist, Hank practices cruelty and considers it a part of humanity. The future would have been productive if Hank's dream resonated with Twain's objective to achieve a protopian world without aspiring toward something ideal.

Protopia aims to solve problems and imagine future problems based on people's engagement with past issues. Thus, the cycle goes on since it is a never-ending process. Protopia is an appropriate model to follow, but it does not mean that technology is flawless, which is exquisitely articulated by Kelly (2016), "Yesterday's technological successes caused today's problems, and the technological solutions to today's problems will cause tomorrow's problems. This circular expansion of problems and solutions hides a steady accumulation of small net benefits over time" (p. 26). However, it depends on technology's usage, whether it is a boon or a bane. Although modernity has undoubtedly brought terrible violence, people probably live in the most peaceful world compared to the long history of violence. The world will never be as precise as humans want, but it does not mean they cannot improve it, collectively and individually.

## CONCLUSION

The research concludes that Hank pretends to achieve the utopia dream, to secure power and privileges which come with the entitlement of the 'Boss,' not to realize utopia itself. His selfish acts digress the anticipated protopian narrative scope to a dystopian ending, for which Twain criticizes him. The article, thus, suggests that while imagining future goals, utopian and social reformers (like Hank) should tie these goals to the welfare of society first. The eventual reality's scope depends on the initial dream's scope. Therefore, they do not lose sight of this throughout the lengthy process of executing plans in the hope of accomplishing utopian goals. Unlike Hank, they must give precedence to social concerns over selfish desires. However, Hank fails to meet Twain's expectations, ostensibly in his desire to live in a self-sustained utopian society for bodily comfort and power. Indeed, to achieve the quintessential goal of humanity, protopia appears to be an appropriate model to follow since utopia is unachievable.

Protopia is not just a novel term but a novel perspective and method, and it even has the potential to become a new genre. The research indicates that Kelly's concept of protopia has been present in previous utopian works, highlighting a bigger issue of deciding whether policies and advancements should aim for radical changes (like Hank) or take 'baby steps' every day to improve society. It divulges the scope to re-read the

novel with a protopian perspective, which the body of the text has embodied and left open-ended for future readers. Indeed, protopia is an appropriation of both utopia and dystopia since it deals with the real world where technology has not become a means of destruction, as shown in the novel. However, a medium of progress is constantly striving to create a better future for people. It creates a world where society and technology flourish side by side, as imagined by Kevin Kelly in *The Inevitable*. Thus, by reading this novel with a protopian approach, the present study has lent a new perspective to Twain's novel and created a paradigm for other readers to follow the footprint of this article to re-read the dystopian novels as a narrative of progress.

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## **Gender, Ethnicity and Unpaid Domestic Work Before and During the COVID-19 Pandemic in Malaysia**

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### **ABSTRACT**

The COVID-19 pandemic resulted in mandatory work-from-home arrangements and the closure of schools and daycare centres, placing an additional burden on families. Using an online survey carried out during the second Movement Control Order in January 2021, this survey was about who is responsible for housework and childcare work and the subjective time pressure, spare time and satisfaction. Our results indicated that housework and childcare were shouldered by women rather than men during both periods, i.e., before and during the pandemic. In addition, housework and childcare were viewed by many women as either their sole or shared responsibilities with their partners. Contrarily, many men believed that housework and childcare should be shared or fully borne by their spouses. The gender differences in managing domestic responsibilities persist before and during the pandemic. Furthermore, the findings conclude that there is a significant association between gender and unpaid domestic work responsibilities for certain ethnic groups and not all ethnic groups within both periods. Our findings also revealed that during the pandemic, most women reported time pressure and dissatisfaction towards the division of housework and childcare among couples. Overall, reducing women's burden of unpaid domestic work and improving their well-being is crucial.

*Keywords:* Dissatisfaction, pandemic, time pressure, unpaid domestic work responsibilities

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### **INTRODUCTION**

The COVID-19 pandemic has affected private and public lives globally. In March 2020, most countries responded to COVID-19 with similar preventative measures, including nationwide lockdowns, social distancing measures and closure of schools and workplaces

(World Health Organization, 2020). The Malaysian government swiftly responded to the pandemic by announcing the first nationwide lockdown, which is referred to as Movement Control Order 1.0 (MCO 1.0), as its preventative measure when 533 cases were recorded (Tang, 2020). Furthermore, the second Movement Control Order (MCO 2.0) was implemented due to a massive spike in cases, i.e. 3027 cases, on January 13, 2021 (Povera & Harun, 2021).

Because of the necessary stay-at-home requirement, paid and unpaid domestic work must be carried out concurrently (Boo, 2021b; United Nations Development Programme [UNDP], 2020). Surveys showed that some employed men and women spent shorter hours in paid work when working from home (Department of Statistics Malaysia, 2020b; JobStreet Malaysia, 2020). According to these surveys, working men and women spend more time on unpaid domestic work and less on paid-related matters. These surveys highlight that unpaid domestic work cannot be avoided when they are working from home. Unpaid domestic work is important because it ensures the functions of a family (Adrian Hodges Advisory Ltd [AHA Ltd] & Chan, 2019). Someone must take up the responsibility to maintain the family to continue functioning well (Treas & Tatlock, 2012).

In this time of crisis, studies in Malaysia (Boo, 2021b) and worldwide revealed that women shouldered most of the additional housework and childcare responsibilities during the first nationwide lockdown

(Chauhan, 2020; Chung et al., 2021; Craig & Churchill, 2020; Hazarika & Das, 2021; Xue & McMunn, 2021). Most studies only focus on the gender differences in housework and childcare responsibilities during the first nationwide lockdown (Boo, 2021b; Chauhan, 2020; Chung et al., 2021; Hazarika & Das, 2021; Xue & McMunn, 2021). Limited studies focus on the gender differences in housework and childcare responsibilities before and during the COVID-19 pandemic (Craig & Churchill, 2020). While there is extensive research on the gender differences in housework and childcare responsibilities during the COVID-19 pandemic, quantitative analyses on the gender differences in housework and childcare responsibilities across various ethnic groups have not been examined. As a result, there is a lack of information about to what extent gender differences in housework and childcare responsibilities are statistically significant across various ethnic groups.

Next, notwithstanding the additional burdens, studies in Western countries also reported that the gendered impact put women in more stressful conditions than men (Craig & Churchill, 2020; Neetha, 2021; Xue & McMunn, 2021). These studies imply that women are experiencing more gender inequality in unpaid domestic work and feel more stressed than men during the pandemic in Western countries. Unlike Western research, quantitative empirical research on the subjective feelings of time pressure, spare time and satisfaction with housework and childcare are not explored

in the studies in Malaysia during the COVID-19 pandemic (Boo, 2021b).

Studies on gender inequality in housework and childcare responsibilities are crucial because past studies prior to the pandemic found that women experienced negative well-being and psychological symptoms due to the unequal division of household labour (Aziz et al., 2016, 2018). Moreover, studies found that unequal division of household labour may further lead to marital divorce (Ruppanner et al., 2017). It is important to highlight that Malaysia's divorce and domestic violence cases have increased tremendously during the pandemic (Carvalho et al., 2021; Rahim et al., 2021). For instance, about 78000 couples filed for divorce during the pandemic compared to only about 56624 divorce cases prior to the pandemic (Carvalho et al., 2021). Likewise, over 9000 domestic violence cases have been recorded since the pandemic, compared to only about 5657 cases recorded prior to the pandemic (Rahim et al., 2021). These cases are worrying because they imply that couples have conflicts with paid and unpaid domestic work when they mostly stay home.

The Malaysian government has introduced two nationwide lockdowns since the pandemic's start in March 2020. However, the effects of the second nationwide lockdown on gender-related differences in housework and childcare responsibilities and subjective feelings are unknown. Likewise, the gender differences in housework and childcare responsibilities across various ethnic groups are unknown.

Hence, in this study, we aim to address the research gap by determining who is responsible for the housework and childcare responsibilities before and during the COVID-19 pandemic and whether there were any gender differences in the housework and childcare responsibilities when heterosexual couples stayed home together during both periods, i.e., before and during the pandemic. Moreover, we aim to analyse further the gender differences in the housework and childcare responsibilities across various ethnic groups within both periods. Lastly, we aim to determine whether there are any gender differences in the subjective feelings of time pressure, spare time and satisfaction with housework and childcare. This study presents preliminary findings on how the COVID-19 pandemic affected unpaid domestic responsibility and subjective feelings about it. These preliminary findings add to the literature on unpaid domestic work among married couples in the Malaysian context during the crisis.

The definition of unpaid domestic work, gender norms and family responsibilities are provided as context for this study.

### **Defining Unpaid Domestic Work**

In this study, housework and childcare are unpaid domestic work (Treas & Tatlock, 2012). For example, housework comprises "food preparation, cooking meals, cleaning, washing clothes, gardening, household repair, shopping and paying utility bills" (Addati et al., 2018, p. 41). On the other hand, childcare comprises "physical care,

emotional care, intellectual care and passive care” (Craig et al., 2008, p. 9). Between housework and childcare, housework is often considered tedious work, flexible and can be delayed or rescheduled later, whereas childcare cannot easily be delayed or rescheduled later (Hewitt et al., 2011). Furthermore, childcare is believed to be more enjoyable and rewarding than housework because it is more associated with feelings of love and emotion (Addati et al., 2018; Hewitt et al., 2011; Poortman & Van Der Lippe, 2009). Both housework and childcare require time and effort to keep the family running without any monetary compensation to individuals who do it at home (Addati et al., 2018).

### **Gender Norms and Family Responsibilities**

Studies suggest that the unequal division of household labour is related to the gender norms that expect women to shoulder family responsibilities (Boo, 2021a; Stratton, 2020; United Nations Population Fund [UNFPA] & Promundo, 2018). For example, women are expected to engage in housework and childcare work because they are homemakers, whereas men can skip housework and childcare because they are the breadwinner according to gender norms (Boo, 2021a; UNFPA & Promundo, 2018). It is socially unacceptable in many countries to see men solely responsible for housework and childcare because this behaviour is against gender norms (Kaufman, 2014; UNFPA & Promundo, 2018). Men are more likely to take on a supportive role in housework and childcare due to societal

gender norms and expectations (Boo, 2021a). Hence, it is not surprising to see that past studies demonstrated that women devoted more hours than their spouses in unpaid domestic work around the globe because men tend to play the backup role in families (Addati et al., 2018; Boo, 2021a; Budlender, 2008; Choong et al., 2019).

In Malaysia, it is difficult for women to skip doing housework and childcare even though they are employed because men and women have to follow the prescribed gender roles embedded in the cultural and religious gender norms, which emphasise the male-breadwinner and female-homemaker model (Boo, 2021a). Women have to prioritise family and unpaid work responsibilities to fulfil the expectations ingrained in the gender norms (Abdullah et al., 2008; Noor, 1999). Due to the difficulty in juggling paid work and family responsibilities, most employed women stopped working because of family responsibilities (Department of Statistics Malaysia, 2022). These studies suggest that family responsibilities become a barrier for women to achieve gender inequality at home and to continue working. Thus, to what extent who is responsible for taking up the housework and childcare responsibilities is important to this study.

### **METHODOLOGY**

An online survey, ‘Movement Control Order 2.0: Unpaid Domestic Work Before and During the COVID-19 Pandemic’, was conducted for two weeks in the mid of January 2021. Respondents were recruited through parenting groups on Facebook

in Malaysia. Researchers emailed the administrators of parenting groups to explain the research information and get approval to post a survey call on the parenting group page. With the approval from the administrators, a survey call was posted on the parenting groups on Facebook, and those who fulfil the criteria can participate in this study.

A consent form informing the nature of this research, researchers' contact details, expected survey time, voluntary withdrawal terms, anonymity and confidentiality were included on the first page of the online survey. All respondents were asked to provide consent before their participation. An ethics approval was obtained (Protocol number: USM/JEPeM/COVID19-05).

This online survey targeted couples with young children using a purposive sampling design. A non-probability sample of present Malaysian married couples responded to this online survey, yielding 177 responses. A total of 177 people who participated in the survey were found to be adequate (Cohen, 1988), which exceeds the required number of 166 for a population survey at a 99% confidence level and 10% confidence interval using Cochran's formula (Cochran, 1977). It should be highlighted that the researchers are aware of the small sample size. It should be noted that the sample size is largely subjected to the voluntary willingness of respondents to participate in the research during the COVID-19 pandemic, and it also subjected the assistance of social media administrators to post the survey calls on the social media page. Although the sample

size is small, this preliminary study provides important insights into unpaid domestic responsibilities before and during the COVID-19 pandemic in Malaysia.

The online survey asked the respondents about their demographic information, including age, ethnicity, educational attainment, employment status and monthly income of each spouse and household compositions, including additional adults, age and the number of children in the households during the COVID-19 pandemic. In addition, the online survey asked respondents who should be responsible for housework and childcare within the two periods. Furthermore, the respondents were asked to report their subjective time pressure, spare time and satisfaction with the division of housework and childcare during the COVID-19 pandemic.

After the quantitative data collection, Fisher's exact test was used as the analytical method in this study because of the small sample size. The Fisher's exact test is suitable for determining if there is a significant relationship between categorical variables when the sample size is small compared to the Chi-square tests, which require a larger sample size (Korosteleva, 2018).

First, Fisher's exact tests were conducted to determine whether gender differences were statistically significant in the housework and childcare responsibilities within the two periods. Respondents were asked to answer the following question: Who should be responsible for housework and childcare before and during the COVID-19 pandemic? Four options were

given, including me, my spouse, an equal and others, for housework and childcare responsibilities.

Second, Fisher's exact tests were used to develop the analysis further by measuring the relationship between housework and childcare responsibilities by gender and by ethnicity. This analysis aimed to examine to what extent the gender differences in housework and childcare responsibilities are statistically significant across ethnic groups.

Third, to determine subjective experience in time pressure, spare time and satisfaction with the division of housework and childcare, Fisher's exact tests were conducted based on the respondent's response to the four questions: (1) How often do you feel rushed or pressed for time? (2) How often do you have too much spare time? (3) How satisfied are you with how you divide your housework with your spouse? (4) How satisfied are you with dividing your childcare with your spouse? A 3-point Likert scale ranging from seldom, sometimes and often was included for questions 1 and 2. In contrast, a 3-point Likert scale ranging from dissatisfied, neither satisfied nor dissatisfied,

and satisfied were included for questions 3 and 4.

## RESULTS

### Respondents' Characteristics

A total of 177 respondents completed the online survey. Table 1 presents an overview of sample characteristics. The sample was skewed towards Malay ethnic groups rather than towards other ethnic groups, similar to Malaysia's ethnic group composition (Department of Statistics Malaysia, 2020a). Moreover, the sample was skewed towards working women and those with bachelor's degrees. In addition, the sample was skewed towards nuclear families with children below 12. These characteristics are similar to the online survey conducted during the first nationwide lockdown (Boo, 2021b). It highlights that the proportion of employment status changed from full-time to part-time jobs, and unemployment increased during the pandemic compared to before the pandemic, especially for men. Likewise, the average monthly earnings for both men and women decreased during the pandemic compared to before the pandemic.

Table 1  
*Respondents' characteristics (means and proportions)*

Variable	Women	Men
Ethnicity		
<i>Malay</i>	61.4	67.6
<i>Chinese</i>	26.4	16.2
<i>Indian</i>	8.6	8.1
<i>Others</i>	3.6	8.1

Table 1 (Continue)

Variable	Women	Men
Household composition <sup>a</sup>		
<i>Living with parents/parents-in-law</i>	17.1	0.0
<i>Living with maid</i>	3.6	0.0
<i>Living with children ages below 12</i>	82.1	83.8
<i>Living with children ages over 13</i>	45.7	35.1
Average number of children in the household	2.8	2.6
Average age of respondent	40.5	41.7
Average monthly earnings before COVID-19	4198.5	4920.3
Average monthly earnings during COVID-19	3918.1	4468.1
Employment status before COVID-19		
<i>Full-time</i>	72.1	97.3
<i>Part-time</i>	5.8	2.7
<i>Unemployed</i>	22.1	0.0
Employment status during COVID-19		
<i>Full-time</i>	71.4	81.1
<i>Part-time</i>	5.0	10.8
<i>Unemployed</i>	23.6	8.1
Educational attainments		
<i>Masters' degree or PhD</i>	25.0	18.9
<i>Bachelor's degree</i>	35.7	40.5
<i>Graduate certificate or diploma</i>	23.6	16.2
<i>Pre-university or below</i>	15.7	24.3

Note. <sup>a</sup>Percentages do not add up to 100

### Housework and Childcare Responsibilities by Gender

Fisher's exact tests were conducted to determine whether gender differences were statistically significant in the housework and childcare responsibilities within the two periods. The results of Fisher's exact tests are presented in Table 2. The results are also presented graphically, as shown in Figures 1 and 2 for housework responsibility within two periods.

Fisher's exact tests demonstrate significant differences between men and women regarding housework responsibilities during both periods. About 46.4% of women perceived housework as their sole responsibility before COVID-19 compared to 55.7% of women during COVID-19. It suggests that the proportion of women reporting housework as a sole responsibility rose during the pandemic. There were,

however, slight decreases in the percentage of women who perceived housework as a shared responsibility between spouses, i.e., from 45% before COVID-19 to 35.7% during COVID-19. This finding suggests that more women perceived housework as their responsibility when working from home during the pandemic.

Contrarily, about 8.1% of men have perceived housework as their sole responsibility before COVID-19, compared to only 5.4% during the pandemic. It suggests that fewer men perceived housework as their sole responsibility

during the pandemic than before it. It could be that during the restrictions, both spouses were at home together; men could have relied on their wives to do housework and played a backup role. Next, about 70.3% of men perceived housework as a shared responsibility between spouses before COVID-19 compared with only 64.9% during COVID-19. These findings suggest that men relied on their wives to do housework during COVID-19 as the percentage of spouses' responsibility rose from 21.6% before the pandemic to 27%.

Table 2  
Housework and childcare responsibilities within two periods (%)

	Pre-COVID		During COVID	
	Women	Men	Women	Men
Housework responsibility				
<i>Me</i>	46.4	8.1	55.7	5.4
<i>My spouse</i>	3.6	21.6	5.0	27.0
<i>Equal</i>	45.0	70.3	35.7	64.9
<i>Others</i>	5.0	0.0	3.6	2.7
<i>Fisher's exact test</i>		***		***
Childcare responsibility				
<i>Me</i>	48.6	2.7	50.7	5.4
<i>My spouse</i>	3.6	40.5	5.0	32.4
<i>Equal</i>	35.0	54.1	37.1	56.8
<i>Others</i>	12.9	2.7	7.1	5.4
<i>Fisher's exact test</i>		***		***

Note. \*\*\*  $p < 0.001$



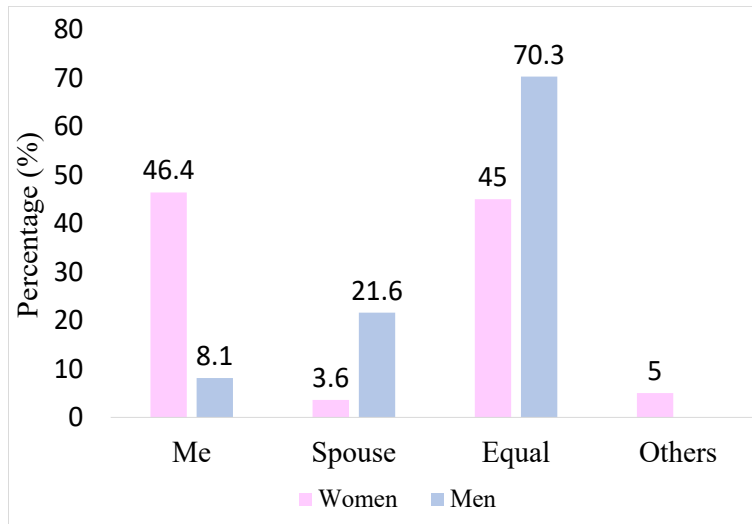


Figure 1. Housework responsibilities before COVID-19 pandemic (%)

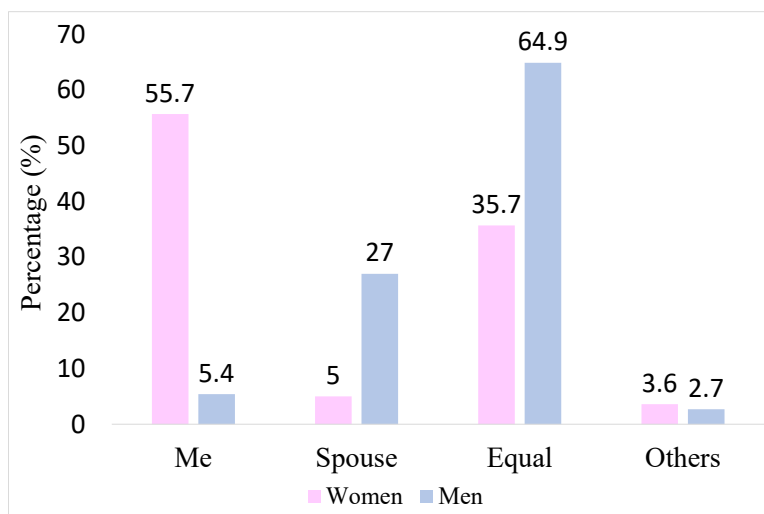


Figure 2. Housework responsibilities during COVID-19 pandemic (%)

Next, Figures 3 and 4 present the gender differences in childcare responsibilities before and during the COVID-19 pandemic. Figure 3 presents childcare responsibilities before the COVID-19 pandemic, and Figure 4 presents childcare responsibilities during the COVID-19 pandemic.

Fisher’s exact tests demonstrate significant differences between men and

women regarding childcare responsibilities during both periods. About half of the women perceived it as their sole responsibility before and during COVID-19 (48.6% and 50.7%, respectively); likewise, about one-third of women perceived childcare as a shared responsibility with their spouses at both time points. It should be highlighted that the results shown during the pandemic are

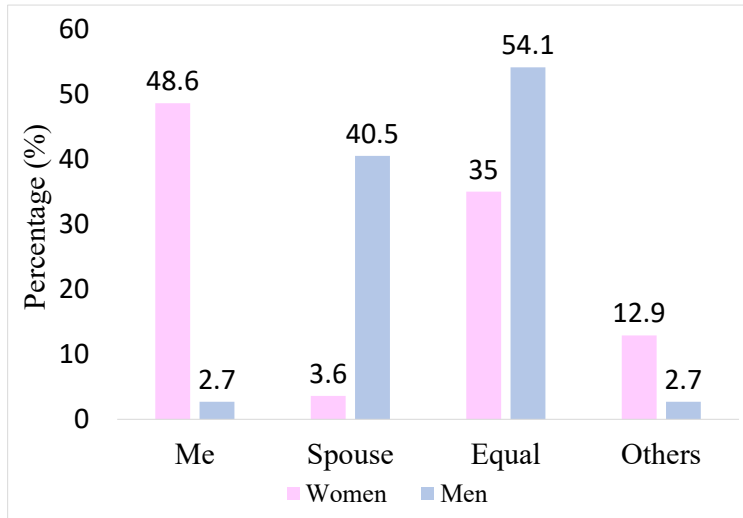


Figure 3. Childcare responsibilities before COVID-19 pandemic (%)

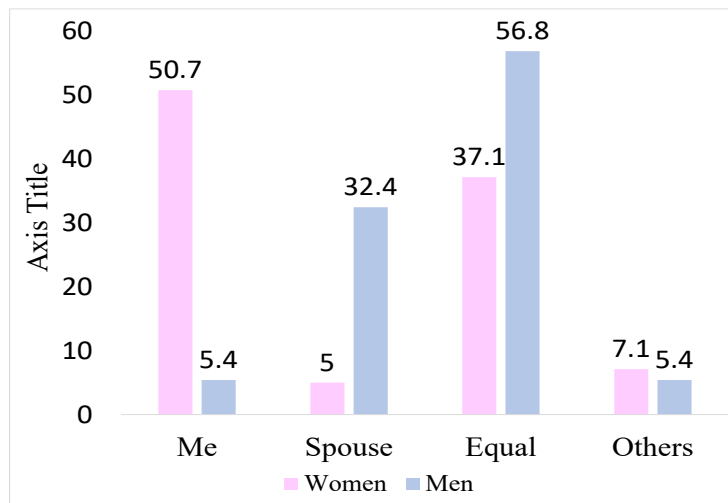


Figure 4. Childcare responsibilities during COVID-19 pandemic (%)

similar to the study conducted during the first nationwide lockdown in Malaysia, which only examined housework and childcare responsibilities during the COVID-19 pandemic. However, the past study did not compare the childcare responsibilities for both periods as conducted by this study (Boo, 2021b).

Conversely, most men perceived childcare as a shared responsibility or their spouses' sole responsibility at both times. These findings suggest that childcare was not the sole responsibility of men either before or during the pandemic. In this study, only a few men perceived childcare as their sole responsibility. However, there

is a slight increment in the percentage of men who tend to perceive childcare as their sole responsibility during the pandemic compared to before it (5.4% and 2.7%, respectively).

To further explore the relationship between housework and childcare responsibilities by gender, ethnicity as the control variable was included to examine to what extent the gender differences in housework and childcare responsibilities are significantly associated with various ethnic groups.

**Housework Responsibilities by Gender and by Ethnicity**

Table 3 presents the relationship between housework responsibilities by gender and by ethnicity within two periods. Table 3 shows a closer examination of gender differences in housework responsibilities for each ethnic group. The results show that gender differences in housework responsibilities are statistically significant for Malay and Chinese ethnic groups before and during the COVID-19 pandemic and not statistically significant for Indian and other ethnic

Table 3  
Housework responsibilities by gender and by ethnicity before and during the COVID-19 pandemic (%)

Ethnicity		Pre-COVID		During COVID	
		Women	Men	Women	Men
Malay	<i>Me</i>	43.0	12.0	54.7	8.0
	<i>My spouse</i>	2.3	16.0	4.7	24.0
	<i>Equal</i>	50.0	72.0	36.0	68.0
	<i>Others</i>	4.7	0.0	4.7	0.0
	<i>Fisher's exact test</i>		***		***
Chinese	<i>Me</i>	45.9	0.0	54.1	0.0
	<i>My spouse</i>	5.4	33.3	8.1	50.0
	<i>Equal</i>	43.2	66.7	35.1	33.3
	<i>Others</i>	5.4	0.0	2.7	16.7
	<i>Fisher's exact test</i>		*		**
Indian	<i>Me</i>	66.7	0.0	58.3	0.0
	<i>My spouse</i>	0.0	33.3	0.0	33.3
	<i>Equal</i>	25.0	66.7	41.7	66.7
	<i>Others</i>	8.3	0.0	0.0	0.0
	<i>Fisher's exact test</i>		n.s.		n.s.
Others	<i>Me</i>	60.0	0.0	80.0	0.0
	<i>My spouse</i>	20.0	33.3	0.0	0.0
	<i>Equal</i>	20.0	66.7	25.0	75.0
	<i>Others</i>	0.0	0.0	0.0	0.0
	<i>Fisher's exact test</i>		n.s.		n.s.

Note. \*\*\*  $p < 0.001$ , \*\*  $p < 0.01$ , \*  $p < 0.05$

groups. The results suggest that nearly half of the Malay and Chinese women were solely responsible for housework tasks before and during the COVID-19 pandemic compared to Malay and Chinese men. Furthermore, the results suggest that the proportion of Malay and Chinese women reporting housework as a sole responsibility rose during the pandemic.

Looking from the men's perspective, the proportion of Malay and Chinese men who perceived that their spouse is responsible for housework tasks rose during the pandemic, with an increment of 8% during the pandemic for Malay men (16% and 24%), and an increment of 16.7% for Chinese men (33.3% and 50%). It is important to note that no Chinese men perceived housework as their sole responsibility before and during the pandemic. These results indicate that Malay and Chinese women shouldered most of the housework tasks before and during the COVID-19 pandemic compared to men. Moreover, the results indicate that Malay and Chinese men relied on women to complete the housework tasks in both periods, with the proportion of Chinese men doubling that of Malay men.

### **Childcare Responsibilities by Gender and by Ethnicity**

Table 4 demonstrates the relationship between childcare responsibilities by gender and by ethnicity within two periods. Table 4 presents a closer examination of gender differences in childcare responsibilities for each ethnic group. The results show that gender differences in childcare

responsibilities are statistically significant for Malay and Chinese ethnic groups before and during the COVID-19 pandemic and not statistically significant for other ethnic groups. Regarding Indian ethnic groups, the results show that gender differences in childcare responsibilities are statistically significant before the COVID-19 pandemic and not statistically significant during the COVID-19 pandemic.

From women's perspective, nearly half of the Malay, Chinese and Indian women perceived that they were responsible for childcare tasks (45.3%, 59.5% and 50%, respectively) compared to men before the COVID-19 pandemic. Among the three ethnic groups, the proportion of Chinese women who perceived childcare as their sole responsibility is higher than the Malay and Indian ethnic groups. On the other hand, during the COVID-19 pandemic, 51.1% of Malay women perceived childcare as their sole responsibility, which suggests that the proportion of Malay women who perceived childcare as sole responsibility increased slightly during the COVID-19 pandemic. However, the proportion of Chinese women (54.1%) who perceived childcare as their sole responsibility decreased slightly during the COVID-19 pandemic.

From the men's perspective, half of the Chinese men perceived that their spouse was responsible for childcare tasks. The proportion of Chinese men who perceived it as a spouse's responsibility is higher than the Malay men for both periods. It should be highlighted that the proportion of Indian men (66.7%) who perceived childcare as

Table 4  
 Childcare responsibilities by gender and by ethnicity before and during the COVID-19 pandemic (%)

Ethnicity		Pre-COVID		During COVID	
		Women	Men	Women	Men
Malay	<i>Me</i>	45.3	4.0	51.1	8.0
	<i>My spouse</i>	4.7	32.0	7.0	28.0
	<i>Equal</i>	39.5	64.0	37.2	60.0
	<i>Others</i>	10.5	0.0	4.7	4.0
	<i>Fisher's exact test</i>		***		***
Chinese	<i>Me</i>	59.5	0.0	54.1	0.0
	<i>My spouse</i>	2.7	50.0	2.7	50.0
	<i>Equal</i>	18.9	33.3	32.4	33.3
	<i>Others</i>	18.9	16.7	10.8	16.7
	<i>Fisher's exact test</i>		***		***
Indian	<i>Me</i>	50.0	0.0	41.7	0.0
	<i>My spouse</i>	0.0	66.7	0.0	33.3
	<i>Equal</i>	33.3	33.3	58.3	66.7
	<i>Others</i>	16.7	0.0	0.0	0.0
	<i>Fisher's exact test</i>		*		n.s.
Others	<i>Me</i>	20.0	0.0	40.0	0.0
	<i>My spouse</i>	0.0	66.7	0.0	33.3
	<i>Equal</i>	80.0	33.3	20.0	66.7
	<i>Others</i>	0.0	0.0	40.0	0.0
	<i>Fisher's exact test</i>		n.s.		n.s.

Note. \*\*\*  $p < 0.001$ , \*  $p < 0.05$

their spouse's responsibility was much higher than the Malay (32%) and Chinese (50%) men before the pandemic. The proportion of Indian men perceived so is almost double that of Malay men. These results imply that Malay, Chinese and Indian men perceived that their spouse should be responsible for childcare might lead to gender inequality continuing to prevail in the households.

### Subjective Time Pressure, Spare Time and Satisfaction

Table 5 presents gender differences in terms of the subjective experience with time pressure, spare time and satisfaction with the division of housework and childcare during COVID-19. First, the results indicate gender differences in time pressure. About 42.1% of women 'often' felt rushed during the pandemic compared with only 21.6%

Table 5  
 Subjective time pressure, spare time and satisfaction (%)

	Women	Men
I feel rushed or pressed for time		
<i>Seldom</i>	18.6	35.1
<i>Sometimes</i>	39.3	43.2
<i>Often</i>	42.1	21.6
<i>Fisher's exact test</i>		**
I have too much spare time		
<i>Seldom</i>	66.4	51.4
<i>Sometimes</i>	26.4	35.1
<i>Often</i>	7.1	13.5
<i>Fisher's exact test</i>		n.s.
Regarding how I divide housework tasks with my spouse, I am		
<i>Dissatisfied</i>	22.1	10.8
<i>Neither satisfied nor dissatisfied</i>	42.9	32.4
<i>Satisfied</i>	35.0	56.8
<i>Fisher's exact test</i>		**
Regarding how I divide childcare tasks with my spouse, I am		
<i>Dissatisfied</i>	23.6	8.1
<i>Neither satisfied nor dissatisfied</i>	43.6	35.1
<i>Satisfied</i>	32.9	56.8
<i>Fisher's exact test</i>		**

Note. \*\*  $p < 0.01$

of men. Second, no significant gender differences were observed regarding spare time during COVID-19. Third, about 22% of women felt dissatisfied with housework and childcare division during COVID-19 compared with less than 10% of men. Conversely, 56.8% of men felt satisfied with the housework and childcare division during the pandemic. These findings suggest that about half of the men are more satisfied than

women with the division of housework and childcare during the pandemic.

## DISCUSSION

Women shoulder most housework and childcare responsibilities before and during the pandemic. The subjective experiences in time pressure and satisfaction with the division of housework and childcare reflect the additional burdens on families, which

were shouldered mostly by women during the restrictions. The restrictions have implications for both women and men, with more women often feeling rushed and dissatisfied with the household division than men.

The results indicate that most women perceived housework and childcare as their responsibility or a shared responsibility before and during the COVID-19 pandemic. Contrarily, most men tend to perceive housework and childcare as a shared responsibility or their spouses' sole responsibility during both periods (Table 2). These results suggest that women are mainly responsible for unpaid domestic work before and during the pandemic. It is consistent with the research conducted in Western countries (Craig & Churchill, 2020; Del Boca et al., 2020).

In addition, the results found that many men refused to take over the sole responsibility of unpaid domestic work before and during the restrictions. It is consistent with the research conducted during the first nationwide lockdown in Malaysia that most men tend to share the responsibilities or assist their wives in unpaid domestic work even though they have spent more time at home (Boo, 2021b). It implies that work-from-home arrangements resulted in couples spending time at home and did not free women from many family responsibilities. Likely, men do not perceive family responsibilities as men's work but women's work even though they have more time at home. The continued gender inequality in family responsibilities

is likely related to the expected gender roles embedded in the gender norms (Boo, 2021a; Kaufman, 2014; UNFPA & Promundo, 2018).

A closer examination of gender differences in housework responsibilities for each ethnic group found that Malay and Chinese women tend to perceive housework and childcare as their sole responsibility within both periods. In contrast, Malay and Chinese men tend to perceive housework and childcare as their spouse's responsibilities. It implies that Malay and Chinese women continue to shoulder housework and childcare responsibilities because they perceive that women are responsible for unpaid domestic work. Likewise, Malay and Chinese men continue to perceive that they can rely on their spouses to complete housework and childcare work, which has loaded the burden on women's shoulders. The way Malay and Chinese women and men perceive housework and childcare responsibilities are consistent with the gender role expectation in society (Boo, 2021a; Kaufman, 2014; UNFPA & Promundo, 2018).

As a result, the pandemic has generated more housework and childcare workloads for women than men. It can be seen in the greater time pressure and dissatisfaction with unpaid domestic work among women (Table 5). It suggests that women are experiencing more difficult times than men during the pandemic. The results support that more than half of the men felt satisfied with the housework and childcare division during the pandemic. This study implies

that the crisis has negatively impacted more women than men, which suggests that the gendered division of housework and childcare occurred not only before the pandemic but also during the pandemic.

In addition, this study reveals the challenge of encouraging men to take over or share unpaid domestic work responsibilities during the pandemic, as they felt satisfied with the current division of household responsibilities. Tackling this issue would require changes in men's perceptions of unpaid domestic work as only a woman's responsibility. For example, shifting the traditional gender norms seems important to encourage more men to take up unpaid domestic responsibilities and not heavily rely on their spouses. Also, it would require men to seriously acknowledge the negative well-being arising from the unequal division of household labour and care about their wives' well-being by contributing more to unpaid domestic work. Without taking this issue seriously, women are more likely to suffer from the prevailing gender inequality at home.

Apart from changes in men's perceptions towards unpaid domestic work as women's work, changes in women's perceptions towards unpaid domestic work being their sole responsibility is crucial because women tend to shoulder a disproportional amount of housework and childcare. However, their spouses are at home during the pandemic. Women should encourage or negotiate with their spouses to engage more in unpaid domestic work and not be solely responsible. This change is vital as it would

reduce women's burden and time pressure during the crisis. Moreover, changes in women's perception towards housework and childcare responsibilities are important because many women quit their jobs due to family responsibilities (Department of Statistics Malaysia, 2022). It is important to note that unpaid domestic work negatively impacts women's time and satisfaction, as highlighted in this study, and the labour force participation rate, as recorded in the Department of Statistics Malaysia. In addition, studies found that women's dissatisfaction towards the division of housework and childcare among couples is more likely to lead to marital divorce (Ruppanner et al., 2017). It should be highlighted that Malaysia's divorce rate is increasing tremendously during this pandemic (Carvalho et al., 2021); hence, this issue should not be taken lightly.

This study has methodological limitations, including an online survey as the recruiting method and small sample size. First, an online survey was used during the COVID-19 pandemic because of mandatory work-from-home arrangements and the closure of schools and daycare centres; it is the most suitable method to adopt during MCO 2.0. However, this online survey excluded people who fulfilled the sample criteria but could not access the Internet. Second, only a small sample size was achieved. Hence, the findings could not be generalised to the broad population but could be generalised to a small number of online populations only. Although this study has methodological limitations, it



provides early results on the gender and ethnic differences in family responsibilities within the two periods. In addition, this study provides preliminary results on the subjective experiences of time pressure and satisfaction with the division of housework and childcare in the Malaysian context.

## CONCLUSION

In conclusion, the findings imply that the gendered division of household labour has become worrying as most Malay and Chinese women still shoulder unpaid domestic work before and during the pandemic, despite men being at home. This phenomenon is worrying because gender inequality in the household undermines women's ability to take part in paid work and have more leisure time. Also, this phenomenon seems to be against the promotion of shared responsibility within the household by Sustainable Development Goal 5.

The findings also found that more women reported time pressure and dissatisfaction than men during the COVID-19 pandemic. These findings add insights to the body of knowledge on unpaid domestic responsibilities before and during the crisis across various ethnic groups. It also adds to the literature on the subjective experiences of time pressure and satisfaction with the division of housework and childcare in Malaysia. This study calls for the Ministry of Women, Family and Community Development's attention on reducing women's burden in unpaid domestic work and improving their well-being during the pandemic.

Recommendations for future research include a larger sample size to study gender and ethnic differences in unpaid domestic work, subjective experiences in time pressure and satisfaction among couples during the post-pandemic. Also, researching the division of household labour during the post-pandemic with no mandatory work-from-home order would add insight into gender and family studies in the Malaysian context.

## ACKNOWLEDGEMENT

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## **Overpassivisation in L2 Acquisition: An Examination of L1 Malay ESL Tertiary Students' Passivisation of Intransitive Verbs in English**

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### **ABSTRACT**

Overpassivisation, a phenomenon in which passive morphology is applied to intransitive verbs, is a common feature in the interlanguage of L2 English learners. This study examines overpassivisation among L1 Malay ESL tertiary students concerning the type of intransitive verb and English proficiency level. A total of 499 L1 Malay ESL students in higher educational institutions in Malaysia completed a grammaticality judgment test involving items with unaccusative and unergative verbs. The students have completed at least 10 years of formal English instruction in school and have considerably more exposure to English than ESL learners in a foreign language setting. As predicted, the participants overgeneralised passive morphology to the intransitive verbs, and more so with unaccusative than unergative verbs. Further, students' competence in rejecting overpassivised forms decreased with learners' increasing proficiency in English. The findings show that while overpassivisation is committed by the L1 Malay ESL students, unaccusative verbs contribute more to

overpassivisation than unergative verbs. It indicates learners' processing of the different underlying structures of the two classes of verbs. Also, the passive rule is progressively acquired as a reduction of overpassivisation is observed for both verb types with increasing English proficiency. L1 Malay ESL tertiary students in Malaysia at lower English proficiency levels have yet to work out intransitive structures,

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particularly those involving unaccusative verbs. The findings suggest that receiving L2 input in a high-exposure environment does not necessarily allow learners to bypass the developmental stages in acquiring the passive rule.

*Keywords:* English passive, interlanguage development, intransitive verbs, Malay ESL learners, overpassivisation errors, second language acquisition

## INTRODUCTION

Second language (L2) learners of English, regardless of their native language (L1), face various challenges in acquiring the target language, as L2 learning is affected by many factors, including the lack of L2 input and influence from the learner's first language (L1; Mitchell et al., 2019; Saviile-Troike & Barto, 2016). The inherent characteristics of L2 structures also play an important role in determining whether learners can acquire the structure easily; the more complex the structure, the more effort is needed to work out and reconfigure the grammatical rules in their interlanguage system. One of the structures in the English language that particularly poses a challenge to L2 English learners is the passive structure (e.g., Amadi, 2018; Choomthong, 2011; Hinkel, 2004; Kalimuttu, 2016; Mahdun et al., 2022; Simargool, 2008). The structural complexity of the English passive and crosslinguistic influence from learners' L1 have been cited as factors contributing to the difficulties experienced by L2 learners in acquiring the English passive.

Among the errors committed by L2 learners, overpassivisation is a notable occurrence. Studies have reported that L2 English learners from different L1 backgrounds frequently overgeneralise the passive morphology to English intransitive verbs (e.g., Choi, 2019; Ju, 2000; Okada, 2021). Further, the type of intransitive verb has also been shown to have a bearing on learners' passivisation errors.

The Unaccusative Hypothesis (Burzio, 1986; Perlmutter, 1978) postulates two subclasses of English intransitive verbs, the unaccusative and unergative. Verbs such as *fall*, *happen* and *disappear* are unaccusative verbs as they denote non-events and change of states and have non-agentive subjects. A different class of intransitive verbs is the unergative verb. Examples of unergative verbs are *run*, *sing* or *laugh*, which usually denote processes and have agentive or volitional subjects. An interesting observation is that even though the two types of verbs have similar surface structures in sentences in English, L2 learners have a higher tendency to extend the passive morphology to unaccusatives than to unergatives (e.g., Ahn, 2015; Kondo, 2005; M. Oh, 2014; Okada, 2021; Oshita, 2000, 2001; Pae et al., 2014; Yip, 1995; Yuan, 1999).

Examples of typical overpassivised unaccusative structures produced by L2 English learners are shown in Examples (a) and (b).

- a. \*My mother *was died* when I was just a baby. (Zobl, 1989, p. 204)

- b. \*Two or three days ago, the important trouble *was happened*. (Oshita, 2000, p. 312)

Studies focusing on passivisation errors by L2 English learners in connection with the type of intransitive verbs have been carried out over the years. In a study by Zobl (1989) which examined the writings of 114 tertiary level L2 learners of English from 25 different L1 backgrounds, it was found that there was a higher overpassivisation rate with unaccusatives than unergatives. In another study by Balcom (1997), a grammaticality judgement test and a cloze passage test were administered to 38 L1 Chinese university students of advanced English proficiency. Consistent with Zobl's findings, the analysis of learners' errors showed that the students accepted the passive morphology with unaccusative verbs as correct more significantly than overpassivisation with other types of verbs.

In a corpus-based study, M. Oh (2014) examined overpassivisation with alternating unaccusatives, non-alternating unaccusatives and unergatives. The findings showed significant differences in the error rates among the different types of intransitive verbs, with the highest rate for the alternating unaccusatives, followed by non-alternating unaccusatives, and with unergatives having the least errors. The pattern of overpassivisation errors was also found to differ according to the animacy of the subject. Similarly, Choi's (2019) study on 67 Korean ESL learners revealed that overpassivisation is influenced by verb types and passive morphemes in L1

translation. More recently, Okada (2021) obtained results from her study using high school students demonstrated a significant relationship between overpassivisation and subject animacy, as was also found by M. Oh (2014). The authors concluded that the overpassivisation of unaccusative verbs relates to subject animacy, whereas unaccusative verbs with inanimate subjects tend to be overpassivised.

The higher occurrence of overpassivised unaccusatives compared to unergatives, as has been identified in past studies, is an interesting phenomenon since L2 learners could not have encountered evidence for it in the input, as native and proficient speakers do not produce passive morphology with intransitive verbs. It suggests that the L2 learners' interlanguage is drawing on linguistic knowledge which is not directly inferable from the input of the target language and that L2 learners can distinguish the argument structures of the unaccusatives and unergatives; the argument of unaccusative verbs originates in the object position but not so with the unergatives (Kondo, 2005). It may be the reason for the higher overpassivisation of unaccusatives and lower frequency of using the passive marker with unergative verbs, as L2 learners of English may incorrectly interpret any movement from object to subject position as a passive structure construction (Oshita, 2000; Yip, 1990). Since the internal argument of unaccusatives is similar to the object of a transitive verb, L2 English learners assume that it is passivisable, and hence, their acceptance of the incorrect passive forms.

The role of L2 proficiency as a variable has also been observed when investigating passivisation errors among L2 English learners. Connecting L2 proficiency with acquiring specific L2 structures is important in L2 acquisition studies as it can provide information about the development pattern in acquiring the target structure. Several studies have reported that the rate of overpassivisation is unrelated to L2 proficiency levels (e.g., Chung, 2015, 2016; M. Oh, 2014; Owada, 2017; Pae et al., 2014; Zobl, 1989). However, some studies have reported that overpassivisation diminished as learners' L2 proficiency level increased (e.g., Choi, 2019; Hwang, 2006; Okada, 2021; Shin, 2011), pointing to a developmental pattern in learners' restructuring of the L2 system in their interlanguage.

### Explaining Overpassivisation

Several hypotheses have been proposed to explain the causes of overpassivisation among L2 English learners, particularly with the unaccusatives. Several researchers have suggested a language-specific account or L1 influence for the occurrence of the errors (Hahn, 2009; Hwang, 2006; Montrul, 1999; No & Chung, 2006; Oshita, 2000; Zobl, 1989). For example, Montrul (1999) indicated an L1 influence of the Spanish intransitive marker 'se' on acquiring unaccusative verbs among Spanish ESL learners. Similarly, No and Chung (2006) reported the influence of the Korean passive morpheme 'ci' on the learners' tendency to accept passivised unaccusatives—however,

E. Oh (2011), among others, argued that the overpassivisation phenomenon is not related to L1 transfer as it has been observed cross-linguistically among L2 learners of various mother tongues (e.g., Thai, Japanese, Chinese, Arabic and Korean).

Another attempt to explain passivised unaccusatives is the Transitivity Hypothesis which states that L2 learners interpret unaccusatives as underlying transitive (Ju, 2000; Yip, 1990, 1995). Yip (1995) argued that since unaccusatives are represented as transitions in learners' interlanguage, learners tend to extend the passivisation rule to most unaccusative structures, producing ungrammatical passive forms.

Proponents of the Noun Phrase (NP)-movement Marker Hypothesis postulate that L2 learners passivise unaccusatives as an overt marker of the NP movement as they regard unaccusatives as subsumed under the syntactic rule for passive formation. The postverbal argument of the unaccusative verb is similar to the passive structure (Hirakawa, 2001; Lee, 2010; Oshita, 2000; Yip, 1995; Zobl, 1989). The similarity of the underlying representation between the intransitive unaccusative verb and the transitive passive verb is believed to create confusion for L2 learners, as the passive morphology results from NP movement from the direct object to the subject position. L2 learners misapply this rule for unaccusatives, leading to the formation of passivised unaccusative constructions. It explains the higher tendency of overpassivisation of unaccusatives than unergatives. Overpassivisation has been



interpreted as support for the Unaccusative Hypothesis (Burzio, 1986; Perlmutter, 1978), which explains why L2 learners analyse unaccusatives and unergatives differently.

Furthermore, some studies have shown that overpassivisation is not applied to all unaccusative verbs homogenously (Balcom, 1997; Hwang, 2006; Ju, 2000; No & Chung, 2006). For instance, Korean L2 learners passivised the verb *disappear* more frequently than *happen*, although both verbs are unaccusatives (Ju, 2000). The between-verb variation among unaccusatives is related to the distinction between the subclasses of unaccusatives, alternating and non-alternating unaccusatives (Levin & Hovav, 1995). Alternating unaccusatives have a transitive counterpart, as in *The door closed/The child closed the door*. In contrast, non-alternating unaccusatives do not have a transitive counterpart, as in *The accident occurred/\*The accident was occurred by the driver* (Kim, 2016). Overpassivisation is committed more frequently with alternating unaccusatives than non-alternating unaccusatives (Balcom, 1997). It may be attributed to the transitive counterparts of the alternating unaccusatives, which are not morphologically distinct from intransitive forms. Hence, learners may incorrectly assume those verbs can be passivised like transitive verbs. Another perspective attempting to explain the occurrence of passivised unaccusatives is animacy effects which showed that L2 learners were more likely to incorrectly accept ungrammatical unaccusatives with inanimate subjects (No & Chung, 2006; Pae et al., 2014).

## L2 Proficiency and Overpassivisation

Overpassivisation has been demonstrated in L2 perception and production by learners across all proficiency levels, including learners at the advanced level (Lee, 2007; M. Oh, 2014; Shin, 2011). A study by Montrul (2001) and Moore (1993) showed that L2 learners at low proficiency levels eventually obtained the target grammar as their L2 proficiency increased, even though they failed to utilise the correct form before. Similarly, Shin (2011) revealed that learners at the high-intermediate proficiency level committed fewer overpassivisation errors than mid- and low-intermediate proficiency students. These studies suggest that the rate of overpassivisation decreases with increasing L2 proficiency.

On the other hand, some studies have reported that L2 learners' overpassivisation errors did not differ significantly across proficiency levels (e.g., Chung, 2015, 2016; M. Oh, 2014; Owada, 2017; Pae et al., 2014). Overpassivisation was observed to persist even as proficiency level increased, this possibly pointing to a learnability problem. Interestingly, it has also been reported that overpassivisation is more common among advanced proficiency learners than those in the lower proficiency groups (Ju, 2000; Kong, 2018; Park & Lakshmanan, 2007; Yip, 1995). Although advanced L2 learners are proficient in using the passive form, they are still susceptible to overpassivisation regarding unaccusative verbs (Jo, 2018). With these differences observed, it is worthwhile to re-examine the relationship between L2 proficiency and

overpassivisation for evidence that can shed light on learners' acquisition patterns.

### **Overpassivisation Among L1 Malay Learners**

Several studies on errors committed by L1 Malay ESL learners have reported overgeneration of *be*-verb in non-obligatory contexts and used with lexical verbs (e.g., Arshad & Hawanum, 2010; Aziz, 2018; Roslina & Mohd Don, 2014; Wee, 2009; Wee et al. 2010). Wee (2009) investigated verb form errors in the writings of 50 Malay ESL learners and observed the overgeneration of *be*-verb in structures like "*The nurse was bandaged her leg*" And "*The accident was happened at Jalan Raja Laut*." Similarly, Arshad and Hawanum (2010) and Roslina and Mohd Don (2014) reported the occurrence of *be*-verb overgeneration errors among L1 Malay ESL learners, such as in "...was very dark. Suddenly, the lamp was opened ownself" and "*In a few minutes, the ambulance was arrived*". While these findings point out that overpassivisation errors are committed by L1 Malay ESL learners, a description of these errors concerning the type of intransitive verb and learners' L2 proficiency is still lacking for this population.

### **The Present Study**

Overpassivisation is one of the most common errors committed by L2 learners in learning the English passive, and it has been shown to relate to verb type and learners' English proficiency. ESL learners have been observed to extend the

passive rule to intransitive verbs frequently. This study sought to contribute to current knowledge using L1 Malay tertiary students in Malaysia, where English is widely used as a second language.

Malaysian students learn English in school from the first year in elementary school and take English as an examination subject over 10 years of formal schooling. The schooling system in Malaysia is unique in that elementary schools may use the Malay language, Chinese, Tamil, or English as the medium of instruction, depending on the type of school. Hence, students in Malaysia are at least bilingual, and many are multilingual. Further, many students continue to take English courses at tertiary institutions. English is used extensively in the country, particularly in the more urban settings. While Malay is the national language, English is recognised as a second language and is the medium of instruction for most academic programmes at tertiary educational institutions. Hence, in terms of exposure to the English language, Malaysian tertiary students have considerably more experience and familiarity with the language than learners in a foreign language setting.

It is worth noting that most previous studies on overpassivisation among L2 learners have been conducted on populations in a foreign language setting where exposure to the L2 is limited. Findings from a study on learners with prior and current high exposure to English, such as tertiary-level students in Malaysia, would be useful to bring additional insight into the phenomenon of overpassivisation in L2 acquisition.

Another point to note is that most of the studies on overpassivisation in L2 acquisition have utilised either small samples or those not representative of the target population. The current study examined overpassivisation patterns among L1 Malay ESL tertiary students in Malaysia, targeting a large sample representative of students in tertiary institutions of higher learning across the country. The following questions were addressed in the study:

1. To what extent does intransitive verb type influence overpassivisation among L1 Malay ESL tertiary students in Malaysia?
2. To what extent is overpassivisation influenced by the English proficiency level of L1 Malay ESL tertiary students in Malaysia? Are there changes in the occurrence of overpassivisation with students' increasing English proficiency?

The present study was part of a larger research investigating the interlanguage representation of the English passive among L1 Malay ESL tertiary students in Malaysia. This paper focuses on the perception aspect of the learners' interlanguage and, therefore, does not include results from the production study. By looking at errors produced by learners at different levels of English proficiency, the study sought to shed light on the interlanguage development of L1 Malay ESL tertiary students at different stages of L2 acquisition.

### Unaccusative Hypothesis: The Unaccusative/Unergative Distinction

The Unaccusative Hypothesis postulates two subclasses of English intransitive verbs: unaccusative and unergative (Burzio, 1986; Perlmutter, 1978). These two classes differ in their syntactic constraints and underlying semantic representations. The unaccusative verbs denote unwilled or non-volitional acts, which are verbs of change of state or location, such as *burn*, *melt*, *fall* and *happen*, while the unergative verbs entail willed or volitional acts, for example, *dance*, *run*, *walk*, and *sleep* (Park & Lakshmanan, 2007).

Unaccusative verbs have an internal argument generated from the object position with a thematic role (theta role) of THEME/PATIENT, similar to the object of transitive verbs, yet lacks an external argument (subject) functioning as AGENT. Meanwhile, the unergative verbs have an external argument generated in the subject position with a theta role of AGENT, similar to the subject of transitive verbs. The difference in argument-structure property between unaccusatives and unergatives is reflected in their distinct underlying structures, as shown in Examples (c) and (d) below. Superficially, both appear syntactically similar but differ in their underlying representations.

(c) NP [<sub>VP</sub> V \_\_\_] unergative  
[John [<sub>VP</sub> laughed]]

(d) \_\_\_ [<sub>VP</sub> V NP] unaccusative  
[John<sub>i</sub> [<sub>VP</sub> arrived <sub>i</sub>]]

(Shan & Yuan, 2008, p.165)

In (c), the unergative verb requires an external argument but lacks an internal argument, which means that it has a subject (AGENT) and no object (Shan & Yuan, 2008). The sole argument of unergative verbs is in the subject position, behaving like a subject of transitive verbs (Burzio, 1986). On the contrary, as shown in (b), the internal argument but not the external argument is present, as the unaccusative verb has an internal argument and lacks an external argument. The surface subject of an unaccusative verb is derived from the direct object through NP movement. The derived subject is similar to the object of a transitive verb but differs from the subject of a transitive or unergative verb. This syntactic process is similar to the formation of the passive, which involves the NP-movement of the subject to the object position and vice versa (Kondo, 2005; Oshita, 2000; Shan & Yuan, 2008; Yip, 1995; Yuan, 1999). The verb in the passive is morphologically marked; however, it is not the case with unaccusatives. The unique syntactic structure and semantic representation of the unaccusatives have been cited as the cause of considerable learning problems for L2 learners. L2 acquisition studies have reported that L2 learners tend to overgeneralise passive morphology to intransitive verbs, and more noticeably with the unaccusatives than with the unergatives (Ju, 2000; Hahn, 2009, 2011; M. Oh, 2014; Oshita, 2000, 2001; Shin, 2011; Wee, 2009; Yuan, 1999; Yip, 1995).

As overpassivisation has been observed in the interlanguage of L2 learners of many

different L1s, it has been proposed that it is a universal phenomenon in the development of L2 English (Ju, 2000; Hawkins, 2001; Oshita, 2001; White, 2003), that is to say, it is a part of the process of working out the system of the target language rather than effects of interference from the learner's L1.

## METHODOLOGY

### Participants and Sampling

A two-stage random sampling technique was used in the selection at the level of institutions and classes. The first stage was a random selection of institutions of higher learning in Malaysia which was conducted using computer-generated random numbers. The institutions selected were contacted, and where there was no approval granted or reply received, the selection process was repeated. The final number of institutions selected was nine Malaysian institutions. These institutions provided a list of English classes and the lecturers' contact numbers. Another stage of random selection was then conducted on the lists of classes using computer-generated numbers. Out of the total of 71 classes, 45 classes were selected using computer-generated numbers. The respective lecturers were also contacted for permission to enter their classes. All students in the selected classes, totalling 940, completed the background information questionnaire and language tasks.

Data screening was then performed to select further participants who were L1 Malay speakers with a score of 50 on the Oxford Placement Test (Allan, 2004). The

final number of participants included in the study was 499. There were 236 students in the Elementary proficiency group, 163 in the Lower Intermediate group, 78 in the Upper Intermediate group, and 22 in the Advanced group. The sample size of 499 is deemed sufficient as this study should have a minimum sample size representative of 384 (Cohen et al., 2007; Krejcie & Morgan, 1970).

### **Instruments**

The participants completed three language tasks: The Oxford Placement Test (OPT), a grammaticality judgement test, and a picture description test. As this paper focuses on participants' competence, production results from the picture description test are excluded. The OPT was used to determine the participants' English proficiency level. The grammaticality judgement test (GJT) was used to determine the participants' competence in identifying acceptable and unacceptable English passive forms. The items consist of 24 active grammatical structures and 24 ungrammatical passive structures, with half using unaccusative verbs and half using unergative verbs for both the grammatical and ungrammatical items.

The verbs in the test were adopted from those used in past studies on L2 acquisition in the English passive and studies on overpassivisation errors (e.g., Hirakawa, 2001; Ju, 2000; Kondo, 2005; Oshita, 2000; Park & Lakshmanan, 2007; Yuan, 1999). Each type of verb was represented by 3 different verbs: Unaccusative (fall, happen, die); Unergative (run, laugh, swim).

The length of the items in the GJT was between 6 to 9 syllables, and the types of tenses in the test items were balanced in number. The GJT was validated by piloting it with 48 native English speakers using an online version of the test. The result obtained was 98% accuracy. Further, the instrument was piloted on 39 Malaysian participants, and Cronbach's coefficient alpha was 0.93. The arrangement of the items was randomised in the GJT to avoid a metalinguistic focus on the part of the participants (see Carson, 2016; Elliot et al., 1969; Greenbaum, 1973).

Students' responses in the GJT were examined for accuracy in their judgement of the grammatical and ungrammatical structures of the unaccusatives and unergatives. Paired *t*-tests were then performed to determine differences between the scores for each verb type. A one-way ANOVA was also conducted to examine differences across proficiency groups (Field, 2018; Pallant, 2020).

### **Ethical Clearance**

This research was approved by Universiti Putra Malaysia's Ethics Committee for Research Involving Human Subjects (ref: FBMK(EXP15)P42).

## **RESULTS**

### **Overpassivisation and Verb Type**

Students' performance (correct responses) for items in the GJT was scored. Mean scores were obtained for their competence in accepting the grammatical sentences

and rejecting the ungrammatical sentences. Grammatical sentences were active structures of the verbs, and ungrammatical sentences were the overpassivised structures

of the verbs. Table 1 presents the mean scores for both the unaccusative and unergative verbs.

Table 1

*Students' mean scores in correctly identifying grammatical and ungrammatical sentences according to verb type*

	Unaccusative verb <i>M</i> (n=499)	Unergative verb <i>M</i> (n=499)
Grammatical sentences	82.53	82.99
Ungrammatical sentences	59.80	71.26

*Note.* 0 < *M* < 100

The students performed well in accepting the grammatical structures of the unaccusative and unergative verbs. They correctly judged the active structures as grammatical, with a mean percentage score above 80%. A score of 80% and above is normally similar to native-like performance (Muftah & Wong, 2011; Soo & Wong, 2012; Wong, 1999, 2002). It suggests that the students are competent in recognising grammatical structures using intransitive verbs. However, their scores in correctly rejecting ungrammatical structures were poorer, at mean scores of only 59.8% and 71.26% for the unaccusative and unergative verbs, respectively. To find out whether these lower scores for failing to recognise

overpassivised (ungrammatical) structures are due to chance, the paired samples *t*-test was conducted to determine whether there is a significant difference between the mean scores for students' correct identification of the grammatical and ungrammatical sentences within each verb category. The results show that the differences are statistically significant, at  $t(498) = 18.66, p < 0.001$  for the unaccusative verbs, and  $t(498) = 11.68, p < 0.001$  for the unergative verbs (see Table 2). It suggests that students can make more correct judgments on the active (grammatical) structures of both the unaccusatives and unergatives than the overpassivised (ungrammatical) structures of both verb types.

Table 2

*Paired samples t-test on students' mean scores in correctly identifying grammatical and ungrammatical sentences within verb types*

	Grammatical Sentences		Ungrammatical Sentences		<i>t</i>	<i>df</i>	<i>p</i>
	<i>M</i> (n=499)	<i>SD</i>	<i>M</i> (n=499)	<i>SD</i>			
Unaccusative verb	82.53	10.62	59.80	25.66	18.66	498	0.000*
Unergative verb	82.99	11.25	71.26	19.21	-11.86	498	0.000*

*Note.* \* $p < 0.01, 0 < M < 100$

The results also show that students scored more poorly in recognising the overpassivised structures using the unaccusative than those using the unergative verbs. To determine whether the difference is statistically significant, the paired samples *t*-test was conducted. As shown

in Table 3, the mean score representing students' competence in rejecting the overpassivised structures using unergative verbs is significantly higher than their score for rejecting the ungrammatical structures using unaccusative verbs, at  $t(498) = 16.26$ ,  $p < 0.001$ .

Table 3

*Paired samples t-test on students' mean scores for correctly rejecting ungrammatical sentences across verb types*

Ungrammatical Sentences	Unaccusative verb		Unergative verb		<i>t</i>	<i>df</i>	<i>p</i>
	<i>M</i> ( <i>n</i> =499)	<i>SD</i>	<i>M</i> ( <i>n</i> =499)	<i>SD</i>			
	59.80	25.66	71.26	19.21	-16.26	498	0.000*

Note. \* $p < 0.01$ ,  $0 < M < 100$

### Overpassivisation and English Proficiency Level

Students' mean scores were examined for each proficiency group to investigate the influence of L2 proficiency level on students' competence in recognising overpassivised structures. Table 4 shows the mean scores for both the unaccusative and unergative verb types.

The scores indicate that the students' correct rejection of overpassivised structures for both verb types progressively increases as their English proficiency levels increase. At the Elementary level, the lowest level of proficiency, students have the most difficulty discerning correct and incorrect forms, with poorer scores for unaccusative and unergative verbs (46.14% and 62.19%, respectively). At the Lower Intermediate level, while students' correct judgement of overpassivised forms with unergative verbs increased to 73.93%, which is slightly

short of 80%, their judgement of the same with unaccusative verbs remains quite low, at 62.37%, which is moderately higher than the chance level of 50%. On the other hand, the Upper Intermediate and Advanced proficiency groups appear to have acquired a high competence in recognising overpassivised structures and correctly rejecting them, at mean scores above 80%.

These findings show that students can resolve the overpassivisation confusion more easily for unergative verbs than unaccusative verbs. Overpassivisation is common for the unergative and unaccusative verb types at low proficiency levels. However, while learners at the Low Intermediate proficiency level have reconfigured their understanding of the intransitive rule for the unergative verb to a large extent (a higher mean score of 73.93), overpassivisation remains high for the unaccusative verb (a low mean score of 62.37). For the unaccusatives, there is

Table 4  
*Mean percentage scores for ungrammatical items across English proficiency levels*

English Proficiency Level	Unaccusative verb	Unergative verb
	<i>M</i> (n = 499)	<i>M</i> (n = 499)
EL (n = 263)	46.14	62.19
LI (n = 163)	62.37	73.93
UI (n = 78)	85.15	86.75
ADV (n = 22)	97.47	93.94

Note. EL = Elementary; LI = Lower Intermediate; UI = Upper Intermediate; ADV = Advanced;  $0 < M < 100$

a steep increase in the correct rejection of overpassivised forms from 62.37 to 85.15 from the Low Intermediate to the Upper Intermediate proficiency levels.

A one-way ANOVA test was performed to determine whether students' English proficiency significantly affected their recognition of overpassivised structures. Statistically significant results were obtained indicating the role of proficiency in students' rejection of ungrammatical unaccusatives ( $p < 0.05$ ,  $F(3,499)=103.61$ ,  $p = 0.000$ ) and ungrammatical unergatives ( $p < 0.05$ ,  $F(3,499) = 62.65$ ,  $p = 0.000$ ) (see Table 5).

The post-hoc comparison showed significant differences in the scores for the two verb types between all pairs of proficiency groups, except for the Upper Intermediate and Advanced pairing (see Table 6).

The scores between the EL, LI and UI groups are significantly different. In contrast, scores between the UI and ADV groups show no difference for both the unaccusative and unergative verb types, providing important information on the development pattern in learners' acquisition of the passive rule. While learners experience a more difficult struggle in processing the unaccusative than

Table 5  
*One-way ANOVA on students' correct rejection of ungrammatical sentences between proficiency groups for both verb types*

Source	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Sig. p</i>
<b>UG Unaccusatives</b>					
Between	3	126468.49	42156.16	103.61	0.000*
Within	495	201404.42	406.88		
Total	498	327872.91			
<b>UG Unergatives</b>					
Between	3	50592.66	16864.22	62.65	0.000*
Within	495	133240.01	269.17		
Total	498	183832.67			

Note. UG =Ungrammatical, \* $p < 0.05$



the unergative structures, upon reaching the Upper Intermediate proficiency level, any misinterpretation of the rule applied to both intransitive verb types appears to be resolved.

Another point to note is that the learners in the current study are students studying in higher learning institutions and who are well-exposed to the English language due to the many years of formal English instruction in school and the use of English as the medium of instruction in their tertiary academic programmes, in addition to the

fact that English is widely used as a second language in the country. However, despite the extent of exposure to and familiarity with the language, learners' proficiency level plays a vital role in determining whether the learner can sort out the English grammatical system to exclude the passive morphology from intransitive verbs. For the students in the study, the Upper Intermediate proficiency level, as measured by the Oxford Placement Test, appears to be the threshold for students to be competent in rejecting overpassivised forms (see Figure 1).

Table 6  
*Post-hoc Tukey Result for ANOVA*

Sources	Proficiency Levels	Mean Difference	<i>p</i>
UG Unaccusatives	EL-LI	16.23	0.000*
	EL-UI	39.01	0.000*
	EL-ADV	51.34	0.000*
	LI-UI	22.78	0.000*
	LI-ADV	35.10	0.000*
	UI-ADV	12.33	0.056
UG Unergatives	EL-LI	11.73	0.000*
	EL-UI	24.56	0.000*
	EL-ADV	31.75	0.000*
	LI-UI	12.83	0.000*
	LI-ADV	20.01	0.000*
	UI-ADV	7.19	0.268

Note. UG =Ungrammatical, \**p* < 0.05

## DISCUSSION

The present study aims to investigate overpassivisation errors concerning verb type and English proficiency level among L1 Malay ESL students in institutes of higher education in Malaysia. The findings

indicate that while L1 Malay ESL students in Malaysian higher learning institutions can identify grammatical structures using unaccusative and unergative verbs, they had problems rejecting overpassivised structures for both unaccusative and unergative verbs.

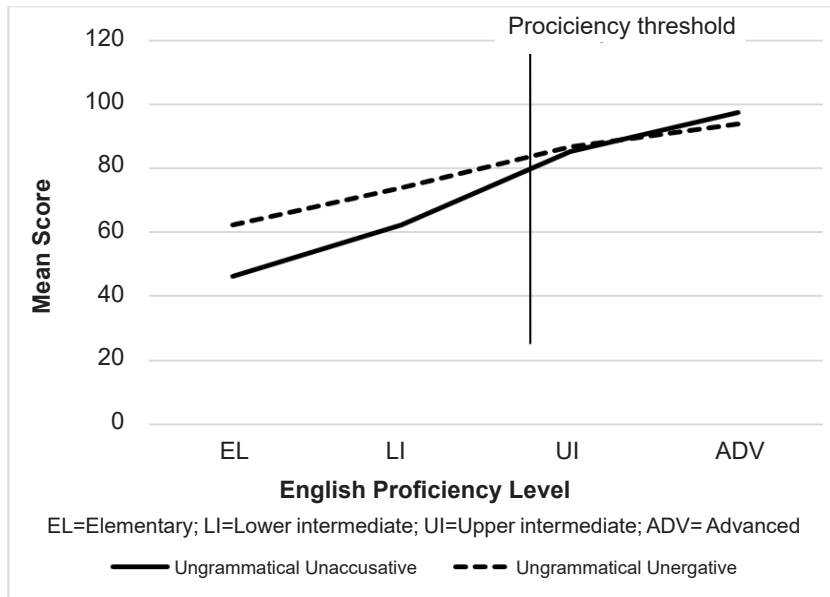


Figure 1. English proficiency level and students' mean scores in rejecting overpassivised structures

Further, the students are more inclined to extend the passive morphology to the unaccusative verbs than the unergative verbs, in line with findings of past studies (e.g., Ju, 2000; Hahn, 2009, 2011; M. Oh, 2014; Oshita, 2000, 2001; Shin, 2011). This finding is consistent with the results of previous studies, which found that L2 overpassivisation occurred more with unaccusative verbs than with unergative verbs (e.g., Balcom, 1997; Hahn, 2009; Hirakawa, 2001; Lee, 2007, 2010; Oshita, 2000; Sorace & Shomura, 2001). The unaccusatives are more susceptible to passivisation errors because their internal argument has a feature similar to the object of a transitive verb and hence, a higher tendency to be mistakenly passivised by L2 learners. In contrast, unergatives are less susceptible to overpassivisation because their

external argument is similar to the subject of a transitive verb (Burzio, 1986; Shan & Yuan, 2008). The differential acceptance rates of overpassivised structures for both the verb types imply that the students can discern between the underlying structures of both the unaccusative and unergative verbs in working out the passivisation rule in their interlanguage. The finding supports the Unaccusative Hypothesis (UAH), which postulates that L2 learners analyse unaccusative and unergative verbs differently.

The findings also revealed that as English proficiency level increases, the students become more competent in rejecting overpassivised structures; this is true for both the unaccusative and unergative verbs. This finding is consistent with previous studies, such as Montrul (2001), who found

that learners at the low L2 proficiency level failed to utilise the correct form of a particular L2 structure initially but eventually obtained the target grammar as their proficiency level increased. Also, Shin (2011), who conducted a corpus study on Korean college students' English writings, reported that learners of high-intermediate level committed fewer overpassivisation errors compared to mid- and low-intermediate students. While these past studies have shown that overpassivisation decreases with increasing proficiency, the present study attempted to shed light on the process of this development. The findings suggest that L1 Malay ESL students resolve their understanding of the ungrammatical forms more easily for the unergatives than unaccusatives as they progress in their English proficiency. While students' over-generalisation of the passive rule extends to both unaccusative and unergative verbs, especially at the lower proficiency levels, students can resolve this misapplication of the passive morphology more easily with unergative verbs than unaccusative verbs due to the inherent differences in the underlying structure of the verbs as discussed earlier. Upon reaching a higher proficiency threshold (Upper Intermediate level in this study), the type of verb makes no difference to students' performance as students can reject overpassivised forms for both verb types equally.

## CONCLUSION

Acquiring the English passive is challenging for L2 learners, even those

at advanced proficiency levels (Amadi, 2018; Choomthong, 2011; Hinkel, 2004; Kalimuttu, 2016; Wang, 2016). Overpassivization is one of the notable error types observed in the interlanguage of L2 learners of different L1 backgrounds and proficiency levels. These L2 learners tend to overuse the passive morphology with the intransitive verbs, more significantly with the unaccusative verbs than the unergative verbs. The present study thus focused on L2 Malay ESL students to investigate the extent to which they committed this type of overpassivisation error. Consistent with past studies, the findings show the students have problems recognising ungrammatical overpassivised structures, and more so with the unaccusative than the unergative verbs. However, it is worth pointing out that while there were fewer wrong judgements on overpassivised unergative structures, they nevertheless did occur and be statistically higher than the extent of wrong judgements of unergative grammatical structures. Furthermore, the findings also revealed that English proficiency level influences the students' recognition of overpassivised forms as ungrammatical. Progressive acquisition of the grammatical rule with increasing L2 proficiency may be viewed as part of the process of interlanguage development, where learners go through development stages in L2 learning and through which their interlanguage grammar is continuously reconfigured and updated (Hawkins & Chan, 1997; Tarone, 2018; Towell & Hawkins, 1994; White, 2003). The study's findings provide insights

into the interlanguage representations of the English passive of L1 Malay ESL adult learners of different proficiency levels. It contributes a better understanding of the developmental process of the L1 Malay ESL adult learners to the SLA literature, particularly on the Unaccusative Hypothesis, which currently lacks insights from the perspectives of L1 Malay ESL adult learners. ESL language instructors, teachers, and language practitioners can benefit from the findings as they understand better the problems L1 Malay learners of English experience when asked to produce the English passive. Learning material for students should be carefully arranged, considering L1 influence, complexities of the L2, and learners' L2 proficiency.

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## **Structures and Functions of Lexical Bundles in Student and Expert Timed Argumentative Writing: A Corpus-Driven Study**

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### **ABSTRACT**

Despite rich research into lexical bundle use in documented writing on both expert and novice levels, little is known about this linguistic behaviour in undergraduate timed argumentative writing. This study aimed to narrow this gap by examining two self-compiled corpora: a student corpus composed of 200 timed argumentative essays written by first-year students at a Vietnamese university and an expert corpus comprising 200 essays of the same type produced by IELTS professional writers. Employing existing bundle classification frameworks, it compared structures and functions of four-word bundles across the corpora. Results showed that bundle use was more clausal than phrasal in both corpora, inconsistent with a few previous studies. In addition, the student corpus outnumbered the reference corpus in all broad structural categories, which can be ascribed to the over-manipulation of the “Pronoun/NP + be/VP fragment”, “NP with *of*-phrase fragment”, and “PP with *of*-phrase fragment” constructions. Function-wise, the ubiquity of stance and discourse organising bundles in both the corpora reflected the nature of argumentation, on the one hand, and the rigidly structured IELTS writing format, on the other. The study concluded with methodological implications for bundle research and pedagogical implications for L2 writing.

*Keywords:* Argumentative writing, bundle functions, bundle structures, corpus linguistics, lexical bundles, timed writing

### **INTRODUCTION**

Over the past decades, investigations into large corpora such as the Bank of English (Sinclair, 1991) and the London-Lund Corpus of Spoken English (Svartvik, 1990) brought to the fore the fact that a large proportion of language is prefabricated or formulaic. This proportion was reported

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to range between 32% (Foster, 2001) and 58% (Erman & Warren, 2000). Formulaic sequences, in Wray and Perkins' (2000) words, are "stored and retrieved whole from memory at the time of use, rather than being subject to generation or analysis by the language grammar" (p. 1), so alleviating the cognitive load when learners process the language (L. Wei & Ying, 2011) and facilitating language production (Granger, 2018; Stengers et al., 2011; Wood, 2002).

Formulaic sequences come in several forms, such as idioms, collocations, and lexical bundles (Paquot & Granger, 2012). Among these, lexical bundles, or chunks (De Cock, 1998), n-grams (Stubbs, 2007a, 2007b), and clusters (Hyland, 2008a, 2008b), as termed by other scholars, have received growing attention for their unique semantic and structural attributes and a bottom-up empirical identification approach. Unlike idioms, they are stripped of idiomatic nature, and unlike collocations, they can be syntactically incomplete, as in "the end of the" (Biber & Barbieri, 2007; Y. Wei & Lei, 2011). Notably, lexical bundles are the result of computational corpus-driven retrieval. A word chunk must occur at a normalised frequency threshold of 20–40 times per million tokens and across at least 3–5 texts in the corpus to eliminate individual writers' idiosyncrasies to qualify as a lexical bundle. Biber et al. (1999) defined the construct as the most frequently recurring word sequences in each register or genre. Although this linguistic feature has inspired a decent body of research aimed at postgraduate and research writing, little is done relative to the specific genre of

undergraduate argumentative writing under a timed condition, so further investigations are warranted. The next discussion provides a detailed account of this.

### **Previous Research on Structures and Functions of Lexical Bundles**

Lexical bundle research can be summarised into at least three sublines of inquiry. Early researchers were interested in bundles within and across spoken and written registers with Biber et al.'s (1999) seminal work. The authors extracted bundles from the Longman Spoken and Written English corpus, based on which they developed a 12-category taxonomy for structural classification and found that bundles in conversation are more clausal (e.g., *I would like to*). At the same time, those in academic prose are more phrasal (e.g., *as a result of*). A series of other Biber's studies followed this work and echoed its findings (Biber et al., 2003, 2004; Biber & Barbieri; 2007), with Biber et al. (2004) adding that teaching discourse, as an intermediate register, structurally resembles both conversations in clausal bundles and academic prose and textbooks discourse in phrasal bundles.

The second set of studies, which has received the most rigorous consideration by far, focuses on academic research and disciplinary writing. They looked at discrepancies in bundle use between professional writers and student writers, among professional writers *per se*, and among student writers *per se*. It is agreed that professionals and students do not differ significantly in usage patterns of

bundle structures as both groups of writers employ clusters that are based more on noun phrases (NP; e.g., *this point of view*) and prepositional phrase (PP; e.g., *in the number of*) than verb phrase (VP; e.g., *it is possible to*) (Chen & Baker, 2010; Cortes, 2004, 2008; Hyland, 2008a, 2008b; Y. Wei & Lei, 2011). In a similar spirit, there is a consensus that native professionals produce more NP- and PP-based chunks while non-native professionals depend on VP-based forms (Akbulut, 2020; Esfandiari & Barbary, 2017; Fajri et al., 2020; Pan et al., 2016). As far as student writing is concerned, studies by Bychkovska and Lee (2017) and Lu and Deng (2019) converge that bundle use is verb-heavy in Chinese student writing compared to English student writing.

Function-wise, it is important to note that researchers utilised two distinctive taxonomies, i.e. that of Biber et al. (2004), with three broad categories of stance (e.g., *it is difficult to*), discourse organising (e.g., *on the one hand*), and referential expressions (e.g., *when it comes to*) (Adel & Erman, 2012; Bychkovska & Lee, 2017; Chen & Baker, 2010; Cortes, 2008), and Hyland's (2008a, 2008b) research-specific version consisting of research-oriented (e.g., *a wide range of*), text-oriented (e.g., *as shown in figure*), and participant-oriented functions (e.g., *it is suggested that*) (Akbulut, 2020; Lu & Deng, 2019; Pan et al., 2016; Y. Wei & Lei, 2011). Mixed findings have been reported. For example, while native English students use more stance bundles (Adel & Erman, 2012), non-native Chinese counterparts prefer bundles of this type (Bychkovska & Lee, 2017), or while

professional writing represents remarkably more text-oriented than research-oriented bundles (Hyland, 2008a, 2008b), there is a similar amount of these functions between professional writing and student writing (Y. Wei & Lei, 2011).

The third subdomain of bundle inquiry pertains to undergraduate general academic writing, whose literature is scarce and methodologically inconsistent, so it interests the present study. Ping (2009) compared two subcorpora of argumentative scripts written by Chinese-L1 and English-L1 students. The scholar suggested that the Chinese corpus mainly contained clausal multiword and stance-oriented expressions, especially those with the embedded third-person plural pronoun *we*. It is congruent with Nam and Park (2020), who examined argumentative essays composed by Korean and American students and showed that the former writers relied more heavily on VP-based and stance sequences than the other group. Staples et al. (2013) and Chen and Baker (2016), dealing with bundle use across proficiency levels, were unanimous in that stance bundles persisted across all three levels. Chen and Baker (2016), however, added that bundles used in lower levels mirrored a more personal tone and those in higher levels more impersonal, and in terms of structure, lower-level essays were characterised typically by VP-based bundles while more proficient writings by more nominal constructions. With all that has been discussed, these conclusions should be treated with great caution because of the inconsistencies in the studies' methodological arguments.

## The Gap in Bundle Literature and Research Questions

The impetus for this study was two-fold. Firstly, while studies on bundle use across registers and academic disciplines are many, we know very little about the domain of timed argumentative essays, one of the most widely accepted text genres of undergraduate academic writing (Johns, 1995). Secondly, those rare studies display methodological limitations that potentially render their findings questionable, the most problematic of which seems to be inadequate management of confounding influences. Specifically, the subcorpora in Ping (2009) contained both timed and untimed writings of different mean lengths, while intuitively, unmatched time conditions and length requirements may activate different language use mechanisms. Chen and Baker (2016), while trying to ensure data homogeneity as to time condition, essay length, and topic, did not discriminate argumentative writing from general expository writing. Staples et al. (2013) compared two unparallel datasets: a self-compiled corpus of TOFEL-iBT timed exam responses and Chen and Baker's (2010) corpus of discipline-specific academic writing. The present study compares bundles to use in timed argumentative scripts written by Vietnamese university students and professional IELTS writers, trying to fine-tune previous research from a methodological perspective. In so doing, it sought to address two questions below:

1. What are the structural patterns of lexical bundles used by Vietnamese

student writers and expert writers in timed argumentative essays?

2. What are the functional patterns of lexical bundles used by Vietnamese student writers and expert writers in timed argumentative essays?

## METHODOLOGY

### Corpora Construction

The present study employed a whole corpus approach (Brezina, 2018). Materials used were two self-compiled corpora: a student corpus and an expert corpus (henceforth SC and EC). The SC was constructed based on Granger's (2013) learner corpus design model, which highlights two variables associated with the learner and the task. For the sake of comparability, variables persisting across the corpora were: task type (IELTS Task 2 simulated essay), text genre/rhetorical function (argumentative), conditions (timed and short writing), and discipline (general topics).

The SC consisted of 200 scripts produced mainly by first-year students undertaking the English major program and partly by a small group of other freshmen taking English modules as prerequisites at a university in Vietnam between 2017 and 2020. The essays were from mid-term and final exam papers with the task assimilated to IELTS Task 2, in which the students composed an extended response of at least 250 words to a general topic. The complete list of chosen topics can be found in Appendix A1. The request for access to these scripts was made to the faculty's management board, and

they were offered anonymity as the student information had been removed. Only essays scoring 6.0 and 8.0 (out of 10) were selected to limit the observed proficiency level to B2 upper-intermediate. These cut scores were determined concerning the Vietnamese Standardised Test of English Proficiency (VTSEP) score conversion guide, which is, in turn, based on the Common European Framework of Reference for Languages (CEFR) scale descriptors. All the chosen exam papers had previously been marked by EFL writing instructors, following an analytical rating procedure. As a step of the second rating, essays whose scores the researcher disagreed with were purposively removed.

The subsequent stage in the SC construction was typing. There was either no or insufficient documentation of how texts were typed in preceding studies until Bychkovska and Lee (2017), Huang (2015) and Shin et al. (2018) scrutinised bundle errors. Whether grammatical, lexical, and orthographical errors are corrected should largely affect the results. Not departing from an error-analysis approach but rather appreciating learners' attempts to use patterned language, the researcher corrected errors that would potentially jeopardise the status of a bundle. In so doing, the researcher referred to the authors mentioned above for common bundle errors and decided upon four main types: preposition (*in the one hand – on the one hand*), article (*as the result – as a result*), word form (*it is clearly that – it is clear that*), and spelling (*beleive – believe*). Chen and Baker's

(2016) list of bundles was consulted since the study is closest to the present study in task and learner characteristics to filter out potential bundles for correction. Except for the erroneous bundles, the essays were typed verbatim in MS Word and converted into *.txt* files.

The reference corpus EC consisted of 200 essays written by IELTS experts. The tricky 'expert' quality was assured by accepting only compositions from (1) published IELTS books, (2) a reliable IELTS website, and (3) two renowned IELTS trainers: Simon and Mat Clark. The books were checked for credibility by referring to their publishing houses (the book list can be found in Appendix A2). The chosen website was *ielts-exam.net*, whose scripts considerably overlapped with those from published books; the two IELTS experts are well-known for their public dissemination of Band 9.0 compositions. As the rhetorical function was argumentation, only these questions were opted for: (1) *To what extent do you agree or disagree?* (2) *Do you agree or disagree?* (3) *Discuss both views and give your own opinion*, and (4) *Do the advantages outweigh the disadvantages?* The essays were typed verbatim in MS Word and converted to *.txt* files. Table 1 sketches out the corpora.

### Retrieval and Filtration of Bundles

AntConc, a software program developed by Anthony (2014), enabled the automatic retrieval of lexical bundles. Input values were needed: the bundle length, the normalised cut-off frequency, and the dispersion range.

Table 1  
*Description of two corpora*

Characteristics	SC	EC
Task type	IELTS Writing Task 2	
Text genre	Argumentative essay	
Writing condition	Timed	
Topics	General	
No. of texts	200	200
Mean text length	335 (SD = 71)	290 (SD = 30)
Range	210–582	251–405
Mean score	6.97	N/A
Corpus size (tokens)	67,006	57,951

This study considered four-word bundles under their salience in bundle scholarship. The widely documented frequency and dispersion criteria figures are 20–40 times per million words and at least five texts. While the observed corpora were small, a normalised frequency threshold of 40 times per million words was taken, equivalent to a raw frequency of 2.6 times for the SC and 2.3 times for the EC. As these values were still below the dispersion criterion, even accepting the minimum requirement of three texts, the dispersion was set first to

four texts, raising the raw frequencies to four times for each corpus. This establishment retrieved 547 types and 4806 tokens in the SC and 98 types and 577 bundles in the EC.

Removing bundles that may inflate the overall results appears to be what past research ignored or poorly handled until Chen (2009), in her doctoral dissertation, worked out a ‘pseudo’ bundle treatment procedure. In this study, these ‘disguised’ bundles were manually filtered according to the exclusion criteria in Table 2.

Table 2  
*‘Pseudo’ bundles removal criteria*

Removal criteria	Description
(a) Context-dependent bundles	
i. Prompt-based bundles	A great number of ‘true’ bundles stem from the prompts in the SC, e.g., <i>some people believe that</i> (prompt #9). The question was whether the writers truly possessed this bundle in their repertoire. To illuminate this, I checked the concordance lines and established two selecting criteria: the paraphrasing degree and the assigned score. If a chunk of text containing the prompt-based bundle rephrased the prompt at an acceptable level, plus the essay was awarded at least 7.0 (the SC’s mean score), the bundle would be retained or otherwise deducted from frequency statistics. Other obvious prompt-based bundles, like <i>the main source of information</i> or <i>media, such as newspapers</i> , were easily eliminated.

Table 2 (Continue)

Removal criteria	Description
ii. Topic-related bundles	In conformity with Biber et al.'s (1999) accentuation of register/genre-specific rather than topic-specific nature of bundles, those related to the topics were disqualified. For instance, the bundle <i>at an early age</i> in the EC was used in texts responding to different prompts on the same topic of young children's education, so it was taken off the list. Ambiguous bundles such as <i>have the right to</i> and <i>society as a whole</i> remained counted as they were found across texts with different topic areas.
<b>(b) Overlapping bundles</b>	
i. Complete overlap	Refers to two four-word bundles with matching frequencies derived from the same five-word bundle. For example, the two bundles, <i>there is no doubt</i> and <i>no doubt that</i> , occur 16 times, so they were merged as <i>there is no doubt + that</i> with 16 counts.
ii. Complete subsumption	Refers to two four-word bundles being part of a five-word bundle but differing in occurrences. For example, <i>in conclusion, I think</i> in the EC occurs 8 times, and <i>conclusion I think that</i> occurs 6 times. The latter is completely subsumed in the former in frequency, so it was noted as <i>in conclusion, I think (+ that)</i> with a frequency of 8 times and the latter was removed.
iii. Partial subsumption	Refers to a situation in which two four-word bundles derived from the same five-word bundle, differing in occurrences but not completely subsumed in each other. For instance, <i>more and more popular</i> with 11 counts and <i>is more and more</i> with 6 counts; sharing 4 counts of the longer bundle <i>is more and more popular</i> . In this case, it was rewritten as <i>(is +) more and more popular</i> , with a finalised frequency being the sum of occurrences of the component bundles minus that of the shared five-word bundle, or 13.

Bundle types and tokens in both corpora dwindled after the manual extraction (see Table 3).

**Analytical Frameworks**

The present study analysed lexical bundles considering Chen and Baker's (2010)

Table 3  
Bundles in two corpora before and after removal of 'pseudo' bundles

	SC		EC	
	Types	Tokens	Types	Tokens
Before filtration	547	4806	98	577
After filtration	139	1057	77	490

Note. Type = the number of different bundles; Token = the number of occurrences of the bundles

structural taxonomy and Chen and Baker's (2016) functional taxonomy. The structural framework originated from Biber et al. (1999). It was taxonomised by Chen and Baker (2010) into three broad categories, i.e., NP-based, PP-based, and VP-based, with each category entailing a few subcategories. It is the only framework to date that has been employed by researchers for categorising lexical bundles structurally.

The functional taxonomy underwent a more complex evolutionary process. It was rooted in Biber et al. (2004) and constantly modified by Biber and Barbieri (2007), Chen (2009), Chen and Baker (2010, 2016). Chen and Baker's (2016) version was adopted due partly to its recency and partly to its nature of being non-research-directed as opposed to Hyland's (2008a, 2008b), which caters better to research-based writing. Due to space constraints, the chosen taxonomies are not presented separately but are embedded in Tables 5 and 7.

### Data and Statistical Analysis

The lexical bundles, upon retrieval, were each assigned a code corresponding to its subcategory, e.g., N1 for the "NP with *of*-phrase fragment" structure or S1 for an epistemic function, after having been meticulously checked with literature and concordance lines. They were then grouped by the letter code they shared. Intra-coding was carried out twice since the first coding, with the second coding two weeks after the first coding and the third another two weeks after the second. When there were inconsistencies in the coding, I consulted

Chen's (2009) bundle list, in which each item was transparently structurally and functionally categorised. Type and token frequencies and percentages were then computed for descriptive analysis. As the two corpora were unequal, the occurrences were normalised to 100,000 words. The log-likelihood (LL) tests were applied to raw token occurrences of each main category and subcategory for significance testing. Lancaster University's Log-likelihood online calculator was employed to this end. LL critical values were as follows: an LL of 3.84 or higher was significant at  $p < 0.05$ , an LL of 6.63 or higher was significant at  $p < 0.01$ , an LL of 10.83 or higher was significant at  $p < 0.001$ , and an LL of 15.13 or higher was significant at  $p < 0.0001$ .

## RESULTS AND DISCUSSION

### Structural Differences in Bundle Use Between Two Corpora

Overall, VP-based bundle types dominated both the corpora, accounting for nearly two-thirds of each corpus (64% in the SC and 63.6% in the EC), while NP-based and PP-based bundle types combined made up a third of each corpus (34.5% in the SC and 33.8% in the EC; see Table 4). The figures suggest nearly identical distributional proportions of the three main categories across the corpora, with a difference of less than 1%. Token-wise, this pattern recurred despite a widened yet inconsiderable gap, signifying a highly consistent type and token distributional reality that bundles used in student writing and expert writing were more clausal than phrasal. This result



Table 4  
*Distribution of broad structural categories in two corpora*

Category	Types (%)		Tokens (%)	
	SC	EC	SC	EC
NP-based	12.9	13	12.3	10.6
PP-based	21.6	20.8	25.4	25.1
VP-based	64	63.6	59.5	62.5
Others	1.5	2.6	2.8	1.8

contradicts previous findings in a few ways. Relating to register, scholars (Biber et al., 1999, 2004; Biber & Barbieri, 2007) agreed that clausal bundle use is an attribute of spoken rather than written discourse, while the examined discourse was primarily clausal. Also, while clausal bundles are used by student writers and phrasal bundles more frequently by expert writers (Chen & Baker, 2016; Cortes, 2008; Hyland, 2008a, 2008b), this does not completely hold for this study as clausal bundles were representative of both sets of writings.

Table 5 further illuminates how lexical bundles were structurally used across the corpora. If we look at each main category, it is visible that the between-corpus proportional pattern deduced above no longer applies. All major categories of bundles were used at least twice more frequently in the SC than in the EC; the differences were statistically significant at  $p < 0.0001$ . This finding agrees with previous studies (Chen & Baker, 2016; Nam & Park, 2020; Ping, 2009) in that non-native writing contains more verbal constructions, but at the same time, disagrees with others (Bychkovska & Lee, 2017; Pan et al., 2016) in that they found more nominal and prepositional

constructions in expert writing. Scrutiny of the subcategories cast further light.

The corpora were heavily clausal due primarily to the “Pronoun/NP + be/VP fragment” construction with respective frequencies of 482 and 200.2 times per 100,000 words (p100kw). This construction is one that Chen and Baker (2010, 2016) modified by adding the VP fragment in the predicate position, allowing a substantial number of instances to be legitimised into this subcategory. Examples from the SC are *some people believe that, I completely agree with*, and *we cannot deny that*, and examples from the EC include *I would argue that, many people believe that*, and *I think it is*. As Chen (2009) contended, lower-level students are driven by language of vagueness (e.g., *some people believe that*) and personal involvement (e.g., *I completely agree with*). Notably, this construction was not uncommon among expert scripts, probably attributable to the nature of IELTS writing as being semi-academic rather than purely. It implies that students should eliminate the belief that minimising clausal formulas alone would help their scripts read native-like.

Table 5  
*Structural differences in bundle use between two corpora*

Category/ Subcategory	Types		Tokens		LL
	SC	EC	SC	EC	
NP-based					
NP with <i>of</i> -phrase fragment	11	6	62 (92.5)	34 (58.7)	4.73 (+)*
NP with other post-modifier fragments	7	4	68 (101.5)	18 (31.1)	24.17 (+)****
Subtotal	18	10	130 (194)	52 (89.7)	24.17 (+)****
PP-based					
PP with <i>of</i> -phrase fragment	9	5	59 (88.1)	25 (43.1)	9.67 (+)**
Other PP fragments	21	11	109 (162.7)	98 (169.1)	0.08 (-)
Subtotal	30	16	268 (400.0)	123 (212.2)	36.09 (+)****
VP-based					
Anticipatory <i>it</i> + VP/AdjP	14	13	81 (120.9)	88 (151.9)	2.20 (-)
Passive verb + PP fragment	-	-	-	-	-
Copular <i>be</i> + NP/AdjP	7	4	66 (8.5)	20 (34.5)	19.71 (+)****
(VP +) <i>that</i> -clause fragment	2	4	9 (13.4)	21 (36.2)	6.84 (-)**
(Verb/adjective) + <i>to</i> -clause fragment	4	7	24 (35.8)	45 (77.7)	9.91 (-)***
Adverbial clause fragment	4	3	20 (29.8)	16 (27.6)	0.05 (+)
Pronoun/NP + <i>be</i> /VP fragment	43	18	323 (482)	116 (200.2)	73.85 (+)****
VP with an active verb	15	-	106 (158.2)	-	-
Subtotal	89	49	629 (938.7)	306 (528.0)	71.94 (+)****
Other expressions	2	2	30 (44.8)	9 (15.5)	9.09 (+)**
Total	139	77	1057 (1577.5)	490 (845.5)	138.56 (+)****

Note. AdjP = Adjective phrase; the number in brackets indicates normalised frequency per 100,000 words; LL = log-likelihood; [+] indicates overuse in the SC, [-] indicates underuse in the SC; \*:  $p < 0.05$ , \*\*:  $p < 0.01$ , \*\*\*:  $p < 0.001$ , \*\*\*\*:  $p < 0.0001$

Table 5 also statistically accounts for greater VP-based bundle use in the SC than in the EC. The above-mentioned “Pronoun/NP + be/VP fragment” construction accounted for the largest part of the difference at  $p < 0.0001$ . Perhaps this is because the student writers habitually imitated this expert practice before overdoing it in their essays. Meticulous concordance line checks uncovered that this construction was used no more than once per expert essay but a few times per student essay in a sizable portion of the student corpus. Another contributing factor is the “VP with active verb” construction with 158.2 tokens p100kw noted in the SC and none in the EC. Students’ over-reliance on this subcategory can be exemplified by a vast token coverage of such bundle types as *plays an important part*, *play an important role*, and *become more and more*. According to Chen (2009), these bundles are often deemed clichéd and overgeneralising, so they are rarely used in expert writing.

Another finding is that whereas the SC outnumbered the EC in most subcategories, it was found underrepresented in the “(VP +) *that*-clause fragment” (e.g., *that they do not*) and “(Verb/adjective) + *to*-clause fragment” (e.g., *to be able to*) constructions at  $p < 0.01$  and  $p < 0.001$ , respectively. Surprisingly, the “Passive verb + PP fragment” bundles (e.g., *can be seen as*) appeared in neither of the corpora. At the same time, according to Y. Wei and Lei (2011), this construction is over-manipulated in student writing.

Phrasal bundles of most types were overused in the SC. The “NP with *of*-phrase

fragment” structure (e.g. *one of the most*), albeit its overrepresentation, was more than half realised by overgeneralising bundles such as *a large amount of* or *an important part in*, or bundles with the embedded colloquial quantifier “a lot of” such as *a lot of people*, *a lot of time* or *us a lot of*, which are speech-like (Chen, 2009; Chen & Baker, 2016). The “PP with *of*-phrase fragment” construction also contained speech-like, or L1 translated bundles such as *with the help of*, *with the development of* or *thanks to the development*. Bundles like these inflated both bundle types and tokens in the non-native corpus to a great extent. It calls for students’ effort to convey messages using linguistically condensed and content-specific expressions. For example, the sentence *With the help of technology, a lot of people are able to pay online when they shop* can be rephrased as *Technology has enabled numerous shoppers to pay online*.

### Functional Differences in Bundle Use Between Two Corpora

Chen and Baker’s (2016) functional taxonomy for bundle classification consists of three broad categories: stance, discourse organising, and referential. Stance bundles express the writer’s attitude or epistemic evaluation of the certainty of a proposition, so they are subdivided into epistemic bundles (e.g., *it could be argued*) and attitudinal/modality bundles (e.g., *it is difficult to*). Discourse organisers structure the link between the preceding and coming text. They are used to introduce a topic (e.g., *in this essay I*), elaborate or clarify a topic

(e.g., *on the other hand*), and emphasise a piece of information (e.g., *one of the most*). Referential expressions are used to make a direct reference to frame a given attribute or condition (e.g., *as a result of*), qualify a proposition in terms of size, number or extent (e.g., *a large proportion of*), and specify place, time, and text-deictic contexts (e.g., *in the first place*).

While discourse organisers accounted for the largest proportions in the SC (38.9% types and 46.5% tokens), the stance was the most identifiable function in the EC (42.9% types and 44.3% tokens; see Table 6). It is possibly because of the students' being tied to discourse markers that might have been learnt by rote beforehand and of the experts' sophisticated usage of impersonal writing in bringing out the nature of argumentation,

respectively. To elaborate on the former, Vietnamese students are often instructed in EFL writing courses to construct their essays using a template that has fixed discourse organising expressions such as *on the one hand*, *on the other hand*, or *last but not least*. The fact that stance bundles (34.5% types and 33.7% tokens) ranked second only to discourse organisers in the SC and discourse organisers (35.1% types and 37.6% tokens) second only to stance bundles in the EC suggests that the students did try to maintain an argumentative tone. At the same time, the experts were not free from using pre-determined discourse organisers. It is likely how the IELTS writing is made and seen—a rigid writing format with a list of pre-set linking expressions.

Table 6  
Distribution of broad functional categories in two corpora

Category	Types (%)		Tokens (%)	
	SC	EC	SC	EC
Stance	34.5	42.9	33.7	44.3
Discourse organisers	38.9	35.1	46.5	37.6
Referential	26.6	22	19.8	18.1

Regarding bundle counts instead of percentages (see Table 7), bundles of all main functions were consistently used more often in the SC than in the EC (types and tokens). The discrepancy in the stance function resulted mainly from epistemic expressions, used 426.8 times p100kw by the students and 277.8 times p100kw by the experts at a significance level  $p < 0.0001$ . As mentioned above, epistemic bundles depict

the writer's assessment of the certainty of a claim, which is layered into three levels: least certain (e.g., *is more likely to*), neutral (e.g., *it has been suggested*), and strongest commitment (e.g., *there is no doubt*) and gauged by cautious or tentative language (Hyland, 1998; Poos & Simpson, 2002). It was found from the corpora that a large proportion of the bundles were of neutral quality, and those in the SC were inflated

Table 7  
*Functional differences in bundle use between two corpora*

Category/Subcategory	Types		Tokens		LL
	SC	EC	SC	EC	
Stance					
Epistemic	40	25	286 (426.8)	161 (277.8)	19.63 (+)****
Attitudinal/modality	8	8	70 (104.5)	56 (96.6)	0.19 (+)
Subtotal	48	33	356 (531.3)	217 (374.5)	16.89 (+)****
Discourse organisers					
Topic introduction	1	-	10 (14.9)	-	-
Topic elaboration/ clarification	39	20	334 (498.5)	137 (236.4)	58.86 (+)****
Identification/focus	14	7	147 (219.4)	47 (81.1)	40.62 (+)****
Subtotal	54	27	491 (732.8)	184 (317.5)	103.87 (+)****
Referential					
Framing	19	9	100 (149.2)	44 (75.9)	14.99 (+)***
Quantifying	17	2	95 (141.8)	9 (15.5)	70.99 (+)****
Time/place/text-deixis	1	6	15 (22.4)	36 (62.1)	12.23 (-)***
Subtotal	37	17	210 (313.4)	89 (153.6)	34.42 (+)****
Total	139	77	1057 (1577.5)	490 (845.5)	138.56 (+)****

*Note.* The number in brackets indicates normalised frequency per 100,000 words; LL = log-likelihood; [+] indicates overuse in the SC, [-] indicates underuse in the SC; \*:  $p < 0.05$ , \*\*:  $p < 0.01$ , \*\*\*:  $p < 0.001$ , \*\*\*\*:  $p < 0.0001$

by quite a few synonymous bundles of the “Pronoun/NP + be/VP fragment” structure, such as *some people believe that*, *some people think that*, and *some people argue that*. A smaller percentage was of strong commitment, but while the expert writers tended to prefer the “Anticipatory *it* + VP/AdjP” construction, such as *it is true that* and modal hedges as in *it could be argued*, the student writers resorted to boosting adverbs as in *I completely agree with* (Crompton, 1997; Skelton, 1988). It exhibits that students’ exposure to cautious language at the expert level might be scant, so their

attempt to use bundles of this type is often intuitive rather than procedurally guided. Kennedy and Thorp (2007) confirmed this, claiming that student writing is sometimes categorical and hyperbolic. Of note is that the student and expert writers seemed to develop an authorial voice by employing the personal pronouns *I* and *we* at roughly equal proportions. It disagrees with Granger and Rayson’s (1998) and Petch-Tyson’s (1998) statement that non-native learners use more personal pronouns in argumentative writing than professional writers.

Discourse organisers were more common in the SC than in the EC because of the overuse of the “topic elaboration/clarification” bundles by 498.5 tokens p100kw compared to 236.4 tokens p100kw at  $p < 0.0001$ . While both groups of writers used complex lexico-grammatical markers such as *on the other hand* instead of *however*, the student writers used some others that the professional writers did not, for example, *last but not least* instead of *finally*, or *as well as the* instead of *and the*, an index of verbosity in student writing (Kennedy & Thorp, 2007). It should be acknowledged, however, that bundles like these were not ubiquitous. However, the actual reason for a surge in this subcategory in the SC was the overuse of informal bundles like *if we do not, people do not have*, and *for example, if you*, which were completely absent in the EC. It can be ascribed to students’ lack of register consciousness, masking their ability to discriminate speech from writing. Finally, referential expressions were exploited in an unsystematic way in the corpora. The SC recorded an overuse of framing and quantifying bundles but an underuse of time/place/text deictic bundles. Of these, an obvious pattern emerged from the quantifying bundles in the SC that 9 out of 17 bundle types entailed the informal speech-oriented quantifying words/phrases *a lot of* and *many* while the only two bundle types in the EC *the rest of the* and *a large proportion of* were free of such quantifiers. As suggested earlier, framing and quantifying bundles would decline greatly if more content-specific words like *numerous* substituted such quantifiers.

Besides what has been discussed, the above-listed findings can be further elucidated from a few angles. Firstly, IELTS writing is semi-academic rather than fully academic, so experts are not completely independent of VP-based bundle use. They develop a range of discourse organisers and stance bundles at their disposal, such as *there is no doubt* or, *on the other hand*, to deal with a pre-determined writing format. In their learning process, students may copy or at least, in part, be instructed to transfer those expressions to their writing, resulting in an inevitable overuse. Secondly, expert writers may deliver their writing styles. A review of a sample of the expert essays reveals that the argumentation style differs from this essay to another, especially those written long ago, like in the first few books of the IELTS Cambridge series. Finally, according to Chen and Baker (2016), at the B2 proficiency level, students are transitioning from an informal writing style to a formal one, so their writing inexplicably reflects speech-driven language use behaviours such as cliché, overgeneralisation, and verbosity.

## CONCLUSION

This study compared student and expert use of four-word bundles in timed argumentative writing and arrived at the following major findings. Bundles chosen by both writers were found to be structurally more clausal than phrasal due to excessive use of the “Pronoun/NP + be/VP fragment” pattern. Overuse of the broad categories in the SC was also observed, contributed by

the “Pronoun/NP + be/VP fragment”, “NP with *of*-phrase fragment”, and “PP with *of*-phrase fragment” constructions. Functionally, discourse organisers were most prevalent in the SC, while stance bundles prevailed in the EC, but stance bundles and discourse organisers were not uncommon in the respective corpora. Epistemic, topic elaboration/clarification, and framing bundles were the primary contributors to the greater use of each main function in the SC compared to the EC.

### Implications

This study has important implications. Firstly, the findings summarised above were outputted based on the methodological reasonings presented throughout this paper, where an incongruence in data type and/or methodological arguments of earlier studies, even some most recent ones, were attended to, and where methodologically informed claims in previous literature were inherited. In this light, the present study suggests that lexical bundle research closely considers the following facets:

- Corpus construction should rest upon data homogeneity concerning task and learner characteristics if two or more corpora are to be compared. In this regard, Granger’s (2013) model can be a starting point.
- At the onset, whether the researchers are interested in misused bundles it should be stated and justified, as this may affect their decision to accept

or dismiss a certain bundle during the text treatment process.

- Upon software-based retrieval of bundles, a stringent filtration procedure is highly recommended. A transparent “blueprint” for handling context-dependent and overlapping bundles should be in place and strictly followed so as not to distort statistical results.

The study also has implications for pedagogical practices. Expanding on previous studies which support the coverage of lexical bundles in the L2 writing curriculum, it adds that they should only be taught concerning a corresponding text genre since they may not recur in a different genre. For example, the bundle list produced in this study should be used for teaching argumentative essays at an undergraduate level, but the ones previously developed appear more fitted for postgraduate and research writing levels.

Evidence as to bundle frequencies and preferences over certain structural and functional categories among student and expert writers from this study also calls for a need on the part of L2 writers to develop a register awareness. Not only should they be instructed to avoid heavily academic language and colloquial non-academic language use, but they should also be pointed to the integration of cautious language and impersonal writing practices and the minimisation of speech-like language behaviours. It can be achieved through recognition and production activities that

teachers design themselves or material developers procedurally introduce into L2 writing coursebooks. An example activity sequence is that students are asked to notice the forms and functions of lexical bundles in model texts, then do control practice exercises such as gap filling or error identification and correction, which arguably would help them acquire a bundle repertoire for subsequent sentence completion and free extended writing tasks. For this to happen, however, it might be essential that lexical bundle training be given to those parties not directly involved in bundle research, including teachers and material developers.

### **Limitations and Suggestions for Future Studies**

This study has inevitable shortcomings. One is the lack of multiple formal ratings applied to the student essays. Although I was a second-rater and selected only the essays with assigned scores I agreed upon, a more robust marking procedure was desirable.

Another constraint is that this study directly compared the B2 proficiency level to the expert level without considering the middle levels of B1 and C1. It should be acknowledged, however, that lower-level writings not only contain fewer bundles but are also usually under length, making corpus data too small and possibly unrepresentative of the linguistic behaviour under concern. Meanwhile, writings of advanced levels are hard to collect, for participants rarely achieve this level at the time of research, especially in a corpus-driven study that requires a contribution by a large number

of participants. If data is available, future studies are suggested to include B1 and C1 proficiency levels to enrich studies that investigate a continuous proficiency range.

The limitation of data size is also worth discussing. The two corpora in this study were relatively small in comparison with corpora of tens or hundreds of millions of words in bundle research. It is due mainly to the unavailability of expert essays. Though one may claim that a Band 9.0 score can guarantee the expert level, this is far from the truth since such a score does not seem to be awarded based on a strict marking procedure regarding scripts supplied online or in unaccredited books. Furthermore, large corpora often deal with multiple disciplines, text genres, and proficiency levels, while researchers have long agreed that corpora of thousands of words are not less meaningful than gigantic text bodies.

Finally, the present study was a comparative study whose purpose was limited to describing bundle usage. Further studies may utilise the bundle list in Appendix B and put it to the test to see whether explicit instruction of bundles can lead to L2 writers' enhanced recognition and/or production performance.

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## Appendix A1

### *Topics (Prompts) in the SC*

1. Computers are being used more and more in education, and some people believe there will soon be no role for the teacher in education. How far do you agree with this opinion?
2. The role of education is to prepare children for a job in the future. Schools should, therefore, cut music and art out of the curriculum so that children can focus on useful and practical subjects such as IT or physics. To what extent do you agree with this point of view?
3. Will modern technology such as the Internet ever replace books or printed media such as newspapers as the main source of information? Discuss this matter and give your own opinion.
4. Having a good university degree can guarantee people a good job. To what extent do you agree with this view?
5. Some people say that the Internet is making the world smaller by bringing people together. How far do you agree that the Internet is making it easier for people to communicate with one another?
6. Some people believe that the media, such as the press, TV and Internet, should be more strictly controlled. Others feel that controls should be lessened to give people freer access to information. What's your opinion on this?
7. Since its coming into existence, fast food has been accused of contributing to the concurrent increase in the number of overweight people. Hence, some argue that heavier taxes should be imposed on these junk foods. To what extent do you agree with this opinion?
8. Some people think that university students should study whatever they like. Others believe that they should only be allowed to study subjects that will be useful in the future, such as those related to science and technology.
9. Some people believe that advances in technology are increasing the gap between the rich and the poor, while others think the opposite is happening. Discuss both views and give your own opinion.
10. Everyone should stay in school until the age of 18. To what extent do you agree or disagree?

## Appendix A2

### *IELTS books used for the EC*

Cambridge IELTS series 1-9	Collins Writing for IELTS
IELTS Foundation	Barron's Writing for the IELTS
IELTS Plus series 1-3	IELTS Advantage
IELTS to Success	15 Days' Practice for IELTS Writing
IELTS Trainer	Cambridge Guide for IELTS
Insight into IELTS	Exam Essential IELTS Practice Tests 2
New Insight into IELTS	IELTS Writing Analyse – Structure and Academic Essays Collection
Prepare for IELTS	Best Seller: Writing Task 2 for IELTS
Academic Writing for IELTS	High-score IELTS Writing

## Appendix B

### *Lexical bundles and frequencies in two corpora*

Freq	SC	Rank	EC	Freq
51	on the other hand (+ the/ there are/ I/ I believe/ some/ some people)	1	on the other hand (+ there/ some)	35
39	(play/ plays +) an important role in (+ our life/ the)	2	(so +) it is important to	16
26	last but not least	3	it is true that	14
25	(people +) all over the world	4	I think it is	12
24	some people believe that (+ the)	5	I strongly believe that (+ it is)	11
21	(you +) do not have to	6	there is no doubt + that	10
19	(from +) my point of view (+ I)	7	(is +) the best way to	10
19	on the one hand (+ there are)	8	are more likely to	9
18	(because of some following +) reasons first of all	9	on the one hand	9
18	in my opinion I (+ agree with)	10	some people believe that	9
17	is one of the (+ most)	11	as a result of	8
16	some people think that	12	at the same time	8
16	there is no doubt + that	13	I would argue that	8
15	(I +) agree with this opinion	14	in conclusion I think (+ that)	8

**Appendix B** (*Continue*)

Freq	SC	Rank	EC	Freq
15	(nowadays +) more and more people	15	it is difficult to	8
13	some people say that (+ that)	16	one of the most	8
13	(there +) are more and more	17	(+ is) one of the main	8
13	they do not have	18	part of the world (+ and)	8
13	(is +) more and more people	19	(I +) agree with the statement (+ that)	8
11	do not need to	20	in my opinion the	7
11	in conclusion it is	21	it is possible to	7
11	it is undeniable that	22	so that they can	7
11	some people argue that (+ the)	23	to sum up I	7
10	I strongly believe that (+ the)	24	all over the world	6
10	is the reason why	25	and it would be	6
10	in this essay I (+ will look at both)	26	(I +) do not believe that	6
9	a lot of people	27	I believe it is	6
9	is not the only (+ way to)	28	in a way that	6
8	a large amount of	29	in conclusion I believe + that	6
8	but it is not	30	it seems to me + that	6
8	it cannot be denied + that	31	many people believe that	6
8	for a long time	32	that this is a	6
8	for example if you	33	(there are +) a number of reasons	6
8	many people believe that	34	that it is better (+ for)	6
8	the best way to	35	as a means of	5
8	(+ is) a good way to	36	as long as they	5
7	a lot of time	37	have the right to	5
7	it is easy to	38	I believe that the	5
7	many people argue that	39	I believe that we	5
7	they will not have	40	in the first place	5
7	with the help of	41	it is clear that	5
7	I completely agree with (+ this)	42	it is important for	5
7	people who do not (+ have)	43	it is important that	5
6	a great number of	44	people around the around	5

**Appendix B** (*Continue*)

Freq	SC	Rank	EC	Freq
6	agree with this idea	45	society as a whole	5
6	agree with this statement	46	that it is not	5
6	another reason is that	47	the rest of the	5
6	as a result the	48	this point of view	5
6	as far as I	49	true to say that	5
6	because of some reasons	50	when it comes to	5
6	I do not agree (+ with this)	51	will be able to	5
6	have a lot of	52	a large proportion of	4
6	I partly agree with + this	53	an important part of	4
6	I think that the	54	at the expense of	4
6	if we do not	55	both positive and negative	4
6	in conclusion I think (+ that)	56	it could be argued + that	4
6	it is believed that	57	however I do not	4
6	it is clear that	58	I also believe that	4
6	it is true that	59	in conclusion I would	4
6	there are many people	60	in the form of	4
6	we cannot deny that	61	in the number of	4
6	we do not have	62	is also true that	4
6	when it comes to	63	it is certainly true + that	4
6	with the development of	64	is more important than	4
6	with this opinion because (+ of)	65	it is argued that	4
6	we cannot deny the (+ importance of)	66	it is my belief	4
5	other believe that they	67	many people feel that	4
5	a huge amount of	68	not to say that	4
5	as a matter of + fact	69	of the opinion that	4
5	(play +) a significant role in	70	should be able to	4
5	there are a lot + of	71	some people argue that	4
5	as a result of	72	that it would be	4
5	as a result they	73	the fact that the	4
5	becoming more and more	74	the only way to	4
5	do not have	75	there has been a	4
5	do not have enough	76	this can only be	4

**Appendix B** (*Continue*)

Freq	SC	Rank	EC	Freq
5	do not want to	77	while I accept that	4
5	first of all it (+ is)	78		
5	have a chance to	79		
5	I agree that the	80		
5	I agree with the	81		
5	in fact there are	82		
5	in my opinion the	83		
5	is the most important	84		
5	it is difficult to	85		
5	many people believe that	86		
5	no one can deny	87		
5	people do not have	88		
5	people in the world	89		
5	reason is that the	90		
5	that they do not	91		
5	(with +) the rapid development of	92		
5	there are many reasons	93		
5	there are so many	94		
5	this point of view	95		
5	to the fact that	96		
5	us a lot of	97		
4	a good way for	98		
4	a lot of benefits	99		
4	agree with this view	100		
4	an important part of	101		
4	and as a result	102		
4	and give my opinion	103		
4	and they do not	104		
4	and you do not	105		
4	there are a number + of	106		
4	are one of the	107		
4	as well as the	108		
4	become more and more	109		



**Appendix B** (*Continue*)

Freq	SC	Rank	EC	Freq
4	but it does not	110		
4	but it is the	111		
4	do not have much	112		
4	in every corner of (+ the)	113		
4	for some following reasons	114		
4	however I believe that	115		
4	however I think that	116		
4	however we cannot deny	117		
4	I partially agree with + this	118		
4	I strongly agree that	119		
4	I totally agree with	120		
4	I totally disagree with	121		
4	if they do not	122		
4	in my opinion I	123		
4	it is the fact (+ that)	124		
4	it is necessary to	125		
4	it is not only	126		
4	it seems to me + that	127		
4	plays an important part	128		
4	thanks to the development (+ of)	129		
4	that you do not	130		
4	the development of the	131		
4	the first reason why	132		
4	there are many things	133		
4	there are several reasons	134		
4	to be able to	135		
4	to sum up it	136		
4	to the development of	137		
4	when you want to	138		
4	with the idea that	139		



## **Social Subject(ion) and Subjectivity in “Dongeng Penebusan”, A Short Story by Mona Sylviana**

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### **ABSTRACT**

“Dongeng Penebusan” is a short story by Mona Sylviana (Mona), an Indonesian woman writer. Conveyed through dual narration, it raises the theme of social subject(ion) that centers around two characters, Samsu, who wants to redeem his past, and his ex-lover Laksmi, whom he left years before. Combining a feminist approach and close reading, we aim to ‘listen’ to voices articulated through the dual narrative technique and the poetic language, which fuses the symbolic and the semiotic. Whereas Samsu is presented as verbally active, Laksmi is depicted as a silent woman who moves in a limited space and motion. Laksmi’s seemingly passive attitude manifests her active subjectivity. In the story, the dual narration regulates voices by weakening Samsu’s voice and amplifying Laksmi’s subjective and authoritative voice. The poetic is employed to depict the unspeakable, atrocious subject situation. The story presents social abjection as an experience that involves specific strategies and degrees of rejection and acceptance. “Dongeng Penebusan” exemplifies how through her agency woman uses non-violence to maintain subjectivity and reject the presence of a male subject while denigrating his subjectivity.

*Keywords:* Agency, dual narration, feminist criticism, social subject(ion), subjectivity, the poetic

### **INTRODUCTION**

Scholarly discourse on subject(ion) in Indonesian culture and literature is mostly, if not all, concerned with the corporeal/maternal and Creed’s (1993) concept of “the monstrous-

feminine.” Dirgantoro (2017), for example, approaches the representation of the female body in the works of the female Balinese visual artist Murniasih from the perspective of the monstrous feminine. In film studies, Siddique (2002) and Wilger (2016) discuss the cinematic embodiment of the feminine in films about Sundelbolong, a supernatural

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female spirit believed to exist in Indonesian cultures. In literature, Darmawan et al. (2015), Suhendi et al. (2017), and Nariswari and Yoesoef (2018) examine how the monstrous feminine in the novels studied transgresses patriarchal constructions of gender and sexuality. Despite the different objects (visual art, film, and novels) and analysis methods, these studies are linked by their focus on the physicality and visuality of the abject.

This article presents a feminist reading of “Dongeng Penebusan” (2015), a short story by the Indonesian woman writer Mona Sylviana (Mona), which marks a shift from the dominant notion of physical abject(ion) to social abject(ion). The abject(ion) in the story is caused by a situation related to the attempted coup of September 1965, known as the September 30 Movement (Gerakan 30 September/G30S), an event allegedly orchestrated by the PKI (the Indonesian Communist Party). The nocturnal putsch killed six generals and one lieutenant and was followed by the arrests, abductions, disappearances, and killings of those believed to be proponents of or associated with the PKI.

A body of works connected in one way or another with the issue of the G30S is written by male and female writers. Ahmad Tohari’s *Ronggeng Dukuh Paruk*, for example, talks about the relationship between a man and a dancer and how the political situation in the 1960s affected the lives of people in the village where they live. There are also works (fictional and non-fictional) written by women, e.g., Sudjinah

and Sulami, who were imprisoned because of alleged leftist affiliation. More recent works written by woman writers include Laksmi Pamuntjak’s *Amba* (2012) and Leila S Chudori’s *Pulang* (2013). According to Downes (2018, p. 114), the novels counter the “dominant government narratives” (p. 114) concerning the communist in Indonesia. Similarly, Mayasari-Holvert (2021) regards the two novels as “little narratives” that intervene in the dominant narrative about 1965. “Dongeng Penebusan” differs from the works of these authors in that although it bears some reference to the G30S, the issue is not the main concern. In the story, Mona is more concerned with the abject situation that the historical event causes in the personal life of the female character.

“Dongeng Penebusan” is also about female subjectivity, an important topic in Indonesian literature. Various studies have explored the issue as it is portrayed in novels by male writers in the 1920s (Arimbi, 2014), in works by the female writer Suwarsih Djojopuspito in the 1940s-50s (Priyatna, 2018), in more recent works by woman writers published after 2000 (Dhewy, 2015; Hatley, 1999). These studies reveal that women have always lived in predominantly patriarchal societies. However, as presented in the works discussed, women have shown various degrees and manifestations of awareness of their situation, agency, sexuality, subjectivity, and autonomy. However, only Dhewy (2015) touches on the abject, though in passing without exploring it further.

As for Mona's works, Watson (2011) approaches them from the perspective of abject(ion). In his review of the *Wajah Terakhir* anthology, Watson praises Mona for consistently writing about the experiences of women from different backgrounds. Mona highlights various types of discrimination, oppression, and marginalization against women in a squeamish world (Watson, 2011). Using a style Watson calls "dirty realism" (Watson, 2011, p. 136), Mona draws the reader to see the dark realities (oppression, blood, and venereal disease) as part of women's experience. In Priyatna's (2011) reading, Mona captures the darkest desires, scabs, ugliness, and transgressions of norms and orders, while, in so doing, underlying that abnormality is part of daily normality. Priyatna (2011) categorizes the different types of abjection presented in the stories. However, Watson's and Priyatna's general review of the collection lacks detailed textual and narrative analysis of the individual stories. Commentaries by Muhammad (2012) and Adha (2013), which appeared as newspaper articles, are based on their overall reading of the *Wajah Terakhir* collection. Their articles neither provide detailed textual analysis nor touch on the abject(ion) issue presented in several of Mona's works.

The above discussions on Mona's stories leave a gap allowing us to approach abject(ion) differently. First, while previous studies on abject(ion) focus on films, visual art, cultural representations, and practices concerning abject(ion), our study focuses on a short story, which requires

a particular reading and analysis method. Secondly, instead of discussing maternal and physical abjection, we investigate its social dimension, how a socially abject situation affects subjectivity at a personal level, and what it means to face a non-physical abject situation. Thirdly, whereas literature depicting physical aspects of the abject employs generally (visual) imagery, portraying social abjection requires a specific set of textual/narrative strategies. The article explores how the semiotic blends with/into the symbolism of depicting social abject(ion).

"Dongeng Penebusan," we maintain, is important to discuss because the issue of social abject(ion) is still under-researched compared to that of physical/maternal abject(ion). In addition, "Dongeng Penebusan" is a short story that requires Mona to employ a specific narrative craft to portray the complexity of an abject situation within the limited length of a short story. In addition, although Mona's story bears some reference to the 1965 tragedy, she is more concerned with its impact on the personal experience of a woman affected by it. Through the story, Mona articulates a voice muted in history and offers a more gender-aware account of women's adversity during the political turmoil.

Our article aims to explore the forms of social abject(ion) portrayed in the story by looking at the relation, (inter) action, and reaction between characters, which are presented not only through the language used in the narrative description and the characters' conversation but also

through poetic language, a concept Kristeva explicates in *Revolution in Poetic Language* (Kristeva, 1984). We also delve into how the female character uses her agency to (re)claim her subjectivity. Our analysis follows Tyler's (2009) appeal to shift from Kristeva's (1980/1982) physical/maternal abject(ion) to social abject(ion).

### Literature Review

**Mona Sylviana: In and on (Post-) Reformasi Indonesian Literature.** Born in Bandung on May 16, 1972, Mona Sylviana (Mona) was among the forty-five Indonesian writers whose works were exhibited at the Frankfurt Book Fair 2015. 2017 Mona flew to France to attend a writer residence program co-organized by the Indonesian National Book Committee and the Ministry of Education and Culture. In 1995, Mona received an award from *Femina*, an Indonesian women's magazine, for her short story "Masterpiece." Her nonfiction work "Pantai Tanjung Bira, Keindahan Sang Penyendiri" (Tanjung Bira Beach, The Beauty of the Loner"), a travel writing which appeared in *Koran Tempo* newspaper on May 10, 2015, also received an APWI (Indonesian Tourism Journalist Award) the Ministry of Tourism. Mona's works have been published in the following anthologies: *Pesan Ombak Padjadjaran* (1993), *Improvisasi X* (1995), *Angkatan 2000 dalam Sastra Indonesia* (2000), *Dunia Perempuan: Antologi Cerita Pendek Wanita Cerpenis Indonesia* (2002), *Living Together* (2005), *Wajah Terakhir* (2015), *A Tale of Redemption & Other Stories* (2015).

"Dongeng Penebusan" first appeared in *Koran Tempo* newspaper and later in the trilingual anthology *A Tale of Redemption & Other Stories* (2015).

Mona belongs to a group of Indonesian women writers who have set the development of Indonesian literature since *Reformasi* (Reform) in 1998. *Reformasi*, which began soon after the fall of Soeharto, was marked not only by the rise of *Sastra Reformasi* (Reform Literature), whose proponents frankly criticized the government (Aveling, 2007) but also by the publication of prose works by several young women writers who have not only enriched Indonesian literature in their respective ways but also brought women's issues from the periphery to the center. In addition, the emergence of these women writers also introduced new ways of narrating since women's problems can be best expressed through women's language as an avenue for women to (re)claim their subjectivity.

In Mona's words, women must have some liberty to experiment, explore, dismantle, and be "playful" with language to enable it to expose "other worlds," which need to be recognized by both men and women (Sylviana, 2008, August 8). Remaining co-opted in a world created by/for men would make a woman lose the ability to make sense of her world, become estranged from herself, and be linguistically silenced. For Mona, writing about a woman's unique experience means a venture to find a language of her own and a channel to articulate her otherwise unheard voice. Despite her writer awards

and national and international readership, Mona’s works have yet to be explored. Mona and her works deserve critical attention. How Mona combines narrative style and use of language to present feminist themes and unfold women’s unique and personal experiences through her stories offers further critical exploration.

## MATERIALS AND METHOD

The plot of the story can be briefly summarized as follows. One evening, an elderly man named Samsu enters a coffeehouse run by Laksmi. When still young, Samsu left Laksmi and remained in hiding as Laksmi was raped by some army soldiers searching for Samsu. The military believed Samsu was avoiding arrest after an allegation of his involvement with the Communists. The story is told as a dual narration using third- and first-person perspectives. The former revolves around the abject situation in the coffeehouse, whereas the latter flashes back to the night of their separation.

In the coffeehouse, Samsu converses with some younger male regulars and tells about a young man who once left his lover. No account of Laksmi’s rape and how Samsu tells the story is given. In the second narration, Samsu’s past and what happened to Laksmi are implied. The story does not mention how Samsu’s presence and story disturb Laksmi’s subjectivity. Her perturbed subjectivity is suggested implicitly through her silence and gestures of avoidance. That the young man in Samsu’s story is his younger self is made implicit rather than explicit.

Stopping before Samsu tells his story, the first narration is succeeded by the second. This first-person narration recounts what happened on the tragic night. The ‘I’—young Samsu—enters Laksmi’s bedroom to hide, but some soldiers, led by the “commandant,” search the house. Samsu sneaks out and hides nearby, where he can still hear objects banging and breaking. He can also hear cloth being torn as Laksmi’s sobs become feeble. Samsu remains in hiding and will never be seen again until he arrives at the coffeehouse. Laksmi’s name is never mentioned. She is referred to only as “the waitress,” “the woman behind the counter,” or “the old woman.” Her identity is revealed at the end of the story when Samsu approaches the counter to settle his bill, and Laksmi speaks for the first and only time, telling Samsu not to come again.

Our approach to the work is framed by the theoretical perspective of the abject from Kristeva (1980/1982) and social abjection from Tyler (2009), which we briefly outline as follows. Abjection refers to the repulsing of that which is disgusting: blood, vomit, feces, or anything that threatens our “clean and proper” self and (social) acceptability (Kristeva, 1980/1982, p. 8). The abject is unwanted because it “beseeches and pulverizes the subject” (McAfee, 2004, p. 46). Abjection, however, does not guarantee a subject’s stability, for after being driven out, the abject “hovers at the periphery,” and abjection recurs (p. 46). One characteristic of the abject is its ability to create ambiguity and ambivalence. Texts on abjection provide examples of how the abject can cause disgust and fascination.

Kristeva's theory, however, has been criticized by Imogen Tyler (2009) on account of the "matricidal premise on which it is grounded" (p. 78). Tyler advocates for discussions about abject(ion) to expand the concept and shift it toward social context, for abjection is not only about the maternal (body). Maternal/corporeal abjection is "a specific variety of the abject" (Goodnow, 2010, p. 43). Abjection is polyvalent and can manifest in social discourses concerning social (im)purity (Duschinsky, 2013). Abjection does not always concern its primary meaning. Kristeva maintains that abjection occurs not because of uncleanness and unhealthiness (the cause) but because of the condition's disturbance against identity, system, and order. The abject, therefore, can have a non-physical (social) form. The rejection of "the social appearance of the abject" (Kristeva, 1980/1982, p. 16) is referred to as "social abjection" (Tyler, 2009, p. 94).

Social abjection concerns human behavior, attitude, and character. Therefore, betrayal, lies, hypocrisy, and crime are abject because being "immoral, sinister, scheming, and shady" can potentially expose the fragility of the law (Kristeva, 1980/1982, p. 4). For Goodnow (2010), the abject arising from hypocrisy is "the abject which presents with a clean, false face" (p. 28). It is loathsome and perverse, for "it never gives up nor assumes a prohibition, a rule, or a law: but turns them aside, misleads corrupts, uses them, takes advantage of them, the better to deny them" (Kristeva, 1980/1982, p. 15).

Abjection is "tied to language" (Czarnecki, 2009, p. 52), for it extrudes the abject out of the boundaries of signs (Kristeva, 1980/1982). Literature about abjection tends to pervert language, style, and content and transgress boundaries of binaries like purity-impurity, morality-immorality, and self-other (Kristeva, 1980/1982). Kristeva pays particular attention to avant-garde literature, characterized by semiotic drives associated with both the maternal and the abject (Cavanagh, 1993; Oliver, 2012).

Semiotic drives can be traced back to the stage before an infant develops subjectivity, when signification occurs non-linguistically in the semiotic, "articulated by flow and marks" (Kristeva, 1984, p. 40), and rhythm and tones (Oliver, 1997). As Chanter asserts, the semiotic is "characterized by motility, by the movement of energies and drives" (quoted by Arya, 2014, p. 161). In this pre-verbal state, signification does not follow the Lacanian concept of the symbolic, which acts as the paternal law that structures all linguistic signification and "becomes a universal organizing principle of culture" (Butler, 1988, p. 104).

When a child abjects the mother to become a separate subject, it begins to make sense of its world through language governed by the symbolic. Whereas the semiotic works "through elision, repetition, mere sound and multiplication of meaning" (Butler, 1988, p. 107), the symbolic structures the world by instating univocal, discrete meaning while "suppressing multiple meanings" (p. 105) that the semiotic potentially produces. Relation between drives, language, and



patriarchal prerogative can offer a strategy of subversion. The symbolic will remain hegemonic unless it is disrupted by the diversity of meanings evoked by the semiotic.

The infusion of the semiotic into the symbolic results in a moment of distortion, rhetorical figures, rhythms, and alliterations, which constitute poetic language. The capability of poetic language to break down barriers is central to literary transgression and abjection. Texts of abjection remind one of what societies have rejected for their stability (Booker, 1991, p. 148). Transgression and subversion in texts are abject because they defy order, identity, stability, and boundaries and disturb the reader's sense of what is proper and improper.

To dismantle abject(ion) in the story, we use a method that combines a feminist approach concerning (social) abjection and a close reading that combines close reading a feminist perspective and a close reading method that takes into account all textual components (words, phrases, clauses, fragments, and sentences) to unfold the explicit and implicit meanings they convey. We focus on how it portrays the characters and their interaction (abjection). In addition, since the story uses a double narrative technique, we consider the perspectives from which each part is told and what the use of the technique implies. Our article is also concerned with the issue of subjectivity, in which the characters' voices are important. Particular attention must be paid to hearing the different voices and how they are articulated explicitly and implicitly

through verbal and non-verbal expressions, which Kristeva calls 'poetic' language (Kristeva, 1974/1984).

## RESULTS AND DISCUSSION

We present our analysis of the modes of abjection shown by the main characters and how they, particularly Laksmi as the female protagonist, deal with their disturbed subjectivity. Subsequently, we look into using the dual narrative technique and the poetic language as Mona's means to regulate voice.

In the story, Samsu faces his abject past, Laksmi in Samsu's presence, and the young guests with the young man in Samsu's story. Samsu appears in the coffeehouse to unload the burden shaking his subjectivity. Samsu's daunted subjectivity is suggested by the signs of anxiety shown through a combination of telling and showing. As the narrator explicitly discloses, Samsu has behaved with feigned politeness since his entrance into the coffee shop. As the story shows, when the guests turn their faces to him upon his arrival, he smiles "just to affect cordiality" (Sylviana, 2015, p. 123). Similarly, when a man asks him to order coffee, he smiles and moves his head "as if nodding" (p. 124). The adverbials used in the narration unmask Samsu's concealed anxiety while portraying him as an abject with "a clean, false face" (Goodnow, 2010, p. 28).

Samsu's anxiety is further implied through the descriptions of his gestures. When asked upon parting with the young guests if he is coming again the following evening, Samsu gives no reply but "stuffed

out his cigarette on the ashtray [r]epeatedly” (Sylviana, 2015, p. 134). Similarly, when Samsu’s listeners express their abjection of the young man in his story, Samsu says nothing but takes such a long puff that smoke fills his lungs. The repetitive description of Samsu’s movements is the text’s way of highlighting his anxiety and reaction to his being abjected by his audience. Although Samsu assumes an air of friendliness and respectability, his anxiety and two-facedness come to light through the description of his bodily gestures and the use of commentary adverbials. By contrasting Samsu’s outward and inward attitude, Mona provides a narrative indication of his disquieted subjectivity, which is intact to his audience but is frail to Laksmi and the omniscient third-person narrator.

Samsu is abjected, though indirectly, by his listeners. The reverence with which they treat Samsu is attributed to their innocence of his past. From Samsu’s perspective, pouring out his past can be equated to self-cleansing. His past is a pollutant that he hopes to clean by confessing. Nevertheless, he tells his redemption story without revealing his identity, hence the audience’s abjection.

Samsu’s audience reacts to his story with contempt. Two men express it by cursing and another by saying he suddenly wants to go home and see his wife (Sylviana, 2015, p. 133). The use of swear words implies their repugnance toward young Samsu and their unawareness of Samsu’s identity. Here, the story indicates two different modes of abjection, verbal cursing

and the emergence of a sudden desire to leave the place. Samsu is repulsed not only by his past and the other guests but also by Laksmi, who uses several modes of abjection to shun him. First, Laksmi maintains a spatial distance as a mode of abjection. With Samsu becoming the center of attention, the guests’ area becomes not only a gendered space but also an abject space, which Laksmi avoids by remaining seated in her marginal space behind the counter. Laksmi approaches the men’s table only when she needs to. Avoidance of the abject space is also marked by temporality. Laksmi’s presence near Samsu is always brief, followed by her immediate retreat to her seat: “*Like four days before*, the waitress *immediately* withdrew” (p. 124, our emphasis). The idea of temporality is strengthened by repetition. The action of resuming her seat is repeated three times in the story (pp. 124, 125, 127).

The combined use of time and place adverbials thus asserts the significance of navigating spatiotemporality as a mode of abjection. As Becker-Leckrone (2005) asserts, abject(ion) always “involves a crisis of place” (p. 32), and space/spatiality is always related to temporality (Massey, 1994). Mona’s repetitive expressions of the action-place-time triad indicate the important relation between abject(ion) and spatiotemporality and the significance of navigating spatiotemporality as a strategy of abjecting and maintaining subjectivity.

The second strategy concerns silencing. Laksmi keeps a radio to silence the men’s conversation (Sylviana, 2015). Reference

to the radio appears a couple more times in the story, accentuating its silencing function. It needs more than one action for Laksmi to abject Samsu. Even so, Samsu’s presence, voice, and story linger and continue to impinge on her subjectivity. As the narrator says, the radio’s sound is “faint” and does not mute the men’s conversation. After all, Laksmi is the waitress, and Samsu is her guest. Turning up the volume would mean disrespecting all the guests. Laksmi’s subjectivity as an abandoned woman overlaps with her position as a waitress who must serve her customers. Samsu’s presence compels Laksmi to negotiate spatiotemporality and her layered subjectivity.

The third strategy is silence, which, though generally regarded as a form of passivity and submission in the masculine binary view of gender, is portrayed otherwise. From the beginning, it is Samsu who is presented as active. He dominates the conversation and becomes the center of attention. Laksmi’s silence is active, not passive, for she negotiates the situation rather than confronting Samsu before the other guests. It is even Laksmi who finally breaks the silence. The only exchange between them occurs at the end of the story when Samsu is settling his bill. Laksmi’s only words are responded to with a short apology. Before he even says a word, Laksmi expels him by saying “You don’t need to come again, *Bang*...” (Sylviana, 2015, p. 143).

Laksmi’s polite expression is not harsh in tone. She still calls him *bang*,

shortened from ‘*abang*.’ ‘*Abang*’ has several meanings: older brother, a form of address for an older male. Additionally, ‘(a)*bang*’ is frequently used by a woman as an intimate address for her lover/spouse. Laksmi’s word use suggests her admission of her romantic past with Samsu. Yet, spoken by a woman facing an abject person, it implies strength and composure. The mixture of a sense of intimacy and a prohibitive (i.e., abjecting) speech act reflects a compromise between her subjectivity as an ex-lover, betrayed woman, and a coffeehouse keeper, portraying abjection as a complex situation. By breaking her silence, Laksmi does not put herself as an object. Speaking is not a sign of her willingness to reconnect with Samsu. She speaks before he says a word because she does not want him to speak. Her utterance is not a friendly gesture but an imperatively prohibitive speech act charged with authority and subjectivity. Mona’s treatment of silence embodies a characteristic of “abject literature” (Arya, 2014, p. 158) in that it provides an example of “productive silence” (Walker, 1998, p. 66) and “silence that speaks” (p. 127).

Mona’s portrayal of abject(ion) reflects two characteristics of the abject: that it can never be totally expelled and that it is ambiguous. As Kristeva (1980/1982) maintains, “from its place of banishment, the abject does not cease challenging its master” (p. 2); “it does not radically cut off the subject from what threatens it—on the contrary, abjection acknowledges it to be in perpetual danger” (p. 9). In McAfee’s (2004) words, “[w]hat is abjected is radically

excluded but never banished altogether. The abject hovers at the periphery of one's existence, constantly challenging one's tenuous borders of selfhood" (p. 46). Laksmi stays away from the men's area but is still inside the coffeehouse. She even approaches the men's table a few times. She cannot utterly abject Samsu, for he is a customer she must serve. Laksmi and Samsu hover nearby, lurking and threatening each other's subjectivity.

The dual nature of the abject is reflected in the extent to which the abject is partially accepted rather than wholly repelled. (Young) His audience abjects Samsu, yet he endures their rejection until he finishes his story. As Creed (1993) points out, "abjection is always ambiguous" (p. 10), evoking "loathing and fascination" (Kutzbach & Mueller, 2007, p. 8). In the coffeehouse, Samsu experiences abjecting and being abjected. Telling the story about his past can be equated to excreting filth. It is disgusting, yet simultaneously, it gives him two pleasures: one that results from self-cleansing and another from the respectful treatment of his audience. Samsu needs the other guests to listen to his story because he cannot face Laksmi. When his audience curses the young man in his story, Samsu endures it by inhaling his cigarette deeply into his lungs. The curse is compensated by the smoking pleasure. This action again emphasizes that rejection and acceptance—if not pleasure—occur at the same time and that abject(ion) has a paradoxically dual nature (Kristeva, 1980/1982).

Similarly, Laksmi faces the dual nature of abject(ion) in that she endures the situation but benefits from it. The transactions from the sales of coffee and cigarettes give her the benefit (pleasure) that comes together with loathing. She can still hear them—hence the radio. The story shows negotiation as part of the formation of subjectivity. Laksmi's complex subjectivity is depicted through how it has to be constantly negotiated. Laksmi must grapple with her double identity as a woman in an abject situation and as a coffeehouse keeper whose duty is to maintain good relations with her consumers. Her mixed subjectivity prevents her from openly abjecting Samsu in the presence of the other guests.

As for the younger customers, despite their revulsion at young Samsu, they enjoy the old man's presence and are eager to hear how the story ends. They compete to please Samsu and hear the continuation of the story Samsu did not finish a few nights before. The young men respect Samsu by preventing him from being uncomfortable. For example, a man rebukes another man named Buton for asking Samsu to continue his story immediately: "Hey, Buton. Can't you see that our *Bapak* here hasn't finished smoking his cigarette?" (Sylviana, 2015, p. 124). The man does not want anyone to give an impolite impression of Samsu. The form of address *Bapak* (father) is modified by the possessive "our," indicating their acceptance of Samsu. This attitude is strengthened when a man wrapped in a sarong rushes to bring an ashtray and a glass of coffee to Samsu's table while another turns down the television

so they can get the pleasure of listening to his story.

As mentioned earlier, the discussion about the short story also blends the symbolic and the semiotic to create the poetic. Other than repetition, as described earlier, the poetic is manifested through fragments. The absence of syntactic incompleteness in the text does not conceal meaning but provides a context from which meaning emerges. An important use of such a style appears in the passage about the night of the rape: “*Mosquitos swarming ... Buzzing ... They entered the kitchen. A pot fell. A banging sound. Laksmi’s voice holding her sobs. Close ... Sound of cloth being torn*” (Sylviana, 2015, pp. 130–132, originally italicized).

The passage is presented plainly without any adverbials to describe the situation and create a tone. The fragment suggesting Laksmi’s rape is devoid of tone. The absence of Laksmi’s rape scene implies that the vicious crime is abject(ed). However, the short interval between pauses creates a kind of “staccato” and “thrill” (Kristeva, 1980/1982, pp. 194–195) that defy grammatical and syntactic rules (Becker-Leckrone, 2005) and heightens the tension. Mona’s use of the poetic is also shown by the apparent forms of silence in the story. Silence can be described as avoidance of language. Samsu dominates the story with language, but his language is hypocritical because his attitude betrays his words. Laksmi, on the other hand, is silent.

Laksmi’s silence is active because it ‘speaks’ through the accompanying

non-verbal actions. Laksmi ‘speaks’ not with language but with her attitude. Her repetitive acts of avoidance are expressed through the narrator’s words, but what such repetition signifies is not described. It lies in the resulting rhythm, emphasizing that meaning also can come from what escapes language. The text does not indicate whether Laksmi forgives Samsu. Laksmi’s non-response to Samsu’s apology bespeaks that his subjectivity is not restored but remains disrupted.

Another intriguing feature of the text is its dual narrative structure. The first part, conveyed by a third-person omniscient narrator, spans from Samsu’s arrival to the point before he tells his story. There is no account of how Samsu tells his redemption story. The narration is abruptly taken over by the second part, which uses a first-person perspective and is written in italic. On the one hand, using the first pronoun, “I,” which refers to Samsu, gives the impression that Samsu is the narrator and therefore has authority as the subject of the narration. On the other hand, however, the juxtaposition of the two types of narration suggests otherwise. Such dual narration implies the presence of a ‘grand’ narrator who has ‘access’ to Samsu’s mind and uses the first-person pronoun on behalf of the character whose mind is ‘overridden.’ Such narrative switching is not uncommon in Mona’s texts, for it can also be found in Mona’s “Mata Andin,” “Perjalanan Hujan,” and “Mata yang Menyala” (all from the collection *Wajah Terakhir*, Sylviana, 2011).

In this way, the narration creates an impression that the narrator exposes the innermost thoughts that the character conceals. The information untold in the first narration is revealed in the second. The juxtaposition of both narratives leaves a gap from which two things can be inferred. First, Samsu abjects his past, and by doing so, he does not tell the truth to his listeners who, ignorant of his true self, refer to the young man in the story as 'he' and curse before Samsu himself. Second, the "grand" narrator is not neutral but takes Laksmi's side. Not only does the dual technique disrupt Samsu's subjectivity as a respected person in the first part, but it also weakens his voice. At the same time, the technique amplifies the already subjective and authoritative feminine voice that Laksmi carries through her silence.

Based on our reading, Mona shows two contrasting portrayals of abjection. On the one hand, Samsu's abjectness arises from within himself. Samsu's manner of abjection is masculine in that it objectifies Laksmi. On the other hand, Laksmi's abject is Samsu. Her modes of abjection are feminine in that they are non-violent and defensive rather than offensive. Samsu's attitude does not win him the redemption and forgiveness he seeks. Although gnawed all along, Laksmi's subjectivity is maintained and reclaimed. Mona's treatment of the two characters signifies her espousal of the feminine.

"Dongeng Penebusan" is an abject story that defies telling and verbal expressions. While the abject/monstrous discussed in the previous studies mentioned earlier

(Darmawan et al., 2015; Nariswari & Yoesoef, 2018; Siddique, 2002; Suhendi et al., 2017; Wilger, 2016) is physical and therefore tangible, the abject aspects in Mona's story are intangible and defy expressions. Mona's craft of relying on showing rather than telling and creating gaps and rhythm exhibits the characteristics of fusion between the symbolic and semiotic envisioned by Kristeva (1980/1982). The double narrative technique and the rhythm produced by Mona's use of language suggest the impasse resulting from the limitation of the patriarchally structured symbolic language. Our discussion complements Priyatna's (2011) categorization of the abject by elaborating on the modes of abjection shown in Mona's story. "Dongeng Penebusan" is Mona's way of unraveling experiences and voices muted in history.

## CONCLUSION

"Dongeng Penebusan" presents various forms of abject(ion). Samsu is faced with triple abjection. First, he is abjected by his past as he disassociates himself from his younger self. Second, he is abjected by his audience, disgusted by the young man in his story. Third, he is abjected by Laksmi. In the story, abjection takes the form of telling a story, the act of cleaning, navigating spatiotemporally, silencing, and silence. Narratively, the abject(ion) theme is strengthened through repetitions of expressions and actions. The staccato resulting from fragmented structure, pauses, and repetition bears a characteristic of 'the poetic,' the fusion between the semiotic and symbolic.

Silence is responsible for the absence of details about Samsu, Laksmi, and their past. Laksmi is silent about herself and her past, but Samsu is not. He tells about it partially, being silent about his and his past. His dissociating himself from his younger self causes his audience to respect him while abjecting the young man. Samsu's being untruthful prevents him from being purged. Instead of receiving forgiveness, he is abjected verbally by Laksmi.

Abject(ion) in the story is closely related to the issue of subjectivity. Samsu's subjectivity is shaken by his abject past. When telling his story, his subjectivity is fractured because he detaches himself from his younger self. His subjectivity remains shaken when Laksmi does not respond to his apology and prohibits him from coming again. Laksmi's subjectivity is shaken by Samsu's presence and story. She maintains her subjectivity by negotiating between her identity as Samsu's ex-lover and someone in charge of the coffeehouse. Laksmi regains her subjectivity and autonomy by refusing to see him again and not responding to his apology. The story exemplifies silence and spatial navigation as non-violent means of abjecting and maintaining subjectivity.

In "Dongeng Penebusan," abjection involves specific strategies of rejection and certain degrees of acceptance. Mona's portrayal of Laksmi shows how subjectivity is reclaimed through different forms of abjection and how abjection is part of becoming a subject. Through the story, Mona brings the much-avoided issue of abjection to the center. "Dongeng Penebusan" is one

of the stories where Mona's attention shifts from maternal and physical abjection to social abjection.

Through "Dongeng Penebusan," Mona shares an abject situation with her reader. The implicitness and lack of details in the story raise the difficult question of sexual violence perpetrated by those close to power. While the national tragedy itself is already abject, the sexual violence and the impact faced by many women are often trivialized, if not negated altogether. The limitations of the current discourse on (social) abjection in the context of Indonesian politics and history call for further discussions about abject(ion), the social, political, cultural, and historical landscape in which abject(ion) is framed, and how the issue is treated in other works by Mona or other writers.

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## **Effect of the COVID-19 Pandemic and Subsequent Social Distancing on Individual's Mental Health**

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### **ABSTRACT**

The COVID-19 coronavirus, an infectious disease originating in Wuhan, has become an outbreak worldwide, leading to unprecedented measures restricting social and physical activities in many countries. The subsequent social distancing of COVID-19 has significantly resulted in many psychological consequences. The current study examines the impact of social distancing during the COVID-19 pandemic on the mental health symptoms of Selangor State, Malaysia residents. An online survey was conducted through social media platforms targeting residents of Selangor State in Malaysia. A convenience sampling method was led to include 258 respondents in the study. The questionnaire on the symptoms of mental health related to fear of COVID-19 included 13 items developed from the existing studies. The results showed that symptoms of mental health problems related to fear of COVID-19 are negatively associated with the likelihood of social interaction. The overall score of symptoms of mental health related to the fear of COVID-19 showed moderate symptoms of mental problems related to the fear of COVID-19. The factor

of age was also associated with higher symptomatology of mental health problems related to fear of COVID-19. Thus, related measures and guidelines must consider the mental well-being of the at-risk person as the pandemic continues. The current study's findings contribute to the knowledge gaps in behavioural health during biological disasters. It also provides a reference for professionals and policymakers to develop

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programs and measures to handle the psychosocial status of the affected people.

*Keywords:* Behavioural health, COVID-19, Malaysia, mental health symptoms, online survey, Selangor, social distancing, social interaction

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## INTRODUCTION

In December 2019, the WHO was informed of an outbreak of a new disease that causes respiratory infections in humans in the Chinese city of Wuhan. This disease, transmitted by the new strain of coronavirus, was named COVID-19 (Wu et al., 2020). In early 2020, new cases of coronavirus COVID-19 were rapidly detected in various countries where the virus was not previously. Subsequently, WHO declared the novel coronavirus (COVID-19) outbreak a public health emergency of international concern as one of the most significant biological challenges the current global community has faced (Carbone, 2020). More than 758 million confirmed cases of COVID-19 have been reported worldwide, with about seven million fatalities (“WHO Coronavirus”, 2023). Local and international health authorities are taking many measures to prevent the spread of COVID-19 worldwide (Hsieh et al., 2020). These measures differ from country to country; home quarantine or social distancing was one of the primary means to contain the spread of infection (Kopelovich et al., 2020). Some countries like China, Italy, and Malaysia have implemented social distancing by imposing total lockdowns; other countries like Netherlands, UK, US, and Sweden

have taken less stringent social distancing measures.

Despite the precautionary measures and the spread of vaccines, billions of people were quarantined in their homes as nations have executed social distancing to contain the spread of the disease (Clair et al., 2021; De Vos, 2020; Tajudin et al., 2021; Teo et al., 2020). Besides, the subsequent waves of COVID-19 might lead to new streams of social distancing (Müller et al., 2021; Wu et al., 2020). Despite the precautionary measures and the spread of vaccines, billions of people were quarantined in their homes as nations have executed social distancing to contain the spread of the disease (Clair et al., 2021; De Vos, 2020; Teo et al., 2020). Besides, the current and subsequent waves of COVID-19 might lead to new streams of social distancing (Wu et al., 2020). These sudden social measures create certain levels of psychological distress among individuals worldwide (Clair et al., 2021; Müller et al., 2021).

In March 2020, Malaysia recorded many of the first COVID-19 wave infections in the region, as COVID-19 was reported in every state and federal territory. Many measures intended to prevent the spread of COVID-19 were taken by local health authorities and overseen by the Ministry of Health of Malaysia (Bernama, 2020; Boo, 2021). By March 18, 2020, the first nationwide Movement Control Order (MCO) to control the disease through social distancing and a total lockdown was announced by the responsible authorities and overseen under the Ministry of Health

and Ministry of Defence of Malaysia, which lasted over two months (Bernama, 2020; Shah et al., 2020). A gradual easing of restriction was announced under a Conditional Movement Control Order (CMCO) followed by Recovery Movement Control Order (RMCO) until April 2021. The restricted movement of people and closing borders has led to the country's success in flattening the curve of COVID-19 infection (Shah et al., 2020). However, during the second COVID-19 wave in early 2021, Malaysia witnessed an unprecedented sharp rise in COVID-19 cases and deaths, leading to announce the second Movement Control Order until August 2021. During these two years of MCOs, the most widespread measure is the general prohibition of mass movements and gatherings nationwide. The community understands these restrictions as social isolation (Bezerra et al., 2020).

Although these measures are efficient for such diseases (Wilder-Smith & Freedman, 2020); however, social distancing could significantly impact socioeconomic and psychosocial impact. This social isolation is expected to lead to the prevalence of depression, anxiety disorders, loneliness, fear, and boredom (Hsieh et al., 2020; Müller et al., 2021). Long-term social isolation can prejudice mental and physical well-being (Bandura, 1994; Vandervoort, 1999). Psychosocial factors, including depression, anger, stress and anxiety, were found to be associated with social support and self-efficacy, where social support and social interactions were related to increasing the levels of self-efficacy and reducing the levels of depression and anxiety (Bandura,

1994; Müller et al., 2021). Furthermore, biological disasters often affect human well-being in crucial ways, increasing threats and psychological disorders (Clair et al., 2021; Hsieh et al., 2020). Numerous studies were conducted on the psychological impact of COVID-19, focusing on healthcare workers working at the frontline (Chen et al., 2020; Tan et al., 2020; Teo et al., 2020). However, the psychological threat of epidemics, such as COVID-19, on home-quarantined individuals is mainly overlooked, especially in the Malaysian context. Hence, there is a need to examine the impact of the social distancing imposed by the COVID-19 pandemic on peoples' mental health in the home quarantine to facilitate measures considering different perceptions. The current study aims to examine the impact of social distancing during the COVID-19 pandemic on the mental health of residents of Selangor State in Malaysia.

This paper discusses the importance of social interaction as a factor of communities' social support, particularly during biological disasters, followed by social isolation and its impact on mental well-being. Then, the methods adopted for the survey and the significance of findings from the survey conducted. The paper then discusses the effects of COVID-19 and subsequent social distancing on the community's psychosocial behaviours during the MCO.

### **Social Interaction and Social Isolation**

Social interactions refer to a dynamic, physical exchange between two or more individuals and are a building block of societies (Salih et al., 2023). Changes in the

urban fabric, communications, networking, mobility, density, and the health status of individuals were identified as factors predicting social interaction (De Vos, 2020). Meanwhile, the complete or near-complete absence of social interactions, contacts, or relationships between individuals and society refers to social isolation (Alspach, 2013). The weakness or lack of social interaction forms the basis for identifying the social isolation behaviour of individuals. Social isolation and interaction have been identified as factors correlated with dysfunction and physiological and mental well-being. For example, the fear of COVID-19 increased panic and reduced socialisation interaction (Hsieh et al., 2020). Until today, many individuals worldwide continue to take social distancing measures and work or study from home (Keller et al., 2023), affecting their social interaction level.

In contrast, reviewed evidence showed that psychosocial interventions were essential to enhance the population's physical health besides mental health, in both absolute and relative terms (Macleod & Smith, 2003). People with a more socially active life tend to feel better about themselves and have more self-assurance, self-efficacy, life satisfaction, health, and psychological well-being (Ruggeri et al., 2020). For example, the size of the community, the presence of other people in the place where the person lives, and the place's characteristics could increase the likelihood of interacting (Bezerra et al., 2020; Salih & Ismail, 2018a, 2018b), in turn, reduce the psychological and mental disorders (Salih & Ismail, 2017).

Social support and interaction can enhance physical and mental health and reduce social isolation and psychopathological factors inducing social isolation (Yue et al., 2020). Additionally, outdoor public spaces can be defined as shared spaces that facilitate interaction and attachment, enhance well-being and mental health, and increase opportunities for social activities (Barton & Rogerson, 2017; Salih et al., 2023). Accessibility to these spaces provides vital health and social benefits and environmental services (Barton & Rogerson, 2017; White et al., 2019).

### **Mental Health During COVID-19 Social Isolation**

Mental health refers to individuals' emotional, social, and psychological well-being. It affects individuals' think, feelings, actions, and contributions to their community. Poor mental health affects minds and behaviours, and its positively related to poor physical health (World Health Organization, 2005). Mental illness refers to mental health disorders that include various mental health conditions such as depression, anxiety disorders, schizophrenia, eating disorders and addictive behaviours (Malla et al., 2015). One critical factor that leads to poor mental health and mental health disorders is loneliness or social isolation (Malla et al., 2015; World Health Organization, 2005). Mental health and social support have a critical role in managing the epidemic of infectious diseases such as COVID-19. Social support is essential to alleviate fear and anxiety

disorders of contagious diseases (Banerjee & Rai, 2020; Hsieh et al., 2020). Further, social isolation has been identified as a risk factor associated with the development of various diseases and disability that occurs in the course of the disease, as well as mortality statuses (Carbone, 2020; Kopelovich et al., 2020; Macleod & Smith, 2003; Zeilig et al., 2020). Social measures might significantly impact social and physical activity, resulting in increases in physiological (e.g., diabetes, obesity, and cardiovascular) and psychological diseases (Bezerra et al., 2020; Clair et al., 2021; Cleofas, 2021; De Vos, 2020). It could be a risk factor for many mental disorders like stress (Bezerra et al., 2020), loneliness (Banerjee & Rai, 2020; Pantell & Shields-Zeeman, 2020), severe fear, anxiety, and depression (Müller et al., 2021; Teo et al., 2020). Psychosocial disorders make the quarantined individual more segregated into his own constricted space (Clair et al., 2021). Psychological well-being and perceptions of biological disasters were also associated with sociodemographic factors (Chan et al., 2020).

Additionally, fear of diseases or infection with viruses significantly impacts psychological and mental health (Banerjee & Rai, 2020; Hsieh et al., 2020). Persons suspected of being infected with an epidemic disease were found to have higher depression levels, poor social relationships, and higher economic issues than healthy persons (Hsieh et al., 2020). Weak psychosocial support systems in areas affected by the previous epidemics increased the risk of psychological distress and mental health

issues (Cabarkapa et al., 2020). Thus, there is an interrelationship between mental (psychological) well-being, social isolation, and disease infection (Hsieh et al., 2020).

## METHODOLOGY

### Procedure Participants and Study Area

The current study adopted a quantitative cross-sectional online survey to examine the impact of social distancing during the COVID-19 pandemic on mental health among the residents of Selangor, Malaysia. Selangor is one of 13 states of Peninsular Malaysia, encircling the capital city Kuala Lumpur; its area is about 8,000 square km (3,129 sq. miles). Selangor State has the largest economy, resources, and population (12.5% of the total population) and the lowest poverty rate in the country (Department Statistics of Malaysia, 2019). Selangor in Malaysia has recorded the highest number of confirmed novel coronavirus infections; thus, it has been selected as the study area. The online questionnaire survey, written in English, was conducted from June 10 to December 10, 2020; more than 40,000 active cases were reported in the country in July 2020, with over 17,000 active cases in Selangor. The online questionnaire was developed with the Google platform using Google Form online survey service. The questionnaire form has posted to 1000 users on Whatsapp platforms in Selangor State, Malaysia, using convenience and snowball sampling approaches (Kelley et al., 2003).

Thus, the current survey study recruited only adults aged 18 years and over who lived in Selangor State throughout the pandemic.

The respondents were asked to provide the name of the city they resided in to ensure they settled in the State during the pandemic. A total of 301 posted questionnaire was returned; however, 14 of the returned forms were not completed, and 29 were not from Selangor State, which was not included. The study's sample size was evaluated using the Simplified Formula of Kline's (2010) recommendations. The population size was 16,000 (N), representing the monthly average of positive COVID-19 positive cases in Selangor State from June to December 2020, and the level of precision was  $\pm 5\%$ . Thus, the included sample size of the study was (n) 258 respondents. Besides, Kline (2010) suggested that a sample size of 200 respondents would be acceptable in most social science studies.

## Measures

The questionnaire of the current study was developed after a comprehensive review of previous studies, theories, and global scales on behaviour problems. The questionnaire included 13 items that measured respondents' sociodemographics, socialisation status and the symptoms of mental health related to the fear of COVID-19. The demographic variable included gender (female and male), age groups (18 to 25, 26 to 39, 40 to 59, 60 and above), and occupation (student, employed, and unemployed). The demographics classification of gender, age, and occupation were identified according to the previous social studies surveys (Mertens et al., 2019). The socialisation status scale included two

items of category scale to measure the likelihood of social interaction (socialisation opportunities). The first item measured the number of household members (living alone, living with one adult, living with two adults or more), assuming that participants who live with less than two adults could have fewer opportunities for social interaction (Bezerra et al., 2020; Leonard et al., 2017). The second item measured the frequency of going outdoors during MCO (never going outside during MCO; going outside once or twice per week for shopping or necessities during MCO; going outside a short time daily for necessities during MCO; going outside a long time daily for work or other needs during MCO).

The scale of symptoms associated with mental illness related to fear of COVID-19 included eight items of a five-point Likert scale (three-item measure symptoms of depression; three-item measure symptoms of anxiety; two-item measure symptoms of loneliness). The current eight items were developed from different global scales of behavioural health, including a short version of the Geriatric Depression Scale (GDS; Sheikh & Yesavage, 1986), a short scale for Loneliness (Hughes et al., 2004), a Generalized Anxiety Disorder scale (GAD-7; Spitzer et al., 2006), and Malay Version of the Fear of COVID-19 Scale (Pang et al., 2020). Scores on the five-point scale were categorized as (1) strongly disagree, (2) disagree, (3) neutral, (4) agree, and (5) strongly agree, with a total score ranging from 8 to 40 for the overall mental health symptoms related to the fear of COVID-19. A higher score indicates severe mental



health symptoms associated with the fear of COVID-19. Besides, the respondents first answered a screening question about if they had a mental health diagnosis or mental health problems before the COVID-19 pandemic. All respondents confirmed that they had not been diagnosed with any symptoms of mental health problems before. Three expert panels (comprising three associate professors from the University of Putra Malaysia) approved the developed questionnaire form. The experts reviewed the questionnaire items' readability, clarity, and comprehensiveness. Besides, Cronbach's alpha coefficient of the 13 items was 0.79 (greater than 0.70), indicating good internal consistency of the questionnaire.

### **Ethical Statement**

A committee of experts from the Faculty of Design and Architecture, Universiti Putra Malaysia, approved the study protocols. All participants gave informed consent before applying the survey or any related procedure.

### **Data Analysis**

The collected data of this study were entered and analyzed using the Statistical Package for Social Sciences version 23.0 software. Descriptive statistics, either mean  $\pm$  standard deviation ( $\pm$ SD) or frequency (percentage %), were used to summarize sociodemographic characteristics, socialisation status (independent variables), and mental health symptoms related to the fear of COVID-19 (dependent variables). ANOVA was utilized to test the association

between mental health (behavioural health) and the fear of COVID-19 (independent variable) and sociodemographics. Meanwhile, the regression analysis was used to examine the association between mental health symptoms associated with the fear of COVID-19 (independent variable) and socialisation status (independent variables). The multivariate correlation between the study variables was carried out following the criteria of Montgomery et al. (2014). The mental health variable in the descriptive and regression statistics was the sum of the eight mental illness symptoms related to the fear of COVID-19. The depression and anxiety variables were the sums of three-item for each. In contrast, the loneliness variable was the sum of two-item. A *p*-value below 0.05 was considered statistically significant.

## **RESULTS**

### **Respondents' Sociodemographic and Socialisation Opportunities**

Two hundred and fifty-eight respondents were involved in the study (response rate: 85.72%). Most of the respondents (39.1%) were from 26 to 39 years of age, followed by 33.3% of the respondents from 18 to 25 years. Meanwhile, 21.3% were from 40 to 59 years old, and only 6.2% were above 60. More than half of the respondents (60.1%) were female, while 39.9% were male. Regarding occupation, 58.1% of the respondents were students, 31.8% were employed, and 8.5% were unemployed. Over half the respondents (55.0%) reported that they lived with two adults or more, 35.3% were living with one adult, and

9.7% lived alone. Furthermore, half of the respondents (50.0%) reported that they went outside once or twice per week for shopping or basic needs during MCO; 33.7% said that they never went outside during MCO; 14.7% stated that they went outside for a short time daily for shopping

or basic needs during MCO. Only 1.6% of the respondents said they went outside a long time daily for work, visits, or other obligations during MCO. The respondents' sociodemographic characteristics and social status are presented in Table 1.

Table 1  
*Respondents' sociodemographic characteristics and socialisation opportunities (n = 258)*

Characteristic	n	%	
Gender	Male	103	39.9
	Female	155	60.1
Age Group	18–25	86	33.3
	26–39	101	39.1
	40–59	55	21.3
	60 and above	16	6.2
Occupation	Student	150	58.1
	Employed	82	31.8
	Unemployed	22	8.5
	Missing	4	1.6
Number of household members during MCO	Living alone	25	9.7
	Living with one adult	91	35.3
	Living with two adults or more	142	55.0
Frequency of going outdoors for basic needs during MCO	Never going outside during MCO	87	33.7
	Going outside once or twice per week for shopping or basic needs during MCO	129	50.0
	Going outside a short time daily for shopping or basic needs during MCO	38	14.7
	Going outside a long time daily for work or other needs during MCO	4	1.6

### The Severity of Symptoms Associated with Mental Illness Related to Fear of COVID-19

The overall mean score of symptoms associated with mental health behaviours related to the fear of COVID-19 in respondents was  $23.12 \pm 8.02$ , reflecting moderate symptoms associated with mental health problems related to the fear of COVID-19 (Table 2). 41.0% of the respondents had symptoms associated with mental illness score  $\geq 25$ . Only 1.6% of the respondents had no symptoms of

mental issues related to fear of COVID-19, while 23.6% had minimal symptoms of mental illness associated with the fear of COVID-19 (9 to  $\geq 16$ ). Meanwhile, the mean scores of symptoms associated with depression, anxiety, and loneliness related to fear of COVID-19 in respondents were  $8.45 \pm 3.14$ ,  $8.79 \pm 3.33$ , and  $5.87 \pm 2.43$ , respectively (Table 2). Over half the respondents (49.6%, 48.4%, and 54.7%) had symptoms associated with depression, anxiety, and loneliness related to fear of COVID-19.

Table 2

*The severity of mental illness related to fear of COVID-19 among Selangor residents*

Severity of symptoms	Mean $\pm$ SD
The overall mental problems related to the fear of COVID-19	$23.12 \pm 8.02$
Symptoms of depression	$8.45^{**} \pm 3.14$
Symptoms of anxiety	$8.79^{**} \pm 3.33$
Symptoms of loneliness	$5.87^* \pm 2.43$

*Note.* \*\*The total mean score of depression and anxiety ranged from 3 to 15; \*The total mean score of loneliness ranged from 2 to 10.

### Symptoms Associated with Mental Illness Related to Fear of COVID-19 Based on Demographics

The ANOVA test showed that the respondents' age group was positively associated with the symptoms of mental illness related to fear of COVID-19 ( $p = 0.01$ , Table 3). This result indicated that age significantly predicted the symptoms of psychosocial issues related to fear of COVID-19. However, other sociodemographic characteristics, including respondents' gender and occupation, were not associated with the mental health associated with fear of COVID-19 ( $p >$

0.05). Individually, the age group of the respondents was also positively associated with the symptoms of depression ( $p = 0.008$ ), anxiety ( $p = 0.005$ ), and loneliness ( $p = 0.019$ ) related to fear of COVID-19 in the regression analysis. Multiple comparisons analysis using the Bonferroni test was applied to the significant results of ANOVA. Bonferroni test showed differences in the symptoms of mental illness related to fear of COVID-19 between the age group 18–25, age groups ( $p > 0.01$ ) 26–39 and 60 and above ( $p > 0.01$ ).

This result indicated that participants aged 26-39 and 60 and above reported higher symptoms of psychosocial issues related to fear of COVID-19 than participants aged 18–25. Bonferroni test showed that participants aged 60 and above reported higher symptoms of depression ( $p > 0.05$ ) and loneliness ( $p > 0.05$ ) related to fear of COVID-19 than participants aged 18–25. It also showed that participants aged 26–39 reported higher symptoms of anxiety ( $p > 0.01$ ) and loneliness ( $p > 0.05$ ) related to fear of COVID-19 than participants aged 18–25. This result indicated that as the participants were older, they had higher symptomology of mental illness related

to fear of COVID-19 (Table 4). Besides, respondents' occupation (work status) was positively associated with the symptoms of depression ( $p = 0.022$ ) related to fear of COVID-19 (Table 3). Bonferroni test showed differences in the symptoms of depression related to fear of COVID-19 between the students and unemployed participants ( $p > 0.05$ ). This result indicated that unemployed participants had higher symptoms of depression related to fear of COVID-19 than students (Table 5). There was no association between the mean score of depression, anxiety, and loneliness related to fear of COVID-19 and other demographic variables ( $p > 0.05$ ).

Table 3  
Symptoms of mental illness related to fear of COVID-19 based on sociodemographic characteristics

Variable		Mean square	F	p-value
The overall mental problems related to the fear of COVID-19	Gender	16.52	0.25	0.613
	Age group	238.53	3.82	0.01*
	Occupation	91.90	1.42	0.24
Symptoms of depression	Gender	0.24	0.02	0.87
	Age group	38.66	4.03	<b>0.01**</b>
	Occupation	37.21	3.85	<b>0.02*</b>
Symptoms of anxiety	Gender	5.73	0.51	0.47
	Age group	46.25	4.33	<b>0.01**</b>
	Occupation	14.92	2.53	0.08
Symptoms of loneliness	Gender	0.84	0.14	0.70
	Age group	19.51	3.38	<b>0.01*</b>
	Occupation	91.90	1.42	0.24

Note. The table reports ANOVA test; \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$ .

Table 4  
*Differences in symptoms of mental illness related to fear of COVID-19 based on age*

Dependent Variable	(I) Age group	(J) Age group	Mean difference (I-J)	Std. error	p-value	95% Confidence interval	
						Lower bound	Upper bound
The overall mental problems related to the fear of COVID-19	18–25	26–39	-4.07	1.15	0.01**	-7.13	-1.02
		40–59	-2.19	1.35	0.63	-5.79	1.40
		60 and above	-6.88	2.13	<b>0.01**</b>	-12.56	-1.21
	26–39	18–25	4.07	1.15	<b>0.01**</b>	1.02	7.13
		40–59	1.87	1.31	0.92	-1.61	5.37
		60 and above	-2.81	2.10	1.00	-8.41	2.79
	40–59	18–25	2.19	1.35	0.63	-1.40	5.79
		26–39	-1.87	1.31	0.92	-5.37	1.61
		60 and above	-4.68	2.22	0.21	-10.60	1.23
	60 and above	18–25	6.88	2.13	<b>0.01**</b>	1.21	12.56
		26–39	2.81	2.10	1.00	-2.79	8.41
		40–59	4.68	2.22	0.21	-1.23	10.60
Symptoms of depression	18–25	26–39	-1.17	0.45	0.06	-2.38	0.03
		40–59	-0.67	0.53	1.00	-2.09	0.74
		60 and above	-2.50	0.84	<b>0.02*</b>	-4.74	-0.26
	26–39	18–25	1.17	0.45	0.06	-0.03	2.38
		40–59	0.49	0.51	1.00	-0.88	1.87
		60 and above	-1.32	0.83	0.67	-3.54	0.88
	40–59	18–25	0.67	0.53	1.00	-0.74	2.09
		26–39	-0.49	0.51	1.00	-1.87	0.88
		60 and above	-1.82	0.87	0.23	-4.16	0.51
	60 and above	18–25	2.50*	0.84	<b>0.02*</b>	0.26	4.74
		26–39	1.32	0.83	0.67	-0.88	3.54
		40–59	1.82	0.87	0.23	-0.51	4.16

Table 4 (Continue)

Dependent Variable	(I) Age group	(J) Age group	Mean difference (I-J)	Std. error	<i>p</i> -value	95% Confidence interval	
						Lower bound	Upper bound
Symptoms of anxiety	18–25	26–39	-1.58	0.47	<b>0.01**</b>	-2.86	-0.31
		40–59	-0.22	0.56	1.00	-1.72	1.27
		60 and above	-0.13	0.88	1.00	-2.49	2.23
	26–39	18–25	1.58	0.47	<b>0.01**</b>	0.31	2.86
		40–59	1.35	0.54	0.08	-0.09	2.81
		60 and above	1.45	0.87	0.59	-0.88	3.79
	40–59	18–25	0.22	0.56	1.00	-1.27	1.72
		26–39	-1.35	0.54	0.08	-2.81	0.09
		60 and above	0.09	0.92	1.00	-2.37	2.56
	60 and above	18–25	0.13	0.88	1.00	-2.23	2.49
		26–39	-1.45	0.87	0.59	-3.79	0.88
		40–59	-0.09	0.92	1.00	-2.56	2.37
Symptoms of loneliness	18–25	26–39	-0.94	0.35	<b>0.04*</b>	-1.87	-0.00
		40–59	-0.96	0.41	0.12	-2.06	0.13
		60 and above	-1.92	0.65	<b>0.02*</b>	-3.66	-0.18
	26–39	18–25	0.94	0.35	<b>0.04*</b>	0.00	1.87
		40–59	-0.02	0.40	1.00	-1.09	1.04
		60 and above	-0.42	0.64	1.00	-2.14	1.29
	40–59	18–25	0.96	0.41	0.12	-0.13	2.06
		26–39	0.02	0.40	1.00	-1.04	1.09
		60 and above	-0.39	0.68	1.00	-2.21	1.41
	60 and above	18–25	1.92	0.65	<b>0.02*</b>	0.18	3.66
		26–39	0.42	0.64	1.00	-1.29	2.14
		40–59	0.39	0.68	1.00	-1.41	2.21

Note. The table reports the Bonferroni test of multiple comparisons. \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$ .

Table 5

*Differences in symptoms of depression related to fear of COVID-19 based on occupation*

(I) occupation	(J) occupation	Mean difference (I-J)	Std. error	p-value	95% Confidence interval	
					Lower bound	Upper bound
Student	Employed	-0.66	0.42	0.36	-1.68	0.36
	Unemployed	-1.83	0.70	<b>0.03*</b>	-3.53	-0.12
Employed	Student	0.66	0.42	0.36	-.036	1.68
	Unemployed	-1.16	0.74	0.35	-2.96	0.62
Unemployed	Student	1.83	0.70	<b>0.03*</b>	0.12	3.53
	Employed	1.16	0.74	0.35	-0.62	2.96

Note. The table reports the Bonferroni test of multiple comparisons; \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$ .

### Symptoms of Mental Illness Related to Fear of COVID-19 Based on Socialisation

The regression analysis showed a negative association between symptoms of mental illness related to fear of COVID-19 and respondents' socialisation status, including household size ( $\beta = -0.393$ ,  $p = 0.000$ ) and the frequency of going outdoors during MCO ( $\beta = -0.270$ ,  $p = 0.001$ , see Table 6). This result indicates that household members and outdoor visits variables significantly predicted the overall psychosocial issues related to fear of COVID-19. Additionally, multiple regression analyses showed a negative association between the symptoms of depression related to fear of COVID-19 and respondents' socialisation status, including household size ( $\beta = -0.291$ ,  $p = 0.000$ ) and the frequency of going outdoors ( $\beta = -0.278$ ,  $p = 0.001$ , Table 6). There was also a negative association between symptoms of anxiety related

to fear of COVID-19 and respondents' household size ( $\beta = -0.243$ ,  $p = 0.003$ ) and the frequency of going outdoors ( $\beta = -0.225$ ,  $p = 0.004$ ). Besides, loneliness related to fear of COVID-19 in respondents was negatively associated with household size ( $\beta = -0.372$ ,  $p = 0.001$ ) and the frequency of going outdoors ( $\beta = -0.239$ ,  $p = 0.003$ ). These results mean that respondents with lower socialisation opportunities were significantly experiencing symptoms of depression, anxiety, and loneliness related to fear of COVID-19.

### DISCUSSION

This study contributes to the body of knowledge on the immediate impact of social isolation during the COVID-19 pandemic on the quarantined individuals' mental health symptoms. As the coronavirus (COVID-19) vaccine rollout began in 2022, social distancing measures and quarantines were reduced worldwide. However, the

Table 6  
Symptoms of mental illness related to fear of COVID-19 based on socialisation

Variable		B	Std. error	$\beta$	t	p-value
The overall mental problems related to the fear of COVID-19	(Constant)	38.39	1.85		20.74	0.00
	Household size	-3.94	0.68	-0.39	-5.77	<b>0.00***</b>
	Frequency of going outdoors	-3.03	0.63	-0.27	-4.82	<b>0.01**</b>
Symptoms of depression	(Constant)	14.02	0.73		18.98	0.00
	Household size	-1.37	0.27	-0.29	-5.03	<b>0.00***</b>
	Frequency of going outdoors	-1.19	0.25	-0.27	-4.96	<b>0.01**</b>
Symptoms of anxiety	(Constant)	13.6	0.81		16.86	0.000
	Household size	-1.213	0.30	-0.24	-4.04	<b>0.01**</b>
	Frequency of going outdoors	-1.03	0.27	-0.22	-3.75	<b>0.01**</b>
Symptoms of loneliness	(Constant)	10.68	0.55		19.20	0.000
	Household size	-1.35	0.20	-0.37	-6.60	<b>0.01**</b>
	Frequency of going outdoors	-0.80	0.18	-0.23	-4.23	<b>0.01**</b>

Note. The table reports regression analysis; \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$ .

pandemic is not over yet, and subsequent waves of COVID-19 cause excessive panic and streams of quarantine (Wu et al., 2020; Zhang & Ma, 2020). Notably, the short and medium-term impacts of COVID-19 will be severe on individuals worldwide, causing human suffering and challenging societal well-being. Beyond the immediate impacts on the health and economy, the pandemic is increasing individuals' concerns, affecting their social relations, personal security and sense of society (Organisation for Economic Co-operation and Development [OECD], 2020; Zhang & Ma, 2020). Based

on a longitudinal qualitative study by Perez-Brumer et al. (2022), COVID-19 led to significant shifts in physical socialisation and social support, such as using social networks rather than physical interaction. However, physical socialisation and material support are critical in promoting psychosocial health (Perez-Brumer et al., 2022).

Most importantly, the subsequent social distancing taken to limit COVID-19 infection led to immediate effects on health, mental health, income loss, and social isolation (OECD, 2020). Therefore, the current study examines the impact of social



distancing during the COVID-19 pandemic on symptoms associated with mental health among the Selangor community in Malaysia. Consistent with that objective, this study found that symptoms of mental illness related to fear of COVID-19 (including depression, anxiety, and loneliness) are adversely associated with the likelihood of social interaction. More specifically, people who suffered a higher social isolation level during the COVID-19 pandemic showed a higher level of different symptoms of psychosocial problems. These results contribute to the findings reported by OECD (2020) highlighted that temporary measures taken to limit COVID-19 cases through social distancing could have unintended consequences, such as social isolation and income loss, in addition to their immediate effects on health. Another qualitative study by De Vos (2020) stated that social distancing and lack of socialisation imposed by COVID-19 might negatively affect subjective well-being and health status. Another qualitative study by Hsieh et al. (2020) also confirmed that biological disaster like COVID-19 impacts the mental health of those infected and their family and affect the public's well-being.

The overall score of symptoms of mental health related to the fear of COVID-19 in respondents of the current study indicated moderate symptoms of psychosocial problems, reflecting a possible chance of experiencing mental health problems. Almost half of the respondents have experienced depression, anxiety, and loneliness symptoms related to fear of

the COVID-19 pandemic. However, the respondents had no diagnosis of mental health problems before the pandemic. This finding contributes to the results of an online survey from Singapore conducted among hidden-frontline healthcare workers found that there is an increased experience of fear, anxiety and depression among healthcare workers worldwide (Teo et al., 2020). Similarly, Perez-Brumer et al. (2022) confirmed that the familiar feeling described during isolation by the whole sample was loneliness. Another study by Keller et al. (2023) stressed the relationship between COVID-19 and mental health by considering anxiety and loneliness as sustaining factors of depressive symptoms related to COVID-19. The evidence also asserted that people are showing more negative emotions (anxiety, depression, and indignation), excessive panic, and less positive emotions (like happiness) after the declaration of COVID-19 (Li et al., 2020; Müller et al., 2021; Zhang & Ma, 2020). However, a survey study by Zhang and Ma (2020) revealed that the COVID-19 pandemic was associated with mild stressful impact in a sample from mainland China. One possible explanation for these different results is that the COVID-19 virus outbreak was not severe during the previous study in China. Although social distancing during the COVID-19 pandemic led to possible psychological problems, the most appropriate control measure to fight against COVID-19 has mainly proven successful in controlling the COVID-19 pandemic, especially in Malaysia (Shah et al., 2020).

Furthermore, the age variable was significantly associated with higher symptomatology of mental problems related to fear of COVID-19. Home-quarantined individuals aged 60 years and over showed higher symptoms of psychosocial issues related to fear of COVID-19 than individuals aged 16–25. The occupation variable was also significantly associated with symptoms of depression related to fear of COVID-19. Home-quarantined unemployed individuals showed higher symptoms of depression related to fear of COVID-19 than home-quarantined students. These findings align with the existing evidence showing that the perception of the current social isolation varies by demographic characteristics like education, age, and gender (Bezerra et al., 2020). However, the present study results showed that the gender variable was not significantly associated with symptoms of mental health problems related to fear of COVID-19 among quarantined individuals living in Selangor, Malaysia. The possible reason for these different results is that the Malaysian community's socio-cultural experience differed from those experienced in Western societies.

Overall, the present study contributes to the corpus of knowledge by revealing the relationship between social isolation during the COVID-19 pandemic and quarantined individuals' mental health symptoms during the spread of COVID-19. It discloses how social isolation negatively affects mental health due to the increase in symptoms of depression, anxiety, and loneliness, affecting individuals' well-

being, especially in Malaysia. Perhaps public health officials agree that the end of the pandemic is on the horizon. However, the negative impact of the pandemic is causing many social and economic issues to persist in the future. Therefore, the current and proposed guidelines must consider the at-risk community's social condition and mental needs. The current study extended the existing knowledge of the mental health-related issues of home-quarantined individuals during the COVID-19 pandemic. A significant practical implication of this study is the importance of observance of socialisation factors in managing mental and psychosocial problems in mental health assessments, protocols, and clinical interventions. The current study contributes to a deep understanding of the role of social status in individuals' mental health behaviours. The findings of this study contribute to new knowledge in the literature on the mental and psychosocial impact imposed by social distancing during the COVID-19 pandemic. Sparse studies examine the role of socialisation in psychosocial problems during biological disasters. Therefore, the present study results would provide a reference for any intervention program for mental health problems during biological disasters, particularly in Southeast Asia. It enriches the insights available to understand better the individuals' mental health related to social behaviours. It also may provide references for policymakers to plan measures considering people's psychological status in fighting COVID-19.

## CONCLUSION

In summary, the results of the current study found a positive and significant relationship between the symptoms associated with mental health problems related to fear of COVID-19 in home-quarantined persons and the lack of socialisation opportunities. In more detail, the symptoms of depression, anxiety, and loneliness related to fear of COVID-19 are adversely associated with the likelihood of social interaction. Socially isolated individuals during the COVID-19 pandemic showed a higher level of different symptoms of psychosocial problems. The results are consistent with previous studies where there is a significant relationship between psychosocial problems and social support. Furthermore, it found that age (being older) and occupation (unemployed) variables were significantly associated with higher symptomatology of mental problems related to fear of COVID-19. Therefore, public efforts are needed to provide opportunities for sound social interaction to improve mental health. There is a need to necessitate innovative multimodal strategies for healthy socialisation and community involvement that learn from lived experiences across various pandemic stages. Besides, measures and guidelines must consider the mental needs of the at-risk community as the pandemic continues.

## Limitations of the Study

Thy study's limitation included a convenience sampling approach of a sample of individuals living in Selangor State, and the respondents do not adequately

represent the whole community of Malaysia. Besides, the current analysis is based on a movement control period in response to the COVID-19 pandemic, which has specific influences on the trend of social mentality. Hence generalizability of the results is limited. Hsieh et al. (2020) confirmed that when people feel more vulnerable to disease transmission, they exaggerate attitudes and prejudices. Additionally, more sociodemographic characteristics can be studied (e.g., income, education level, and accommodation). Bezerra et al. (2020) revealed that various sociodemographic characteristics like income and education are critical variables associated with social isolation during pandemic mitigation.

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## **Evasion in Malaysian Parliamentary Question Time**

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### **ABSTRACT**

This study explores evasion employed by Malaysian ministers and deputy ministers during Question Time using Clayman's Framework of Evasion (2001, 2012). While most evasion studies have focused on political interviews, particularly within western settings, this study examines evasion during Question Time in the Malaysian parliament. The study is content-analytic and uses parliamentary Hansards. Ministers and deputy ministers performed various overt and covert strategies of resistance by refusing to commit to an answer, attacking the questioners, justifying the agenda shifts to counter negative presuppositions and provide rationales, minimizing the divergence to downgrade the severity of a situation, and operating on the question by asserting agreements and talking about the current policy. Further, the questioners did not pursue overtly employed instances of evasion, indicating the influence of context on evasion. Finally, other strategies of evasion found in this study that were not found in Clayman (2001, 2012), such as jokes, could be further explored in future studies.

*Keywords:* Agenda shifts, content analysis, evasion, Malaysian parliamentary discourse, question time

### **INTRODUCTION**

Answering questions is considered a moral obligation (Clayman, 2001). However,

past studies have shown that politicians employ specific kinds of resistance in answering questions, particularly when they feel threatened. This resistance is called 'evasion' or 'equivocation' (Clayman, 2001, 2012; Dillon, 1990; Hamilton & Mineo, 1998; Rasiah, 2007).

Several gaps were identified in the literature on evasion. First, scholarly research on evasion tends to focus on interviews (Bull, 1994, 2008; Clayman, 2001, 2012; Feldman, 2020; Feldman

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et al., 2016) rather than on parliamentary discourse, except for a few, such as Rasiah (2007). Parliamentary questions are asked and responded to by Members of Parliament (henceforth MPs), unlike interviews where questioners are usually non-politicians. Even though questions in parliament from the government MPs may be collegial, question-and-answer exchanges between the government and opposition MPs may sometimes be adversarial and accusatorial (Ilie, 2015). The purpose of adversarial questions can be multifaceted, including “to hold the government to account by criticizing government policies, exposing abuses, and seeking redress” (Ilie, 2015, p. 9).

Second, evasion is commonly examined in Western political discourse (e.g., Bull & Mayer, 1993; Bull & Strawson, 2020; Simon-Vandenberg, 2008). For this reason, there is a paucity of comparable literature on evasion in Asian political discourse. Finally, studies of evasion in Question Time (henceforth QT) allow for the analysis of evasive responses in a situation where politicians are given ample time to address the issue as questions are submitted before parliament is in session. Based on the identified void in the literature, the present paper explores evasion and agenda shifts based on Clayman (2001, 2012) to offer insights into how these linguistic strategies transpired in Malaysian parliamentary discourse, specifically during QT.

## LITERATURE REVIEW

The term *evasion*, sometimes called *equivocation*, is extensively discussed in

the literature (Bavelas et al., 1988; Dillon, 1990; Goss & Williams, 1973; Hamilton & Mineo, 1998). It is defined as “deliberate vagueness” (Goss & Williams, 1973, p. 162), “intentional use of imprecise language” (Hamilton & Mineo, 1998, p. 3), and a “routine strategy for responding to a question without answering it” (Dillon, 1990, p. 154). Regardless of the definition, evasion tends to be employed when replies are expected, but all the probable replies pose undesirable consequences to the speaker (Alfahad, 2016). As such, they may employ obscure statements or subject switches (Bavelas et al., 1988).

Evasion is especially prevalent in political communication due to the nature of the questions themselves (Gnisci & Bonaiuto, 2003). Prior studies have examined how questions influence the evasiveness of a response. Questions are regarded as assertions when negative interrogatives are employed, threatening the political interviewees and leading to a confrontational setting (Carranza, 2016; Heritage, 2002; Kantara, 2012; Piirainen-Marsh, 2005). Similarly, when communications are framed through the assumptions of guilt and microaggression, police officials treat denials or answers to questions as a form of resistance (Guditus, 2021), whereas face-threatening and adversarial questions are commonly met with evasive responses (Bull & Fetzer, 2010; Feldman & Kinoshita, 2017; Ilie, 2021).

Evasion was also found to be responsive to the structural form of a question. Open-ended questions have been identified to

provide less evasive responses (Alfahad, 2016). Politicians also tend to provide more direct responses when a moderator asks questions during a town hall session for a political campaign rather than the public, as questions from the public tend to be challenging (Zulli & McKasy, 2020). In terms of topics, it appears that issues are likely to be evaded when they are “sensitive and conflict-ridden matters to both citizens as well as to decision-makers, politicians and government officials” (Feldman et al., 2016, p. 60).

Regardless of how questions are framed, context influences the production of evasive responses, be it the context of a particular setting (such as political party primaries, courtroom, and public speeches) or the medium in which the questions are being asked (e.g., TV; Chovanec, 2020; Gnisci, 2021; Zulli & McKasy, 2020). For example, a comparative analysis study discovered that politicians produce less evasive responses in the courtroom than on TV (Gnisci, 2021).

Evasive responses are common in situations where politicians need to deny racist remarks or ideologies (Chovanec, 2020; Simon-Vandenbergen, 2008) and corruption allegations (Carranza, 2016). In such situations, evasive responses are maneuvered by attacking the interviewer (Bull & Mayer, 1993), denying the accusations thrown (Simon-Vandenbergen, 2008), modifying certain negative or positive semantic connotations, claiming innocence by blaming another party and reconstructing the ‘misunderstood’ recorded narrative (Chovanec, 2020). Further, evasive

responses were employed by downgrading the allegations and challenging the interviewers’ professionalism (Carranza, 2016).

A significant problem in the previous frameworks is unclear definitions. For example, in the framework proposed by Bull and Mayer (1993), there is no clear justification for what is defined as a factually inaccurate question or a question with a false promise as an evasive strategy. Another challenge is regarding questions with incorrect presuppositions. According to Bull and Mayer (1993) and Rasiah (2007), responses to questions with incorrect presuppositions are known as ‘intermediate replies’ or ‘intermediate responses.’ However, correcting the presupposition and directly answering the question is considered a direct response, addressing the agendas of the question. In contrast, if the responder corrects the wrong presupposition without addressing the question’s agenda, the response may still be evasive.

Clayman’s Framework of Evasion (2001, 2012; Table 1) provides a more detailed and specific categorization and definition of six evasive strategies than Bull and Mayer’s (1993) in Table 2. For instance, Clayman (2001) justifying a shift involves providing justifications and explanations to steer the question’s agenda. Bull and Mayer’s ‘justifies policy’ is a subcategory of ‘makes political point’ and is limited to advocating for a political stance. However, Bull and Mayer do not precisely define ‘making a political point.’ More importantly, justifying a policy can also serve non-

Table 1  
*Clayman's framework of evasion (2001, 2012)*

Strategy	Description
1. Overt	
1.1 Deference to the interviewer	Speaker requests permission from the questioner to shift the agenda
1.2 Refusing to answer	Speaker refuses to provide any answer and may rationalize their refusal
1.3 Minimizing the divergence	Speaker reassures that the shift in agenda is minimal
1.4 Justifying the shift	Speaker justifies agenda shifts
2. Covert	
2.1 Subversive word repeats, and anaphoric pronouns	The speaker repeats selected words and uses anaphoric pronouns to change the scope of the question
2.2 Operating on the question	The speaker rephrases the question, changing its meaning, before answering

political purposes, such as clarifying or defending against criticism. Politicians may employ overt and covert strategies to reduce the negative repercussions of evasion (Clayman, 2001).

There are 11 types of non-replies according to Bull and Mayer (1993): (i) Ignores the question, (ii) Acknowledges the question without answering it, (iii) Questions the questions, (iv) Attack the question, (v) Attack the interviewer, (vi) Declines to answer, (vii) Makes political point, (viii) Incomplete answer, (ix) Repeats answer to previous question, (x) States or implies that has already answered the question, and (xi) Apologies.

Bull and Mayer (1993) did not provide explicit definitions for each of their typology of non-replies but instead provided examples for each strategy. On the contrary, Clayman's Framework of Evasion (2001) offers a more elaborate and precise classification of evasion strategies than Bull and Mayer. However, the framework has been widely

examined in political interviews (e.g., Carranza, 2016; Hanafe, 2016) and scarcely explored in parliamentary discourse. Therefore, there is a need for evasion to be examined in parliamentary discourse, particularly during QT, as it is an opportunity for MPs to question ongoing matters within the government and its ministries (Yoong, 2011).

## METHOD

The corpus of the study is drawn from four '*Penyata Rasmi Parlimen Dewan Rakyat*' (House of Representatives Parliamentary Hansards), dated from 13–16 August 2018. The data were selected to understand how the new government responds to questions in parliament, as it was the first time in Malaysia's history that the ruling party changed. The dates selected were the last meetings of the first parliamentary session after the fourteenth General Election (GE14) since more questions were asked on various topics compared to the earlier sessions,

which were mostly focused on debating motions, e.g., the appointment of the new Speaker of the Parliament. The Hansards were downloaded from the official website of the Malaysian Parliament. In total, there were 181 question and response adjacency pairs during the QT sessions, which were analyzed to explore how evasion was employed by the ministers and deputy ministers on various issues.

Content analysis, a qualitative method, was used to analyze the Hansards to form “valid inferences from texts (or other meaningful matter) to the contexts of their use” (Krippendorff, 2004, p. 18) and to analyze “the systematic, objective, quantitative analysis of message characteristics” (Neuendorf, 2002, p. 1). A similar content analysis method was also employed by Rasiah (2007), which studied evasion in Australia’s Parliamentary QT. The data in this study were analyzed using Clayman’s Framework of Evasion (2001, 2012), as shown in Table 1, based on the following procedures shown in Figure 1.

### Data Analysis Procedures

All evasive responses were extracted from the data and examined to identify their evasion strategies according to Clayman’s Framework of Evasion (2001, 2012). An inter-rater reliability test was conducted to ensure the validity of the analyzed data, resulting in an 85% similarity. The frequency of each evasive response strategy was then tabulated. Finally, the occurrences of each evasion strategy were analyzed.

## RESULTS AND DISCUSSION

In this study, ministers and deputy ministers were observed to use four of the six evasive strategies outlined by Clayman (2001, 2012) to avoid answering questions. These four strategies include refusing to answer, justifying the shift, minimizing the divergence, and operating on the question, as discussed in the following sections.

### Refusing to Answer

In certain instances of evasive responses, ministers and deputy ministers outright

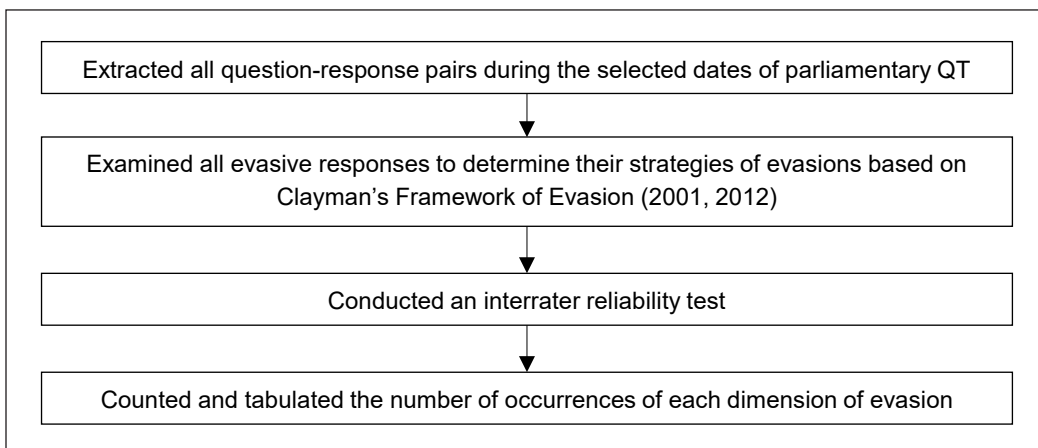


Figure 1. Procedures for analyzing strategies of evasion during QT

refused to answer the questions. This study showed instances of refusal to answer by not providing commitment responses to questions and dismissing questions as jokes. Further, they were also found to attack the questioners without questioning the appropriateness of the questions, as shown in Examples 1, 2, and 3.

Example 1:

MP of Ketereh: *...Yang Berhormat Timbalan Menteri dalam menghuraikan dasar tadi menggunakan istilah 'istiqamah'. Boleh Yang Berhormat Timbalan Menteri huraikan apa makna istiqamah dalam konteks jawapan?*

*...The Honorable Deputy Minister, while describing the policy earlier, had used the term 'istiqamah'. Can the Honorable Deputy Minister explain the meaning of 'istiqamah' in the context of the answer?*

Deputy Minister of Education: *Saya rasa itu soalan tidak perlu dijawablah. Terima kasih.*

*I think the question does not need to be answered. Thank you. .*

*(Penyata Rasmi Parlimen Dewan Rakyat, 2018a, p. 14)*

According to Clayman (2001), it is very uncommon for an IE (interviewee) to reject a question outright without explaining, as it may be perceived as a hostile demeanor, as

seen in Example 1. However, the rejection might be given due to the context of the question asked. As shown in Example 1, the MP of Ketereh began the question by referring to the Deputy Minister of Education's (DME) previous response. The modal verb "boleh" (can), the verb "huraikan" (explain), the wh-question word "apa" (what), and, indeed, the entire interrogative sentence was used to seek clarification. The DME evaded the question by explicitly refusing to answer, "I think the question does not need to be answered." While speakers' communicative intentions cannot be determined explicitly, they are understood through linguistic and social contexts (Fetzer, 2006).

According to Uni (2015), the arrival of Islam in the 15th century introduced Arabic loanwords into the Malay language, which were subsequently adapted and adopted in daily conversations. As evident in Example 1, since the term "istiqamah" (steadfast) is an Arabic term and is commonly understood and used by Malay speakers, it is possible that the MP of Ketereh, who is a Malay himself meant to mock the DME, whom he assumed did not understand the meaning of the word as she is Chinese or a demand for a valid response from her. His choice not to pursue the question supports the interpretation of mockery. The outright refusal implies an implicit attack on the legitimacy of the question and the judgment of the questioner (Clayman, 2001).

Since the question is considered unworthy, justifications are deemed unnecessary (Clayman, 2001). In Example 1, the respondent's deliberate choice

to refuse resulted from the perceived mockery embedded in the question asked. Her dismissal is a form of invalidation, indicating that she understood his intention. She added the particle “*lah*” at the end of the word “*dijawablah*” (answered) to soften “whatever conventions of reserve and politeness are being observed, and to allow a brief lapse into direct “me-to-you” intimacy” (Goddard, 1994, p. 160).

MPs also refused to commit to an answer as the implication of responding could threaten their political coalition’s face.

Example 2:

MP            *Yang Berhormat Jelutong*  
 Ketereh:     *tanya dalam bentuk*  
                  *pantun, saya soalan*  
                  *tambahan pun hendak*  
                  *bagi pantun jugalah ini;*  
                  *Peruntukan RM2 bilion*  
                  *masa Barisan;*  
                  *Yang Berhormat Jelutong*  
                  *bertuah dapat nikmat;*  
                  *Tuduhan tembereng Yang*  
                  *Berhormat Menteri sudah*  
                  *nafikan;*  
                  *Setujukah kalau saya kata*  
                  *memang YB Jelutong*  
                  *sentiasa berniat jahat?*  
 The Honorable Member for Jelutong asked a question in the form of a poem, I want to use a poem too;  
 under *Barisan*, there is RM2 billion allocation; it was deemed as good fortune by the Honorable

Member for Jelutong;  
 The Honorable Minister has denied the allegations; Do you agree if I say that the Honorable Member for Jelutong always has malicious intentions?

Deputy     *Terima Kasih Yang*  
 Minister    *Berhormat Ketereh ya.*  
 of Water,   *Saya rasa soalan nombor*  
 Land and   *satu itu soalan kelakar*  
 Natural     *sajalah ya, tidak payah*  
 Resources: *jawablah ya.*

Thank you, Honorable Member for Ketereh. I think the first question is just a joke, so yeah, we don’t need to answer that.

(*Penyata Rasmi Parlimen Dewan Rakyat*, 2018c, pp. 13-14).

In Example 2, the opposition MP of Ketereh alleged that the MP of *Jelutong*, who was from the same party as the Deputy Minister of Water, Land and Natural Resources (DMWLN), enjoyed benefits given by the previous government. In his poem, the MP of Ketereh denied allegations made by the MP of Jelutong and implied that they were baseless. He then asked the audience and DMWLN if they agreed that the MP of Jelutong had malicious intentions. As previously discussed, negative interrogatives are a form of an assertion that can lead to a hostile setting, thus producing evasive responses (Heritage, 2002; Kantara, 2012). However, the MP of Ketereh used a straight interrogative “*Setujukah...*” (Do you agree). The proposition in the interrogative

has a negative connotation “YB Jelutong always has malicious intentions,” framed as a question.

The question prompted the DMWLN to say that the question was a joke and did not need to be answered. He also attempted to diffuse the hostile atmosphere by using the particle ‘lah’ twice, in “*sajalah*” (just) and “*dijawablah*” (answered). Agreeing with the questioner’s statement would have jeopardized the responder’s political party’s image and indirectly confirmed that they benefited from the previous government’s RM 2 billion. It would also harm the positive image of a party member and confirm their malicious intent. A slightly different version of this maneuver can be seen in Clayman (2001), where a Serbian spokesperson was asked about reports of recent prisoners of war being subjected to physical abuse. Instead of answering the query, the spokesperson asserted that the line of questioning was confrontational and improper, effectively attacking the question itself (Clayman, 2001). This strategy not only allows the individual to avoid answering but also redirects the discourse away from the content towards the manner of the question (Clayman, 2001).

Nevertheless, unlike Clayman’s (2001) example, instead of asserting that the question was confrontational or improper, the DMWLN claimed it was a ‘joke,’ which had ‘non-serious intent’ and included “pre-empting or blocking the taking of offense to the tease, acknowledging a possible impropriety, sanctioning a recipient for taking things too seriously and disputing

the appositeness of the claim to non-serious intent itself” (Haugh, 2016, p. 31).

In another example of refusing to answer, the Prime Minister (PM) was asked if it were true that the Royal Malaysian Police would no longer be using Malay in their daily briefings, as reported by a newspaper.

Example 3:

MP of Kubang Kerian: ... *Saya minta komen daripada Perdana Menteri berhubung laporan Malay Mail pada hari ini, yang mengatakan bahawa Polis Diraja Malaysia akan menggunakan penggunaan bahasa Inggeris dalam taklimat harian dan operasi pada setiap hari...*

... I would like to ask the Prime Minister in relation to comment on the Malay Mail report today, which stated that the Royal Malaysian Police will be using English in daily briefings and operations ...

Prime Minister: *Tuan Yang di-Pertua, kadang-kadang kita guna bahasa Arab supaya yang mendengar itu tidak faham dan terjemahannya kita tidak tahu betul atau tidak betul. Jadi amat penting sekali apabila kita berhubung dengan orang dalam bahasa apa pun yang penting dia faham,*



*apa yang kita kata. Kalau dia kurang faham, kadang-kadang kita terpaksa guna bahasa Arab bagi orang yang pandai dalam bahasa Arab.*

Mr. Speaker, sometimes we use Arabic so that the people listening do not understand and we do not know whether the translation is correct or not. So, the most important thing is, when we communicate with people in any language, they are able to understand what we're saying. If they do not understand, sometimes we have to resort to using Arabic for people who are fluent in Arabic.

*(Penyata Rasmi Parlimen Dewan Rakyat, 2018b, p. 11).*

The Prime Minister (PM) responded: “sometimes we use Arabic so that the people listening do not understand and....” The adverb “*kadang-kadang*” (sometimes) is a usuality device that serves as a hedge (F. Hyland & Hyland, 2001). Apart from avoiding “personal accountability for statements” (K. Hyland, 1994, p. 240), hedges can be considered “a non-straightforward answer” that “could be interpreted as resistance to giving a response” (Carranza, 2016, p. 580).

Additionally, this study showed that hedges are used as a device to exercise power over the opposition bloc, which was

also found in Jalilifar and Alavi-Nia (2012). This notion is cemented by the mention of ‘Arabic’ in the response provided. The Prime Minister’s linguistic choices and context suggest the deliberate reference to Arabic was to attack the questioner. Evidently, the questioner’s party frequently uses Arabic terms such as “*tahaluf siyasi*” to justify its political coalitions or “*ta’awun siyasi*” for their political cooperation (Wan Jan, 2020).

Further, responders may adopt a more assertive approach to avoid answering (Clayman, 2001). As previously addressed, this is done by claiming that the question is undeserving of a response, subsequently attacking the question itself. However, in Example 3, instead of attacking the question, the responder overtly attacked the questioner. Rather than addressing the future policies of the country, the focus of hedges during the communicative exchange could be to mainly attack the characters of the opposing parties who used to run the country (Jalilifar & Alavi-Nia, 2012). In Example 3, the PM chose to attack the questioner and his party over addressing the issue of the use of English in the police force’s daily briefings, thus avoiding confrontation on the issue, which is a slight variation of Clayman’s (2001) analysis. This maneuver is an extension of refusing to answer as it redirects the responsibility of answering to external variables, as Clayman (2001) stated.

Even though the question was specifically addressed to him, he used “*kita*” (we) rather than “*saya*” (I). “*Kita*”

is more inclusive, deflecting responsibility away from him (Bull & Fetzer, 2006). He further ended his response by attacking the questioner again (sometimes, we have to resort to using Arabic for people who are fluent in Arabic). The PM could have chosen another language as an example, but his choice of 'Arabic' emphasizes that he was indeed talking about the questioner's party.

Another instance of attacking the questioner was observed in Example 4, shown below. Here, the strategy of attacking the questioner is analyzed. The Ministry of Tourism, Arts, and Culture was asked whether the government was ready to take further steps to revitalize the country's vast tourism sector by introducing tourists to certain Islamic elements after several foreign tourists danced and behaved inappropriately in front of mosques.

Example 4:

MP of Bachok: *...apakah kerajaan bersedia untuk mengambil langkah yang lebih ke hadapan bagi menyemarakkan lagi sektor pelancongan negara kita yang begitu luas itu dengan menambahkan unsur-unsur berbentuk pengenalan dakwah dan promosi kepada agama Islam yang kaya dengan nilai-nilai hidup yang tinggi serta sentiasa menyeru kepada kesejahteraan, kasih sayang dan kecintaan?...*  
... is the government ready to revitalize our country's

substantial tourism sector by adding elements that introduce da'wah<sup>1</sup> and promote Islam, which has noble values and always advocates well-being, love, and affection?...

Deputy Minister of Tourism, Arts and Culture: *...Juga apabila kita sebut fasal akhlak Islam, kita juga hendak menghormati hak sebagai makhluk-makhluk Allah yang lain. Hak kita mesti menghormati hak orang asal. Seperti di Kelantan, kita tidak menghormati hak orang asal... [Tepuk]*

...Also, when we talk about the moral values in Islam, we must also respect the rights of other creatures of Allah. We must respect the rights of indigenous peoples. But in Kelantan, we do not respect their rights. . . [Applause]

*(Penyata Rasmi Parlimen Dewan Rakyat, 2018d, pp. 19-20).*

The Deputy Minister attacked the questioner by asserting that Kelantan, the questioner's state, which his political party ruled, did not respect the rights of the indigenous people (...But in Kelantan, we do not respect the rights of indigenous peoples). At this point, the responder indirectly attacked the questioner. An attack on a question differs from an attack

<sup>1</sup> 'Da'wah' is an Arabic term referring to the act of inviting people to the teachings of Islam.

on the interviewers themselves (Bull & Mayer, 1993) or the questioners, as in this study. This strategy, even though hostile, was advantageous to the Deputy Minister as it highlighted the ‘hypocrisy’ of the questioner’s political party when asked about the government’s readiness to promote Islamic values to tourists.

### Justifying the Shift

After shifting the agendas of questions, ministers and deputy ministers were asked to provide justifications for their actions. Justifications are commonly given by providing rationales or concerns about the issues asked (Clayman, 2001). In our data, apart from rationales, justifications for the agenda shifts were also provided to counter the negative presuppositions of the questions.

An example of this is depicted in Example 3. The departure from the action agenda of the question was further justified by the responder when he claimed that “when we communicate with people in any language, it is important that they are able to understand what we’re saying.” As per Clayman’s (2001) discussion, reasons given for shifting the interview agenda tend to avoid depicting self-interest as a motivator, which is observable in Example 3. The phrase “*jadi amat penting sekali*” (so, the most important thing) was used to signal his agenda shift and emphasize his subsequent points. The phrase was also found to be employed by Australian MPs in Rasiyah (2007) to justify their shifts, calling the audience’s attention to what is essentially his committal response to a priority. The question presupposed that

the Malaysian government disregarded the importance of the Malay language as part of national identity, as allegedly, the police force used English in their daily operations and briefings.

Examples 4 and 5 (shown below) show instances of justifying the shift by providing rationales.

Example 5:

MP of Bachok: *...Mereka ini saya dimaklumkan telah diambil tindakan oleh pihak kerajaan. Cuma ada isu mengenai denda yang terlalu rendah, beberapa ringgit sahaja didenda...*

... I was informed that the government did take action. The only issue is, the fines were too low, only a few ringgit...

Deputy Minister of Tourism, Arts and Culture: *...Satu syarahan juga yang baik. Sebenarnya, kes yang berlaku di Sabah, di mana ada pelancong daripada negara asing yang menari di hadapan masjid adalah kes-kes terpencil. Tahun 2016, pelancong asing yang datang ke negara Malaysia adalah sebanyak 26 juta. Tiga orang daripada 26 juta ini ialah satu kes yang terpencil. Kita pun telah ambil tindakan dengan mendenda mereka. Denda ini adalah walaupun kecil, ia untuk menjadi pengajaran kepada*

*pelancong-pelancong asing tersebut...*

...What a great speech. In fact, the incident that took place in Sabah, where tourists from overseas danced in front of a mosque, was an isolated case. In 2016, 26 million foreign tourists came to Malaysia. Three out of 26 million people, this is negligible. Also, we did take action by fining them. Even if the amount is small, it is a lesson to those foreign tourists.

(*Penyata Rasmi Parlimen Dewan Rakyat*, 2018d, pp. 19-20).

The phrase “we must also respect...” in Example 4 was used as a “choice that provides an implicit rationale for the agenda shift” (Clayman, 2001, p. 419), further signposting it as an obligation. The phrase highlights what should have been the priority by interlocutors when discussing Islamic values. According to Clayman (2001), justifications may be based on an implicit sense of fairness or the need to respond to opposing views. In Example 4, the maneuver was evasive and based on the former as the responder affirmed that respecting the rights of other creatures is consistent with Islamic values, as espoused by the questioner.

In contrast to Example 4, the evasive maneuver in Example 5 was committed due to the latter since the question expressed the questioner’s dissatisfaction with the

low fines imposed on the tourists. The quantifier “*beberapa*” (a few) indicated how insignificant the fines were, which was then addressed by the Deputy Minister. He asserted that even though the fines were small, they served as a lesson for them, providing a moral justification. In both Examples 4 and 5, the justifications acknowledge the shift in the QT agenda and present the breach in a favorable manner based on the principle of fairness or relevance to the discussion topic, as outlined in Clayman (2001).

### **Minimizing the Divergence**

Minimizing the divergence was employed when ministers and deputy ministers wanted to downgrade the severity of a situation. In Example 5, the Deputy Minister justified the incident by saying it was an isolated case. To further defend this shift, he talked about the total number of tourists who came to Malaysia “...Three out of 26 million people, this is negligible....” Clayman (2001) noted that apart from temporal and numerical minimizers, adverbs may be included to further minimize the divergence. However, instead of adverbs, this study observed the use of adjectives. In Example 5, the adjective “*terpencil*” (negligible) was employed in the response. The deviation of the agenda, even though minor, frames it as inconsequential (Clayman, 2001), as understood from the adjective used. Whilst Carranza (2016) found that politicians minimized the divergence by downgrading the corruption allegations thrown at them, this study, on the other hand, found that

minimizing the divergence was employed to downgrade the severity of a situation, making it less harmful.

### Operating on the Question

Clayman (2001) emphasized that the strategy of operating on the question “may be embedded within some other activity—assertions of agreement or disagreement” (p. 431). Instances of operating on the question in this study were commonly found when ministers and deputy ministers were called out for diverging from the issue, which caused them to assert their agreements in responses. They also operated on the question by discussing the government’s current policy rather than answering it. Operating on the question allows responders to align their responses and shape the question to fit their intended answer, guiding the subsequent answer, as discussed in the following paragraphs.

The attack on the questioner in Example 4 and the downgrade of the severity of the issue in Example 5 led the MP of Bachok to draw attention to the matter and address the speaker of the House, who acted as the mediator in conflictual situations (Bull et al., 2020). It can be interpreted as a request for the Deputy Minister to remain focused on the main agenda of the question and to indirectly request the speaker to impose a sanction for the deviation. The address made to the speaker prompted the Deputy Minister to respond, “I haven’t finished yet...” His response put a stop to further attempts from the questioner since it implied that he was (perhaps) going to address the issue, as illustrated in Example 6.

Example 6:

MP *Tuan Yang di-Pertua,*

Bachok: *soalan saya...*

Mr Speaker, my question...

Deputy *Saya belum habis lagi...*

Minister of I haven’t finished yet...

Tourism,

Arts and

Culture:

MP of *Soalan saya mudah*

Bachok: *sahaja. Adakah kerajaan lebih bersedia mengambil langkah?*

My question is simple. Is the government ready to take further steps?

Deputy *Ya, itu yang saya sebutkan*

Minister of *tadi. Kita memang*

Tourism, *Kerajaan Malaysia baharu*

Arts and *ini telah mengambil*

Culture: *langkah yang positif terhadap memperkenalkan budaya...*

Yes, that’s what I mentioned earlier. We, the new Malaysian Government, took positive steps toward introducing the culture...

*(Penyata Rasmi Parlimen Dewan Rakyat, 2018d, pp. 19-20).*

Subsequently, the questioner redirected attention to the question’s agenda, asking whether the government was ready to promote Islamic elements to revitalize tourism. It presented a dilemma for the responder: a “yes” answer would commit

them to discussing Islamic elements, while a “no” answer would suggest opposition to promoting these values. Both options would indirectly admit that he had diverged from the original question.

While the question focused on the government’s readiness to take the next steps, he claimed that “...We, the new Malaysian Government, indeed took...” a reformulation from the original question. As time is not explicitly indicated in Malay verbs, aspectual markers are employed to ascertain the time when a particular action is performed (Yoke & Hasan, 2014). As pointed out by Clayman (2001), reformulation “affiliates the matter-to-be-pursued with the matter-that-was-inquired-about, thereby minimizing the discrepancy between the two” (p. 430). The matter-to-be-pursued in Example 6 talked about past actions. On the other hand, the matter that was inquired about indicated a future action. The tense marker “*telah*” indicates past action.

Furthermore, the tense shift in the response is also indicative of evasion (Rasiah, 2007). The verb “*mengambil*” (take) in the question was changed into “*telah mengambil*” (took) in the response, whereas the phrase “Yes, that’s what I mentioned earlier” provided a reference to a missing ‘mention’ claimed by him. To further reiterate his assertion, the adjective “*positif*” (positive) was included to compliment the government’s effort. Additionally, the phrase “that’s what I mentioned earlier” served to make it look like he had previously addressed the question. As a result, the

questioner did not pursue the question further.

Rather than addressing the issues brought up in questions, ministers and deputy ministers were found to also operate on the question to emphasize their current policies, indirectly highlighting their effort as the government. Such an occurrence is shown in Example 7.

Example 7:

MP of Segamat: *... adakah kementerian mempunyai cadangan untuk memberi lebih banyak peluang kepada golongan minoriti, termasuk juga orang asal mahupun Orang Asli dalam bidang memasak ini?*

...does the ministry have a proposal to give more opportunities to minorities, including Aborigines and indigenous people, in this field of cooking?

Deputy Minister of Manpower: *...Kerajaan tidak pernah ada satu dasar untuk menghalang masyarakat asal kita untuk menceburi dalam sektor restoran sama ada sebagai pengusaha ataupun sebagai tenaga kerja...*

...The government has never had a policy to prevent our indigenous people from venturing into the restaurant sector

either as entrepreneurs or  
as employees...  
(*Penyata Rasmi Parlimen Dewan  
Rakyat*, 2018c, pp. 19-20)

The Deputy Minister was asked whether the ministry had a proposal to give more opportunities to minorities, including the indigenous people, in the culinary field. In his response, the Deputy Minister indicated that they did not have a policy that prevented the indigenous people from venturing into the restaurant sector (the government has never had a policy to prevent...). The responder veered away from the agendas of the question and shifted into the narrative of their current non-discriminatory policy. In Example 7, the reformulation of the question occurred when the matter to be pursued, “never had the policy to prevent...” was replaced with the matter that was inquired about, which was “have a proposal...”.

In an example given by Clayman (2001), during an interview with presidential candidate Senator Gary Hart, he broadened the question about his alleged extramarital affair with Donna Rice to encompass his marital fidelity over the past 29 years by including periods of separation with his wife that were publicly known. The admission to infidelity was only made after he had redefined the scope of the inquiry (Clayman, 2001). In contrast to the example given by Clayman (2001), where the scope was broadened before being redefined, the scopes were shifted from future to past actions in Examples 6 and 7.

## CONCLUSION

This study provides insights into how evasion is maneuvered in Malaysian Parliamentary Question Time. In Clayman’s (2001) study, attacking the question was categorized as a refusal to answer. However, ministers and deputy ministers in this study were found to attack the questioner rather than the question. Additionally, they had also refused to answer via avoiding committal responses. In their refusals, they tried to sound less formal and serious by using particles such as “*lah*”, impersonalized by using the pronoun “*kita*” (we), and used hedges. They also asserted that questions were unworthy of answers by claiming non-serious intents such as jokes.

Additionally, ministers and deputy ministers justified their agenda shifts to provide rationales and counter the negative presuppositions. Whilst the former was discussed in Clayman’s (2001) analysis, the latter was not. In justifying the shift, they tended to emphasize what was deemed a priority and provided moral justifications. Minimizing the divergence was also found in the data. The ministers and deputy ministers in this study differed from those in Clayman’s (2001) study, as they used adjectives instead of adverbs to downgrade the severity of the situation at hand. Operating on the question was another strategy ministers used when called out on their resistance. In this evasive maneuver, they changed the tense of verbs to show accountability and expressed agreement with the question. Further, operating on the question in this study involved shifting the

scope from future to past actions, unlike in Clayman's (2001) study, where question reformulation involved broadening the scope before redefining it.

Whilst this study analyzed parliamentary question time, Clayman's (2001) research analyzed news interviews, which typically involve more interaction and interviewer pressure. This study challenges the existing framework of evasion proposed by Clayman (2001). While there was some overlap with Clayman's framework (2001), several new strategies were found. In parliamentary question time, questions are restricted to speaking, and any attempt to speak without permission may result in the questioner being silenced by the Speaker. Consequently, those who evade questions would feel relatively safer in parliamentary settings than in news interviews. Practically, the study highlights the need for MPs to be more aware of evasion strategies employed by ministers so that they may continue to press them for answers, possibly preventing delays in the implementation of important policies that could benefit citizens.

Apart from identifying linguistic resources and strategies used by the ministers and deputy ministers to resist the questions, this study provided evidence for how cultural aspects influence the formulation of evasive responses, specifically in the Malaysian Parliament. Questions with negative implications and presuppositions that could threaten the face of ministers were commonly met with various forms of resistance that did not sufficiently address

the agendas of the questions. It is evident in the data in which questions with a racial tone (e.g., the presupposition that Chinese do not know Arabic) and those about upholding the national language or introducing Islamic values were evaded.

Questions with straight interrogatives and negative connotations were also evaded. Additionally, evasive responses were found to be responsive to the cultural aspects brought up in the questions, namely the use of the particle "lah", references to the Arabic language, and using an anecdote about 'Islamic values' to resist answering the questions before subsequently attacking the questioner. The investigation of this study has shown how evasion is employed in Malaysian Parliamentary Question Time, filling in the gaps in the literature and proving a need for further studies of evasion to be explored in other contexts.

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## **Reconstruction of the Legal Policy Model Using the Multidoor Approach to Prevent Land Burning**

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### **ABSTRACT**

This research aims to find an effective legal policy model for handling the criminal case of plantation land opening by fire, especially those carried out by corporations in Indonesia. Criminal law enforcement in these cases is not yet fully integrated. Thus, it requires the multidoor approach. The multidoor approach utilizes several criminal provisions to maximize all constitutional potentials and minimize failures starting from the investigation, prosecution, and punishment stages. This research was carried out by analyzing relevant legal principles, doctrines, rules, and norms. The constitution and courtly decisions were the main primary legal materials. This research shows that most plantation burning cases are not yet processed using the multidoor approach. Most of the prosecution's indictments are prepared alternatively. They exclude the possibility of the cumulative application of other crimes as concurrent criminal acts (*concursum*). Based on the results, it was found that the multidoor approach needs to be reconstructed by strengthening the secretariat and the standard operating procedures in applying the multidoor approach that binds all law enforcement agencies. This

crime has been classified as an environmental crime in the law, and it applies the *premium remedium* principle. The imposition of corporate criminal liability must be carried out maximally to prevent repeating the criminal acts that still frequently occur.

*Keywords:* Corporation, environment, land burning, multidoor, penal sanction, policy

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## INTRODUCTION

In the World Resources Institute report, Indonesia is one of the three top countries that experienced the greatest deforestation of primary forests in the world in 2021. Brazil is the first country on the list, losing 1,548,657 hectares. It was followed by the Democratic Republic of the Congo (499,059 hectares) and Bolivia (291,379 hectares). Even though the rate of primary forest deforestation in Indonesia decreased by 25% compared to 2020, the figure is still very high, reaching 202,905 hectares (Weisse & Goldman, 2021).

In Indonesia, there are several kinds of forests based on their status: state, customary, and private. The state forest area encompasses the areas the government determines to be maintained as permanent forests. The state forests are located on land not encumbered with land rights. Meanwhile, customary forests are in the territories of indigenous peoples. Then, private forests include forests that are located on land that is encumbered with land rights such as property rights, rights for business use, and the rights to collect forest products as stated in Government Regulation No. 23 of 2021 on Forestry Implementation (The Republic of Indonesia's Government, 2021). If perceived from the status of the burned forests, the state forests that encompass Permanent Production Forests, Limited Production Forests, Convertible Production Forests, Conservation Forests, and Protected Forests often dominate the hotspots, although fires also occur outside of the forest area, especially in

Areas of Other Use. From 2018 to 2020, most forest and land fires in Rupert Island, Bengkalis Regency, Riau Province in Limited Production Forests (3,928,235 hectares), Convertible Production Forests (827,151 hectares), Permanent Production Forests (660,367 hectares), and Areas of Other Use (409,272 hectares) (Baroroh & Harintaka, 2021).

The burning of forests and plantation lands has caused Indonesia to bear great losses in the form of environmental destruction, economic loss, health problems, educational problems, the steep downfall of the tourism sector, and even smoke pollution over the state's borders. Forest and land fires have become an annual cycle. It experiences the ups and downs of escalation in Indonesia. After the largest forest and land fires in 2015, which affected 2,611,411 hectares, forest and land fires again reached the highest rate in 2019 when they affected 1,649,258 hectares of land. The fires continued in the following years, covering an area of 296,942 hectares (2020) and 358,867 hectares (2021) (Ministry of Environment and Forestry, 2022). The World Bank reports that the total economic loss of forest and plantation burning in Indonesia in 2019 reached 5.2 billion USD or around 72.9 trillion rupiahs. This amount equals 0.5% of Indonesia's Gross Domestic Product (The World Bank, 2019).

Based on the data of Indonesia's National Disaster Management Authority (NDMA), from 2009 to 2022, there were 3.098 cases of forest and land fires in Indonesia. The fires caused 47 deaths,

387 people were injured or suffered from illnesses, and 506 606 victims suffered and were evacuated. The highest number of deaths happened in 2015, when 24 people died. Then, the highest cases of injuries or illnesses happened in 2017, when there were 367 victims. Then, in 2014, there was the highest rate of victims who suffered and were evacuated, reaching 424,648 people (National Disaster Management Authority [NDMA], 2022). The increase in victims follows the trend of the increasingly massive and widespread area of burned forests.

Based on the data for the public policy consideration, 64 companies were sealed, consisting of 47 units of palm-oil plantations, 13 units of plant forests, one unit of ecosystem restoration, and 3 natural forests with a total burned area of 143.43 km<sup>2</sup> (Ministry of Environment and Forestry, 2019). The dominant number of palm-oil plantation units shows that the burning of the plantation lands is regarded unsustainable practice in plantation cultivation. Even the Head of the National Agency for Disaster Prevention stated that the human factor causes 99% of forest and plantation burning cases, and 80% of the burned land became plantations (National Disaster Management Authority [NDMA], 2022).

Indonesia has determined land burning as an environmental crime. The prohibition of land burning is accompanied by the threat of imprisonment as regulated in some laws, including Law No. 41 of 1999 on Forestry, Law No. 32 of 2009 on Environmental Protection and Management, and Law No. 39 of 2014 on Plantations. As the

codification of criminal laws in Indonesia, the Code of Criminal Law also regulates the prohibition of land burning even though it is not stated specifically (Colchester et al., 2009).

Another obstacle is that only a few forest-burning perpetrators are processed in court and given a final verdict by the judges. The lack of corporate criminal liability happens because it is difficult to prove the elements of land burning. Some corporations were acquitted due to the judge's assessment that the land fires were neither intentional nor caused by negligence. However, they assessed that the fires were due to natural disasters. It is also difficult to criminalize corporations if judges consider that the fires were sourced from outside the corporate concession. It is also difficult to prove the elements of the land fire's impacts on environmental destruction and pollution.

Two scientific pieces of evidence are required to prove environmental cases: factual evidence, such as reports or sampling results, and opinion evidence from competent experts (Roseman-Orr, 2018). The proving of land fire cases is complex, and it requires much scientific evidence, such as damages in the chemical and physical aspects, as well as the biological damage to the land. Other damages that need to be proven are the damages to biodiversity, including the effect on the flora and fauna population. This proof is still followed by the calculation of ecological losses, economic losses, and land restoration costs due to the fires by environmental experts.

During the worst forest and land fires in 2019, the number of individual perpetrators reached 429 people. Meanwhile, there were only 24 corporate perpetrators. The lack of corporate perpetrators followed in the next years. Even in 2020, only two corporations were named suspects (Indonesian Police Force, 2021). Several corporations are still exempt from criminal liability. In the Decision No. 40/Pid.Sus-LH/2019/PN.Tjt dated December 17, 2019, strengthened by the Decision of the Supreme Court No. 2919 K/Pid.Sus-LH/2020 of April 16, 2020, the corporate defendant Kaswaru Unggul Limited (KU, Ltd.) was acquitted in the cases related to plantation fires.

The acquittal in the case of plantation fires continued towards the corporate defendant KU, Ltd. based on Decision No. 233/PID.B/LH/2020/PN PBU on February 17, 2021. It was strengthened with the Decision of the Supreme Court No. 3840 K/Pid.Sus.LH/2021, on November 3, 2021. In general, the consideration of acquittal in land fire cases is often linked with natural disasters. The land fires that happen are deemed to be caused by extreme weather or long drought, or the hotspots originated from outside of the corporation's concession. In addition to having obstacles in proving corporate wrongdoing, corporate criminal liability is still burdened on the management or the activity leader in some cases. In the Decision of the Siak Sri Indrapura District Court No. 101/Pid.SusLH/2017/PN Sak, on August 24, 2017, was strengthened up to the cassation level based on Decision No. 916 K/PID.SUS-LH/2018, on June

7, 2018, corporate criminal liability was not carried out. In this case, the criminal liability was burdened to defendant TB (Defendant's initials) from WSSI's Head of Oil Palm Plantation Limited. He was found guilty in cases related to plantation fires. The problem is that the judge does not have environmental awareness and knowledge, and it is rare to find an expert on forest fires (Hartiwiningsih, 2013). Based on the problem explained above, the problem of this research is, how is the criminal legal policy reconstruction model with the multidoor approach towards the crime of land burning?

## LITERATURE REVIEW

### Forest Burning as a Crime

The socio-economic lives of the Indonesians highly depend on the forest. The state's largest income also comes from the forests. Unfortunately, there is less hope for the forest to become the people's source of economy, the state's foreign exchange, and the world's lungs. It is due to an increase in the land's functional shift, illegal forest destruction, illegal deforestation, and illegal forest burning (Badan Pengelola REDD+, 2015). Forest burning is part of an economic crime as it causes great loss to the state's economy. It is also categorized as a White-Collar Crime, a Corporate Crime, and an Extraordinary Crime. Thus, an extraordinary method for handling it (Colchester et al., 2011). If committed massively, environmental crimes, including forest burning, will cause long-term and broad impacts that endanger human life.



Such crimes can be qualified as ecocide or even as a violation of human rights (Setiyono & Natalis, 2021).

### **Corporate Criminal Liability**

Simultaneously, two weaknesses cause the suboptimum enforcement of the law: the weak laws and the weak implementation of the case handling procedures. Law No. 32 of 2009 on Environmental Protection and Management contains weaknesses as it delegates corporate criminal liabilities to the order-givers or the leaders of crimes (Article 116 clause (2)). With this provision, the doctrine of direct criminal liability of the identification theory and the doctrine of vicarious liability is not used to construct the actions of the administrators, order-givers, or leaders of criminal actions as corporate actions. Corporate criminal liability can directly be applied according to the identification doctrine, where corporations can carry out some direct crimes through individual agents who are directly linked to the corporation. Errors (*mens rea*) of these individual agents are *mens rea* of the corporation (Hafrida et al., 2022).

The 2020 Omnibus Law, which amended Law No. 32 of 2009 on Environmental Protection and Management, does not allow criminal liability to be imposed on corporations if the forest and land fires happened due to negligence that does not endanger human health and if the fires do not cause injuries, severe injuries, and/or deaths (Article 82B clause (2)). This decriminalization policy ignores the characteristics of environmental destruction

and pollution crimes whose impacts are often only detected in the long term (long latency period). The Omnibus Law is a method commonly used by countries with a common law system to change several laws simultaneously under one regulation. It is generally carried out through a quick procedure (Mahy, 2022). Governments often use the Omnibus Law method to change many unlinked laws in a fast period (Hazama & Iba, 2017).

The weakness of this law increasingly creates gaps in the implementation, as in handling cases, investigators and public prosecutors do not consider the possibility of cumulatively applying other crimes as concurrent crimes. Concurrent crimes may occur, for instance, in cases where corporations intentionally carry out plantation activities in forest areas without permits. Apart from being subject to criminal charges for land burning, the perpetrators of this case can criminally be prosecuted under Law No. 18 of 2013 on the Prevention and Eradication of Forest Destruction. In the case of forest burning criminal action, there is a great chance of other crimes, such as corruption and money laundering (Pirard & Cossalter, 2006). Studies reveal that bureaucrats, political parties, parliament members, the military, and the police have been directly or indirectly involved in illegal forest activities (Barr, 2001). Forest officials were also involved in corruption, e.g., demanding bribes to obtain permits and allowing exports without legal permits (Setiono & Husein, 2005). Similar corrupt behavior is widespread within the

Indonesian courts, resulting in very few cases reaching the trial stage and even fewer convictions (Colchester et al., 2006).

### **Criminal Intentions**

One of the factors which cause the burning of forests and land in Indonesia is the preparation of plantation lands. Corporations also choose to use this method to obtain economic benefits by minimizing the budget for land preparation. Fire is a cheap and easy method of clearing plantation lands, such as oil palm. The lack of incentives, especially for smallholders, makes preparing land without fire difficult as it requires a high cost (Purnomo et al., 2017). The land opening by fire only requires a third of the cost of land opening without fire. Apart from requiring a great cost, land opening without fire also takes a long time, bringing the risk of pests or plant diseases (Saharjo et al., 2018). This fact is strengthened by the information from the Ministry of the Environment and Forestry in October 2019, which showed the allegation of the corporations' involvement in forest land burning.

The current legal policy is still dominant in catching the field perpetrators or individual perpetrators. There is still no deterrent effect on corporate perpetrators. The plantation companies or industrial plant forests indirectly cause fires through the mechanism of the wage market in preparing the industrial plant forest land. Usually, the labor team who buys up the job of land preparation chooses the easiest and the cheapest method to obtain the highest profit (Pasaribu & Friyatno, 2008).

The Ministry of Environment and Forest acknowledges that 99% of forest fires are caused by human activity. It is due to economic reasons; it is faster and easier compared to preparing land without fire. This motive of forest burning cannot be separated from the calculations of corporate profits and losses without caring about the destructive impacts. The head of the National Agency of Disaster Prevention states that the budget needed to open a corporate plantation land using fire is only 600,000–800,000 rupiah for every 10,000 m<sup>2</sup>. Meanwhile, without fire, the budget needed is 3.4 million rupiahs per 10,000 m<sup>2</sup>. Land prices increase steeply after being burned (Molenaar et al., 2013).

Apart from that, there is the indication that the companies burn the land to clear it and claim insurance. This motive is carried out when the land is no longer productive. That land is burned, and they propose a claim to the insurance company. Then, it is used to open new land elsewhere. The problem is that the Ministry of Environment and Forest can still not map out the perpetrators of the forest fires. Perpetrators consisted of 413 entities and 147 companies, consisting of individuals and corporations (Hartiwiningsih, 2018).

### **The Legal Framework of Land Burning**

Existing studies show that weak legal policy and inadequate monitoring, exacerbated by chronic corruption among officials, have been a major problem in Indonesia. Law No. 32 of 2009 on Environmental Protection and Management is the main basis for

protecting every person's right to live in a good and healthy environment as part of protecting the whole ecosystem. Other laws that contain environmental policies and stipulations include (1) Law No. 39 of 2014 on Plantations, (2) Law No. 41 of 1999 on Forestry, and (3) Law No. 18 of 2013 on the Prevention and Eradication of Forest Destruction. Some substances of the environmental policies in these laws have been amended with Law No. 11 of 2020 on Job Creation.

The policy that prohibits land burning and the obligation of business owners to have systems, facilities, and infrastructure to prevent and handle plantation fires are also regulated in implementing regulations, namely (1) the Governmental Decree No. 4 of 2001 on Controlling Environmental Damages and/or Pollution Associated with Forest and/or Plantation Fires, (2) the Governmental Decree No. 71 of 2014 on the Protection and the Management of the Peatland Ecosystem as amended with the Governmental Decree No. 57 of 2016, (3) the Regulation of the Ministry of Environment No. 10 of 2010 on the Mechanism to Prevent Environmental Damages and/or Pollution Associated with Forest and/or Plantation Fires, and (4) the Regulation of the Ministry of Agriculture No. 05/Permentan/KB.410/1/2018 on Zero Fire Plantation Land Opening and/or Management.

### **The Concept of Multidoor Law Enforcement**

The existing condition shows that the legal policy of the forest burning crime has been

carried out, but it is not yet optimum, as so far, law enforcers have only used the laws regarding the environment. The ineffective legal policy requires a clear solution, where the handling of the multi-regime law or the multidoor approach must also be used in enforcing the environmental law. The multidoor approach was initiated by the note of agreement in 2012, followed by the mutual regulation between law-enforcing institutions with other related institutions in 2013.

The multidoor approach aims to optimize the deterrent effect, especially on corporate perpetrators, to revive the environmental condition, to return state losses, to return the asset appropriation, which is the result of criminal activity, and to implement the principle of following the money (Ministry of Environment and Forestry of the Republic of Indonesia, 2013). Because of that, the multidoor approach uses various legal regimes, including the environment, forestry, spatial planning, plantations, mining, taxation, corruption, and money laundering.

Multidoor law enforcement must close the gaps or weaknesses in several laws prohibiting land burning. Some laws that regard criminal law violation have not determined a fully proportional threat of criminal sanctions. Judges often impose heavy punishments for light actions and vice versa, imposing light sanctions for serious environmental crimes (Ali & Setiawan, 2022). In several cases, land-burning perpetrators were punished with light sanctions as they were not prosecuted with

laws that apply the minimum-special system of penal sanction. Weak law enforcement is one of the factors that cause the repeating cycle of forest fires (Carmenta et al., 2021)

Indonesian environmental laws have not differentiated actions considered crimes because they are regulated in the law (*malum prohibitum*) or crimes due to their characteristics (*malum in se*). The regulations on environmental crimes are stipulated in the administrative law as a *malum prohibitum* offense. However, the application of criminal sanctions is highly severe, like a *malum in se* offense (Amrani, 2022). The multidoor approach is also necessary, as some laws are ambiguous. Thus, the court often fails to differentiate between corporate criminal liability and the criminal liability of corporate administrators (Wibisana et al., 2021).

## MATERIALS AND METHODS

It is juridical-normative research. This study is normative juridical research conducted by analyzing legal norms contained in constitutional regulations and court decisions related to the cases of plantation land fires. Juridical normative research is doctrinal legal research that analyzes principles, doctrines, rules, and legal norms relevant to the examined case. Doctrinal legal research is carried out to explain legal concepts, rules, principles, and construction through some interpretation methods (Hoecke, 2011).

Doctrinal legal research tries to resolve practical problems by forming new arguments, theories, or concepts as

a prescription for resolving those issues (Hutchinson & Duncan, 2012). The doctrinal legal research includes the search for legal precedent and the interpretation of legislation. The main characteristic of the doctrinal method is that it involves a critical conceptual analysis of all relevant laws and legal cases to uncover a relevant legal statement to the analyzed problem (Hutchinson, 2015).

This study uses the statute approach and the conceptual approach. The former is carried out by analyzing the constitutional regulations relevant from the ontological aspect (the reason) on the issuing of law, the philosophical basis, and the *ratio legis* (Marzuki, 2010). Meanwhile, the conceptual approach is carried out by analyzing the legal concepts and principles contained in the norms of a constitutional regulation or through the existing legal views or doctrines (Marzuki, 2010).

This research uses secondary data using the data collection technique through the literature review. The secondary data includes constitutional regulations, court verdicts, books, journals, results of seminars or other scientific gatherings, and the opinions of legal experts. This normative-legal research is directed to produce new arguments, theories, or concepts as the prescription for resolving the problem of land burning.

The juridical normative approach is carried out through some stages, including identifying legal cases, legal reasoning, problem analysis, and problem resolution. This research used the qualitative juridical

technique of analysis, where the data that concerns the regulation and enforcement of the criminal law of land fires are systematically compiled. These data were then analyzed qualitatively using legal interpretation and construction. The data analysis was carried out through several activities, which include selecting articles that contain legal norms, compiling the systematics of these articles to produce a classification, analyzing these articles using the existing legal principles, and compiling new argumentation constructions, theories, or concepts as a prescription in resolving the investigated problem (Soemitro, 1985). The data was also analyzed by examining the legal considerations (*ratio decidendi*) used by the judges in examining, adjudicating, and deciding cases of land burning.

## RESULTS AND DISCUSSION

The legal policy of the crime of land burning in Indonesia is part of the integrated legal policy on the environment, which involves the Police Force, the Attorney, the Ministry of Environment and Forestry, and the Ministry of Agriculture. The integrated environmental legal policy model is regulated in Article 95 clause (1) of Law No. 32 of 2009 on Environmental Protection and Management, which is strengthened with the Constitutional Court Decree No. 18/PUU-XII/2014 (Maryudi, 2016).

A multidoor approach is an approach of legal policy that utilizes various laws to convict the perpetrators of environmental crime. It regards the laws in the sectors of the environment, forestry, spatial planning,

plantations, mining, taxation, corruption, and money laundering. This approach aims to avoid the disparity of criminal lawsuits in a similar case, creating a deterrent effect, preventing the crime perpetrators from escaping, demanding corporate responsibility, reviving the environment, opening the opportunities for international cooperation as asset recovery, and returning the state's losses (Nurrochmat et al., 2016).

The multidoor approach is carried out because environmental and forestry crimes are inter-sectoral crimes almost always followed by money laundering, bribery, corruption, gratification, and tax evasion. With the multidoor approach, the limitations of one constitutional regulation may be completed by another. Principally, apart from convicting the perpetrators, it is also to find the direction of the money, which is the result of the crime (following the suspect and the money); thus, the physical perpetrators, the functional perpetrators (the crime mastermind), and the corporate perpetrators may be convicted with maximum punishment for their crimes (Tacconia et al., 2019).

In 2012, the multidoor approach started to be initiated in handling the criminal case regarding the forest and the peatland's natural resources and environment. The multidoor approach was initiated with a note of agreement, and followed by the mutual regulation in 2013 between the Republic of Indonesia's Attorney General, the Republic of Indonesia's Police Force, the Ministry of Forestry, the Ministry of Environment, the Ministry of Finance, and the Center of

Financial Transaction Reports and Analyses (Situmorang, 2015). In the multidoor approach, the legal policy uses various legal regimes, including environmental, forestry, spatial planning, plantations, mining, taxation, corruption, and money laundering.

The institution of attorney has also used the multidoor approach since issuing Attorney General Decree No. PER-010/A/JA/06/2013, executed by the International Natural Resource Task Force. This task force is formed to support suing cases on natural resources at the regional, national, and even international levels, using a systematic and coordinative handling method. In the multidoor approach, the suing of the case, which is a series or a combination of crimes in the natural resource and the environment of the forest and the peatland, uses *concursum indictment* (a combination of criminal actions) (Molenaar et al., 2013).

In the legal policy implementation, the Ministry of Environment and Forestry has carried out an integrated approach, working with the Police Force and the Attorney. Since 2015, the Ministry of Environment

and Forestry has facilitated the Police Force and the Attorney on 82 cases of forest and plantation burning. Meanwhile, the Ministry of Environment and Forestry has handled 5 cases of P21 (the investigation results are complete, and the case is deemed ready to be brought to the Attorney) (Molenaar et al., 2013).

If referring to the Data on the Work Results of Law Implementation, the General Directory of Environmental and Forestry legal policy 2015-2020 (General Directory of Environmental and Forestry Legal Policy, 2021), the legal policy through the police and the attorney facilities on the forest and plantation burnings are more effective as they are in the second highest place of the highest number of cases after environmental pollution as mentioned in Figure 1. Conversely, the legal policy results of the forest and plantation burning cases carried out by the Ministry of Environment and Forestry with the P21 status are placed on the fifth rank.

Even though the integrated approach has been carried out, most environmental

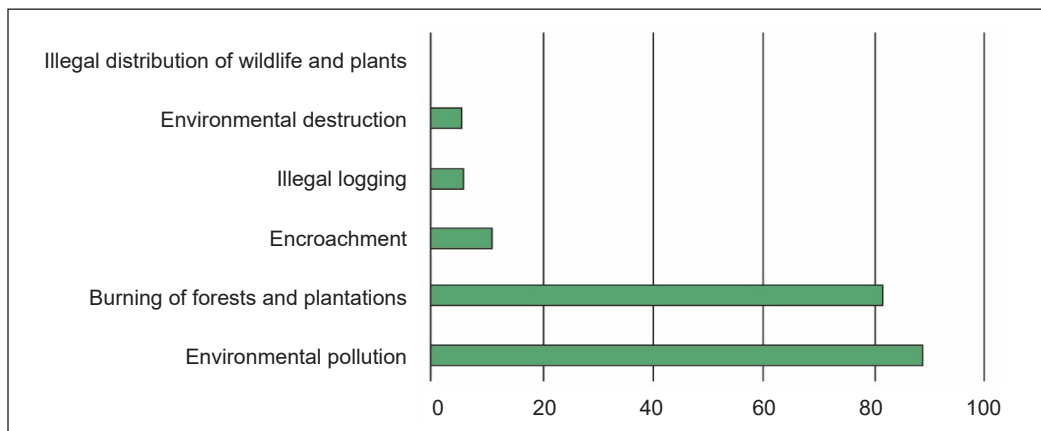


Figure 1. Legal policy results facilitated through the police force and the attorney 2015–2020

cases, including the case of land burning, which is the 3<sup>rd</sup> most destructive case, as mentioned in Figure 2, still have not used the multidoor approach. Practically, the multidoor approach has only been practiced in several cases, including environmental destruction and illegal logging (Murti, 2017). The assessment results of UDNP Indonesia also showed that in its practice, the Standard Operating Procedures (SOP) of legal policy institutions are still not synchronized with the guide under the multidoor approach, even though an MoU was signed in 2013 (Bahuet, 2016). The Multidoor approach experienced more obstacles due to the limited budgets and field personnel. Between 2015 and 2017, the annual budgets of the Directorate General for legal policy of Environment and Forestry amounted to about USD 13.7 million, equivalent to about 13 cents per 10,000 m<sup>2</sup> of forest. Similarly, forestry personnel are far below the sufficient level. In the Java-Bali-Nusa Tenggara region, the personnel-to-forest ratio is only one police for every 600 km<sup>2</sup>, while in Papua, the

ratio is even more extreme: one police for about 5,000 km<sup>2</sup> of forest (The Republic of Indonesia’s Ministry of Environment and Forestry, 2019).

Forest legal policy is also conducted with several bureaucratic structures and agencies to overcome the limited resources allocated. For instance, amidst the rampant illegal logging experienced in the country during the early 2000s, in 2005, the President issued a Decree (Presidential Instruction No. 4/2005) that instructed ministries and state agencies (at the national and regional level) to accelerate the eradication of illegal logging in forest areas and its trafficking across Indonesia (Ekawati, 2013).

The coordinated operations, called sustainable forest operations, reduced smuggling in major timber hubs, but the timber and equipment seizures rarely led to the recovery of the financial losses. The joint enforcement sweeps were even said to have resulted in unlawful appropriation of timber by enforcement personnel (Luttrell et al., 2011). Enforcement operations were

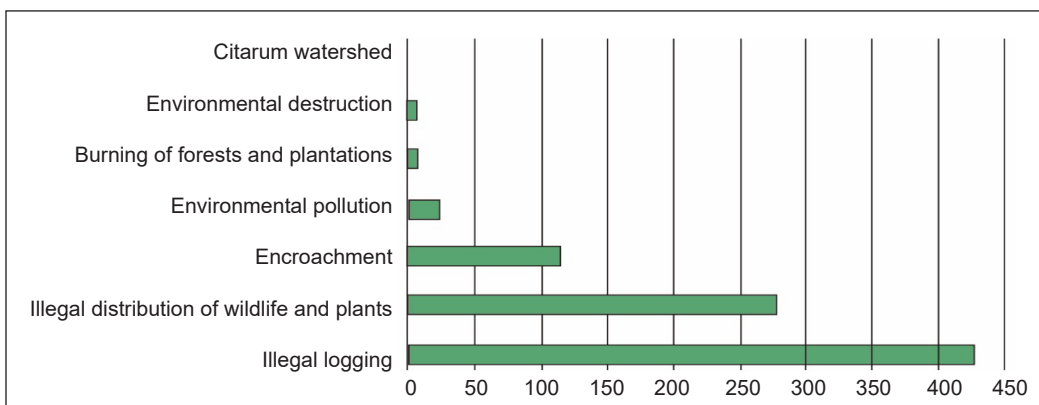


Figure 2. Legal policy results carried out by the Ministry of Environment and Forestry with the P21 status in 2015–2020

seen to have failed to arrest the main actors of illegal logging; only a small fraction of them was prosecuted with even minor sentences (Luttrell et al., 2011).

In recent years, forest legal policy has adopted a multidoor strategy involving the Ministry of Environment and Forestry, the Ministry of Finance, the Attorney General, the National Police, and the Indonesian Transaction Reporting and Analysis Center. The multidoor approach seeks to establish coherence between the inquiry, investigation, and prosecution of forestry crimes by using a combination of various laws related to the environment, forestry, mining, money laundering, corruption, agriculture, and taxation (Arwida et al., 2015).

It targets crimes committed by corporations or corporate actors (United Nations Environment Programme, 2014). The approach applies a follow-the-money approach in dealing with forest-related crime, in which law enforcers track the assets and bank accounts of the suspects, and perpetrators found guilty are obliged to pay the costs of rehabilitation of damaged areas and return lost state revenues.

In the criminal justice process on the crime of land burning, the public prosecutors commonly use a type of alternative indictment and a combination indictment. In the alternative indictment model, some indictments are arranged in layers. One layer is an alternative, excluding the indictments on the other layers. For example, it uses the plantation burning offense in Law No. 32 of 2009 on Environmental Protection and

Management or the land burning in Law No. 39 of 2014 on Plantations (Ekawati, 2013).

It differs from the multidoor approach, which combines indictments that associate the cumulative indictment with the alternative or the subsidiary indictments. For example, the first indictment consists of the primary indictment, a primary indictment using the deliberate offense, and a subsidiary indictment using the negligence of the land-burning in Law No. 32 of 2009 on Environmental Protection and Management. Meanwhile, the second indictment uses the plantation burning offense in Law No. 39 of 2014 on Plantations.

The suing process of the land burning may be imposed on individual or corporate perpetrators. Based on the Law No. 32 of 2009 on the Environmental Protection and Management, if the criminal action of land burning is carried out by, for, or in the name of a business entity, the criminal indictment and the criminal sanctions are convicted to the head of the business entity, and/or the person who gives orders to carry out that criminal action or the person who acts as the leader of that criminal activity.

Suppose the criminal action is carried out by an individual, based on a work-related or other relation, who acts within the work environment of a business entity. In that case, the criminal sanction is convicted to the giver of orders or the leader in that criminal action, without considering whether that action is carried out alone. On the criminal action whose conviction is borne to the business entity, the criminal sanction is imposed on the business entity,



which is represented by the management authorized to represent inside and outside of court according to the constitutional regulations which apply as the functional perpetrator.

In the criminal verdict imposition of the land burning, the judge may impose a principal and additional criminal sanctions. It is a manifestation of the double-track system in the criminal sanction system. Even though the additional criminal sanction has been regulated in detail in Law No. 32 of 2009 on the Environmental Protection and Management, in the imposition of the criminal action verdict of the land burning, it is still seldom to be applied by the judge (Fajri, 2016).

Some of the judges' verdicts that contain additional criminal sanctions include the Verdict of the District Court Opposition No. 228/Pid.Sus/2013/PN.Plw, where the perpetrator is imposed by a principal criminal sanction and an additional criminal sanction in the form of reparation of the criminal action's impacts to revive the land destroyed due to the land burning. Another verdict that contains additional criminal sanctions is the Verdict of Bengkalis District Court No. 547/Pid.Sus/2014/PN.Bls where the perpetrator is imposed with a principal criminal sanction as well as an additional criminal sanction in the form of an obligation to complete the facilities to prevent and avert burning according to the standardized guide which applies (Fajri, 2016).

The law-enforcement model must be reconstructed using the multidoor approach to optimize the prevention of land-burning

criminal action. Until now, the multidoor approach legal framework in the criminal legal policy is only regulated by the note of agreement and the mutual regulation between the Republic of Indonesia's Attorney General, the Republic of Indonesia's Police Force, the Ministry of Forestry, the Ministry of Environment, the Ministry of Finance, and the Center of Financial Transaction Reports and Analyses.

The mutual regulation stipulates that criminal actions are handled using the multidoor approach. One of them is the crime on plantations. Even so, this mutual regulation does not involve the Plantation General Directory of the Ministry of Agriculture, though the plantation burning happens in the plantation areas where in the legal policy, it becomes the task of the plantation Civil Servant Investigators (Ministry of Environment and Forestry, 2020).

For the sake of the investigation's effectiveness, the investigation guidelines must regulate the handling of the investigation through the multidoor secretariat, which is coordinated with the Ministry of Environment and Forestry. Through the multidoor secretariat, the Ministry of Environment and Forestry regularly monitors the development of the case handling, gives technical support, and facilitates communication with the related parties. The multidoor secretariat is necessary to increase the coordination between law-enforcing and related institutions (Barber & Schweifhelm, 2011).

The handling of the land-burning criminal case starts from the complaint

report from the society and the findings of a governmental institution and a law-enforcing institution. Then, the multidoor secretariat facilitates a mutual together with the Police Force Investigators, the Public Prosecutors, and the inter-sectoral Civil Servant Investigators, which include the Environmental Civil Servant Investigators, the Forestry Civil Servant Investigators, the Plantation Civil Servant Investigators, the Spatial Planning Civil Servant Investigators, and the Taxation Civil Servant Investigators. Based on the job descriptions, the Police Force Investigators and the inter-sectoral Civil Servant Investigators will then carry out a preliminary field investigation and collect materials and information. The multidoor secretariat then facilitates a further discussion on the preliminary investigation results to decide upon the status escalation to become an investigation.

Alternatively, they may conduct a preliminary investigation on cases with enough evidence (Hartiwiningsih, 2007).

There needs to be a reconstruction of the coordination plan in handling the criminal case on the natural resources and the environment to maximize the preliminary investigation using the multidoor approach, regulated in the mutual regulation in 2013, into what is presented in Figure 3.

There needs to be an increase in the Civil Servant Investigators', Police investigators, and public prosecutors' competencies and capacities to optimize the investigation of the criminal case of land burning using the multidoor approach (Figure 3). The number of Civil Servant Investigators is insufficient to face the challenges of monitoring and enforcing criminal law (General Directory of Environmental and Forestry Legal Policy, 2019). They should have an increased knowledge of substantive and formal law

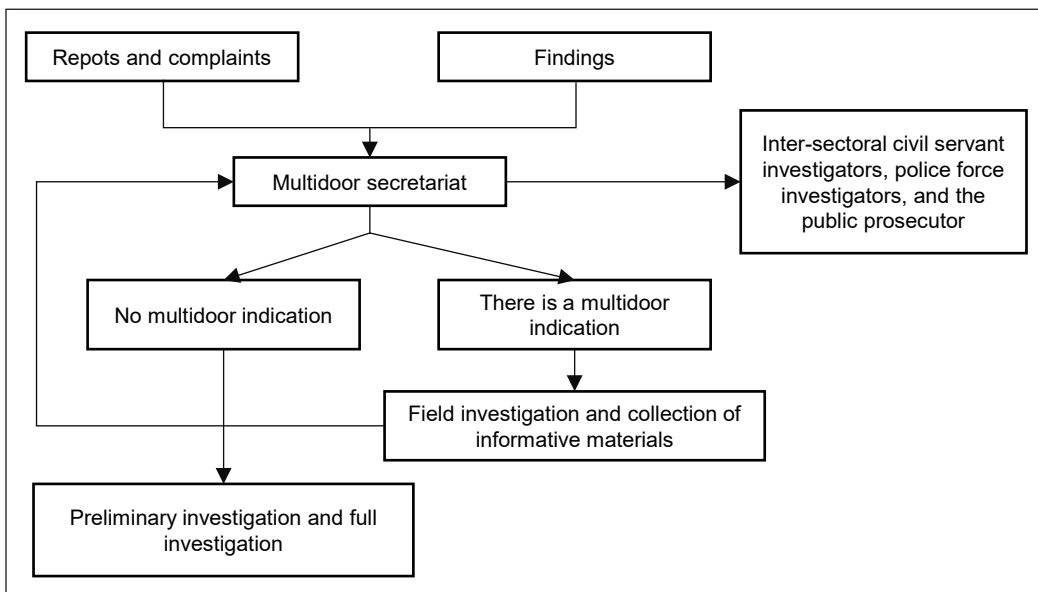


Figure 3. The handling of a case using the Multidoor Approach Model

and legal skills in handling cases using the multidoor approach.

The multidoor approach must also be carried out in the prosecution and investigative stages. Coordination may be carried out since the start of the investigative process through the multidoor secretariat to obtain suggestions for applying the legal constructions. The public prosecutors must primarily scrutinize the related constitutional regulations so that they may use the approach of the multi-regime law. The public prosecutor may carry out the multidoor approach by combining cases and writing them down on one indictment letter as a cumulative indictment.

In line with Article 141 of the Criminal Code, this combination of cases may be carried out if there is a simultaneous or an almost simultaneous acceptance of case files under these conditions: (1) some of the criminal cases are carried out by the same people and the investigative interests do not become an obstacle to its combination, (2) some of the criminal cases involve each other, and (3) some criminal cases are not involved with each other, but there are relations between them, where in this case a combination is necessary for the investigative interests.

The indictment is cumulatively arranged if there are concurrent deeds (*concurcus realis*) in the criminal action of land burning. A *concurcus realis* may happen if someone carries out some actions where each of those actions stands alone as criminal actions. Such actions do not need to be similar, nor do they have to be related. In the multidoor

approach, the indictment is cumulative, but this is contradictory to the *concurcus realis* regulated in Article 65 of the Criminal Code, which regulates that if there are concurrent actions that stand alone, which are then some criminal actions and the perpetrator is threatened with similar principle criminal actions, that person will be imposed with only one sanction.

The prosecution of land-burning perpetrators with concurrent crimes (*concurcus realis*) can be carried out if the criminal perpetrators commit several acts, and each act stands alone as a crime. Apart from being charged with the crime of burning the plantation land, corporations can also be investigated and charged with other possible crimes, such as undergoing business activities without business licenses, which cause several people to become victims, damaging people's health and safety, and/or causing environmental damages as regulated and subject to criminal sanctions. It is stipulated in Article 109 of Law No. 32 of 2009 on Environmental Protection and Management, which was amended into Law No. 11 of 2020 on Job Creation.

Other possible criminal acts linked to plantation land fires are also regulated and subject to criminal sanction in Law No. 18 of 2013 on the Prevention and the Eradication of Forest Destruction, amended into Law No. 11 of 2020 on Job Creation. Apart from being criminally prosecuted for land burning, the perpetrators of that crime can be prosecuted if they undergo plantation activities without permission to undergo business in forest areas as regulated

and threatened with criminal sanctions in Article 92 clause (1) letter A and Article 92 clause (2) letter A of that law. The maximum criminal sanction imposed is the maximum amount of the threatened sanctions of those actions, but it may be more than the most severe maximum sanction added by a third. This stipulation should be changed so that the perpetrator may obtain cumulative sanctions if they commit concurrent crimes (Casson et al., 2006).

The case prosecution of the land burning using the multidoor approach may be used to maximize the criminal responsibility of corporations. As a guide to handling the criminal cases of corporations, there is the issuing of the Supreme Court Decree No. 13 of 2016 on the Guidelines in Handling Criminal Cases of Corporations. The legal subjects whom criminal responsibilities may impose include (1) the corporation or the administrators, (2) the corporation and the administrators, and (3) other perpetrators who are proven to be involved in the criminal activity. The case prosecution of the land burning by corporations is also guided by Attorney General Decree No. PER-028/A/JA/10/2014 on the Guidelines in Handling Criminal Cases with the Legal Subject of Corporations. Those guidelines regulate the actions of the corporations or the actions of the administrators who may be demanded with criminal responsibilities.

Then, the judge may impose a criminal sanction on the corporations through principal and/or additional criminal sanctions. The principal sanction that may be imposed upon a corporation is a fine. Then,

the additional sanction may be imposed on the corporations according to Article 119 of the Law No. 32 of 2009 on Environmental Protection and Management, which includes the appropriation of profits obtained from the crime, the closure of some or all venues of business and activities, the reparation of the criminal action impacts, the obligation to carry out those neglected without right, and the placement of the company under interdiction for the maximum period of three years.

## CONCLUSION

Theoretically, in handling cases of land burning, the multidoor approach can increase knowledge in the criminal procedural law sector as a formal law in handling cases. So far, the sources of formal law include the Criminal Procedural Code and the guidelines for handling cases applied by the Police Force, prosecutors, and judicial institutions. These guidelines have not been harmonized with the development of criminal motives as well as the development of knowledge and technologies. Apart from that, the multidoor approach may theoretically strengthen the plural philosophies and objectives of punishments, namely combining the retributive and utilitarian principles in one unity.

Practically, the multidoor approach can factually uncover an indication of concurrent crimes in cases of land burning. In line with the characteristics of environmental crime with corporate actors, this crime concerns business activities starting from land usage, business permits, payment, cultivation,

management, and marketing activities. The corporations' accountability in fulfilling all requirements in each stage of their business activities can become materials and information in the indictment and investigation processes of the land-burning cases.

Generally, crimes in the natural resource sector involve intersectoral crimes. Even crimes in the forestry sector are often concurrent with money laundering, bribery, gratification, and tax evasion. This condition is weakened by the existing gaps in some laws, such as Law No. 39 of 2014 on Plantations, which has weaker sanctions compared to those in Law No. 41 of 1999 on Forestry.

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## **Integrated Urban Transportation Policy: A Study of Kochi Metro and Vyttila Mobility Hub in Kerala, India**

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### **ABSTRACT**

Integrated infrastructure has been considered the key to the development of the urban transport system. Studies have rarely focused on the benefits and issues related to the urban integrated transport system, including mobility hubs. The present study attempts to analyze different aspects concerning the urban integrated infrastructure with a special focus on the Kochi Rail Metro and the Vyttila Mobility Hub in Kerala. The study reveals that 41 percent of commuters rely on Hub and Metro for occupation-induced traveling, followed by education (28 percent) and health (20 percent). It is revealed that the existing fare of Kochi Metro does not appear to be attractive to passengers. Almost 90 percent of passengers consider fares as not reasonable. Most of the commuters of Metro Train services and Mobility Hub share the view that these are 'inclusive'. The most noteworthy aspect of Metro and Hub is that they are eco-friendlier and sustainable. However, as an integrated infrastructure mode, it has to travel a long way yet. The study shows that the metro rail services must be accessible and affordable to the people. The study suggests that metro

authorities need to make policy decisions to rationalize the fare rates in accordance with different parameters to attract more passengers to the Metro services. As the commuters from the city area are averse to using the metro services, steps need to be taken to encourage the urban passengers to use the metro services.

*Keywords:* Green transport, inclusive transport, integrated infrastructure, mobility hub, sustainable transport

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## INTRODUCTION

It is true that the pace with which urbanization escalates has become unprecedented in recent times, thanks mainly to the increase in diversification of economic activities, growing change in the employment scenario, and the desire of the people to enjoy modern amenities and services (Cohen, 2006). Urbanization has gone to such an extent that in the coming decades, it is expected that 90 percent of world population growth will occur in cities of developing economies (Singh, 2016). India has also experienced rapid urbanization over the past. For instance, the urban population in India surged to 377 million in 2011 from 286 million in 2001 (Revi et al., 2012). Nevertheless, theoretically, India has not been urbanized and will not be urbanized in the near future. However, Kerala, a state situated in the southern tip of India, with 48 percent of its population living in urban areas, has become almost urbanized or nearing it to be urbanized. Despite all benefits it bestows on the inhabitants, urbanization creates an array of socio-economic issues, especially in the absence of a proper, comprehensive, and imaginative urban plan and its execution (Bibri, 2019).

One important aspect of urban planning is its public transport infrastructure to ensure smooth, cost-friendly, and reliable movement of people and commodities across different centers of urban dwellings (Gebre & Gebremedhin, 2019). In the absence of reliable and comfortable public transport facilities, commuters will be forced to depend on the private mode of transport,

increasing traffic congestion, economic cost, and pollution (Seetharaman, 2018). One important lacuna of urban transport in India is the apparent absence of integrated transport infrastructure, which facilitates people to choose between different modes of transport in accordance with their preferences. Moreover, integrated infrastructure would provide ample opportunities to switch to a more convenient and economical mode of transportation in the event of people being fed up with a specific mode of transport. It has well been acknowledged that China's accomplishment in the sphere of economic growth over the last years owes much to the initiatives that China is said to have taken in the establishment of integrated infrastructure (Ness, 2008). In India, small attempts have been made towards this but in vain. Hence, in India, there exists a wide gap between the demand and supply of infrastructure (Agrawal, 2020).

In Kerala, an important step toward integrated infrastructure has been made with the inauguration of the Vyttila Mobility Hub in Kochi in Ernakulam District. In this Hub, three modes of transport, viz. road, rail, and water, meet together, making people able to switch over to one another depending on their interests. Established in 2015, the Hub has made significant changes in the landscape of integrated urban transport in the city of Kochi. The hallmarks of the Hub are the Water Metro and Rail Metro services which help not only the daily commuters but also the tourists visiting Kochi. In this background, it is important to look at the different experiments implemented to

augment and enhance the quality of urban integrated transport infrastructure in terms of sustainability and inclusiveness in Kochi. The objective of this paper is to dwell on this aspect. This paper is broken into two parts: while the first part deals with certain theoretical notes, including issues that hover around infrastructural bottlenecks and growing congestion in cities, the second part dwells on a study based on the commuters of Kochi metro and users of Vyttila Mobility Hub.

### **The Objectives of the Study**

The present study is partly exploratory and partly descriptive. It attempts to present the current scenario and problems plaguing urban transport in India. As a case study, it intends to throw light on commuters' perception towards the Kochi Metro Rail and the mobility Hub constructed in Kochi, Kerala. The specific objectives of the present study are:

1. To examine the present scenario of the urban transport system in India along with some specific problems plaguing the sector.
2. To analyze the opinion of commuters towards the urban metro rail service and the integrated mobility hubs.

### **Theoretical Background**

Urbanization increases the travel demand of people in two ways: (1) expanded city size leads to an increase in trip length; that is, as the limit of urban area expands, people have to perform lengthy journeys to reach the other end of urban areas which is often

called 'trip length,' and (2), as more and more cities are formed people from villages start finding employment opportunities in cities, and they make daily up and down trip to cities to participate in employment activities. For instance, in cities with more than ten million populations in India, studies have shown that the average travel distance has been enhanced from 9 to 12 kilometers (Roychowdhury, 2013). Apart from the two ways mentioned above through which urbanization fastens travel demand, an increase in per capita income appears to have been increasingly contributing to the demand for travel as it tends to increase the economic and social dealings of people and, on account of this, people tend to perform more journeys. Putting it differently, 'Per capita trips' get increased as the income level goes up; that is, per capita trips could be considered as an increasing function of the level of income of the travelers (Pucher & Renne, 2003). People travel mostly for employment and education; roughly 75 percent of travel is made for these reasons. In recent times, especially in Kerala, due to increasing awareness of health issues and lifestyle diseases that affect people, health has become an essential factor driving people's travel needs. The growing interest of people in entertainment or infotainment activities and inclusive tourism also appear to be playing important roles in determining travel demand. Since efficient urban public transport contributes to economic progress in terms of increasing mobility of people, enhancing the quality of time spent on work, and reducing fuel consumption, it

has multiplier effects not only on the urban economy but also on the economy as a whole (Jain & Dhiman, 2017).

Urban transport in India has been beset with a number of issues ranging from growing congestion fueled by an increasing number of vehicles and limited road expansion to poor performance of public transport in terms of quality as well as quantity of services (Singh, 2014). These problems, in fact, tempt urban commuters to shift to private vehicles aggravating the problem again, thus creating a vicious circle of urban transport issues. Besides, the growing number of private vehicles has cost the environment badly by way of degrading the quality of air and increasing the consumption of fossil fuels by private vehicles (Adams & Requia, 2017). Moreover, private vehicles take up more road space per traveler compared to public transport. Apart from these, private vehicles emit more pollutants per passenger also. Hence, for sustainable and inclusive urban transport, a shift to public transport has become indispensable. Urban public transport needs to be given high priority in urban planning. While sustainable transport decarbonizes the transport sector, inclusive transport strives to encompass all sections of urban travelers by ensuring access to transport to all (Ogryzek et al., 2020). Having discussed the theoretical background, we now move on to the issues and the future of urban transport in India.

### **The Way Ahead for Urban Transport in India**

The growing demand for travel in urban

areas, the mounting problems of pollution caused by carbon-emitting vehicles, and the increasing traffic congestion eating into the precious peak time, productivity, and pocket of urban commuters and dwellers have all manifested to such an extent that policymakers and urban planners now start thinking in terms of reshaping the urban transportation policies to incorporate concerns of not only the growing demand for travel but also its sustainability and inclusiveness (Richardson, 2005). For this to happen, in line with its envisagement, it is imperative that support from all stakeholders, including urban commuters and travel service providers, matters a lot. The success of such a plan invariably depends on this joint effort for a common cause of making the urban travel experience sustainable and inclusive. It calls for developing Green Travel Habits or Sustainable Travel Behavior among urban commuters and stakeholders of urban development (Howrath & Polyviou, 2012). It is obvious that global greenhouse gas emission has become an increasing function of unsustainable travel behavior. Studies have thrown light on the fact that traffic congestion owing primarily to unsustainable and irresponsible transportation on roads not only results in increased fuel use but also aggravates the problem of carbon dioxide emissions, leading to colossal environmental damage (Bharadwaj et al., 2017).

Growing travel demand, obviously, has become a reality that, given the present circumstances, can hardly be arrested without causing irreparable damage to the prospects of economic growth and

development (Ecola & Wachs, 2012). It is true that as an economy develops and jobs get diversified, the demand for travel naturally escalates, and if public transport fails to meet these requirements of increasing travel demand by ensuring comfort and effective travel choices, the demand for private modes of travel would unequivocally move up. It will exacerbate urban road congestion, leading to loss of income and labor hours for those who reside in urban areas and those who commute daily to and from cities, seeking gainful employment avenues. In these circumstances, the immediate way to tackle growing urban travel demand could be found in attempts to contain travel demand itself, although it may seem to be a highly implausible one.

One way to contain the travel demand is to implement well-thought-out and comprehensive urban planning methods wherein instead of developing industries and job centers first, laying roads and rails and then allowing business clusters to be developed around such transport infrastructure. Simply put, investing in Social Overhead Capital like roads, railways, and power must invariably precede investment in other sectors, technically called Directly Productive Activities (Thirlwall, 2011). It would make a substantial reduction in the travel demand as 90 percent of travel demand comes from job, education, and health-related reasons. Therefore, self-contained industrial and service clusters and townships around such clusters coexisting with adequate housing, education, and health facilities are developed so that people

rarely need to travel to distant places to avail of these services, and consequently, the need to commute to and out of the urban centers can be effectively contained (de Abreu e Silva, 2014). In other words, if people live closer to their job centers with all amenities and comforts, the need for travel would be immensely reduced (Cao & Chatman, 2016). Nevertheless, unarguably, it is easier said than done. That said, now the problems of the urban transport system in India continue to remain unabated with a number of impediments. Here, an attempt has been made to list some of the important problems the transport system has been confronting within Indian cities.

### **Allocation of Road Space**

Although it is advisable to rely on non-motorized transport modes of conveyance in view of growing environmental concerns and traffic congestion, for travels that go beyond 6 to 7 kilometers, non-motorized modes of transport cannot be relied upon (Ahmed & Monem, 2020). Since this is the case, the most important and advisable non-motorized mode of transport is definitely public transport as it consumes less energy per passenger, emits fewer pollutants, and takes comparably less road space per passenger (Kii & Hanaoka, 2003). Now, the compelling question is how to pursue people to prefer public transport in place of private vehicle modes of conveyance. The answer to this question lies in allocating road space in favor of passengers rather than vehicles (Zheng & Geroliminis, 2013). However, unfortunately, road space allocation in the

traffic regulation gives priority to vehicles rather than passengers, and as a result, a bus carrying 40 to 45 passengers may have to be slow or take another route in case of traffic regulations, while single-passenger cars may be given priority on the roads. It has now become a practice in many junctions that passenger waiting shelters are constructed a few meters away from the junction, forcing bus passengers to walk or catch autos to reach the other side of the road or junction to board the next bus. This improper location of passenger amenity centers and bus waiting shelters may dissuade passengers from preferring public transport in place of private vehicles.

### **Congestion Charging and High Parking Fees**

Since urban public transport aims at reducing the use of personalized motors, certain fiscal and other regulations can be resorted in dissuading people from choosing private vehicle mode of transport. Two such options emerge at this juncture: Congestion charging and levying high parking fees. Congestion charges are special payments that need to be paid to enter the city roads during peak hours which may prevent people from using their vehicles during peak hours. High parking fees, of course, work as a disincentive for many to venture into roads frequently and often unnecessarily. However, the over-exercise of these two measures would invite many other economic issues, such as a decline in the demand for cars (Simicevic et al., 2013). It will have a certain backlash effect on economic growth and employment generation, especially in the

context of the current economic slowdown that has been primarily experienced in the car manufacturing sector in India. Notwithstanding the adverse economic fallout of congestion charges on economic growth in general, it has been acknowledged that congestion charging policy reduces the demand for private car use in both trips and distance, thereby reducing atmospheric pollution (Van Amelsfort & Swedish, 2012).

### **Non-Motorized Green Modes of Travels**

Generally speaking, most roads, especially rural and urban roads in India and Kerala, are not friendly towards pedestrians and cycle riders. For instance, in Bangalore, an Information technology hub center and the capital of Karnataka, a southern State in the Indian Union, out of the 684 fatalities, 276 victims were pedestrians, and it may sound quite unfortunate that 60 percent of them were crossing the road while being hit by the vehicles (Devare, 2019). It is really disheartening to note that while the number of vehicles, especially cars, gets increasing, the size and the length of the roads and the parking areas remain the same, eating indiscriminately into the space available for pedestrians (Mattioli et al., 2020). It has continued to be a lacuna of urban transport infrastructure planning, especially in developing economies. In short, pedestrians and non-motorized users are prone to road accidents as they share the same space on the road with motorized modes of transport (Abdulrazzaq et al., 2012). It causes (1) declines in the speed of motorized transport as they need to take care



of these green travelers, which increases pollution per vehicle and consume more fuels, and (2) pedestrians and cycle riders are likely to be hit by speedy motorized riders, and this has a disincentive effect on the use of non-motorized modes of transport. Hence, a greener urban transport policy has to incorporate these concerns, and while designing roads, ample space must be segregated for pedestrians and cycle riders. Kochi Metro has already made available cycles for the use of its passengers (Nair, 2019). After alighting from the metro train at certain specialized stations, they can avail of cycles to move to their final destinations.

#### **Accessibility and Premium Services**

How many waiting points can be arranged per km of traveling, and what facilities can users enjoy at the waiting points? Smooth and attractive public transport must address this question. A standard procedure goes like this: One access point in the range of half km in city centers and one to two km in outer areas. Apart from this hard and fast rule, the common rule is that access points must be accessible to commuters at an easy distance. Making people walk more may make public modes unattractive to commuters. At the same time, too many access points take too much time to travel, and therefore while deciding on access points, these aspects must be considered (Bell, 2019). To attract car users to public transport, the services in public transport must have good quality in terms of comfort and journey time (Redman et al., 2013). Kochi Metro, one of the focal points of the present study, has been quite

attractive to the passengers in terms of comfort, ensuring timely availability, and reaching destinations. It has been designed in such a manner as to ensure world-class comfort and access points at different locations in the suburban areas of Kochi City. It is indeed obvious that high-end travelers may not like rush buses, and they require a high-comfort journey that reaches their destination at the right time. Premium services must ensure these things because, regardless of fares, high-end users consider the quality of services. Kochi Metro, like many other urban rail transport models, offers all premium services to its passengers, hoping that this would motivate car users to get rid of congested road traveling and start enjoying the ride on Metro trains.

#### **Some Initiatives Towards Popularizing Integrated Infrastructure**

Since the present study pertains to the integrated infrastructure policy and the steps that have been taken towards the starting of Vyttila Mobility Hub and Kochi Metro in the State of Kerala, it would be imperative to dwell on some of the leading initiatives towards the popularization of the use of integrated infrastructure. This popularization attempt has been called for since this opens up a new window of travel experience for commuters accustomed to using either rush buses or private modes of transport. Hence, it turns out to be a herculean task to attract the urban commuters to the world of the journey that unfolds before them with the establishment of an integrated transport transit point at Vyttila. Some steps need a brief explanation.

### **Green Mobility Zone**

Green Mobility Zone is an important initiative toward making urban transport eco-friendly. In Kochi, under the stewardship of Kochi Metro Rail Limited (KMRL), works on Green Mobility Zone has already been commenced. Non-Motorized Mode of Transport has gained wide currency in the sphere of transportation in Kochi City, although certain steps remain to be completed for its cent percent fulfillment. Under this, pedestrian-friendly roads and cycle tracks are being planned to make non-motorized transport a new experience for the urban commuters in Kochi. France Development Agency (FDA), a credit agency for the KMRL, has offered financial assistance to the initiatives of Non-Motorized Transport in Kochi, a program worth 239 crores of rupees. As per this scheme, places adjacent to Metro stations in Kochi will be converted to Green Spaces, and cycle tracks will be laid in available places so that Metro users can make use of cycles to reach the places after alighting from the Metro Trains. Electric and CNG Buses (Compressed Natural Gas Buses), Kerala State Electricity Board Charging Stations, subsidies for E-Autos, and Solar Boat Services are some of the other schemes in the pipeline. Green Transport Corridor from Muzaris at Kodungalur to Eramallur, a program that costs Rs.580 crores, is also being envisaged by the Government. Trams to connect places where the metro is apparently absent are also being planned along with E-Bus Corridor schemes.

### **Water Metro**

The construction of the first Water Metro in India has already commenced in Kochi. Water Metro, an associate of Kochi Metro, is expected to connect 16 places in Kochi with modern luxury boat services. Seventy-six boats and 41 Boat ports are being constructed. Cochin Shipyard is looking after the works of boats under the scheme of Water Metro. It is expected to boost tourism in the Middle part of Kerala State. Since the State is blessed with the presence of water streams suitable for water transport, Kochi Water Metro can do wonders in this respect. Commuters to nearby places, especially to certain sub-urban places, find the water metro the most convenient mode of transport, particularly in terms of costs and travel time.

### **Kochi One Card**

Another new experiment that has been underway is Kochi One Card, a unified ticketing system, which helps its holders to travel in Buses, Metro, and Boats with the same ticket. Travelers can use this Kochi One Card even for shopping in associated shopping malls and merchant houses.

Having discussed certain issues and initiatives toward making an integrated urban transport system a reality in Kerala, we now turn to the crux of the paper where, based on primary data, the opinion of commuters regarding different attributes of the integrated transport infrastructure will be examined.

## MATERIALS AND METHODS

The study mainly uses primary data for the analysis. A sample survey was executed to unearth the perceptions of users of Vyttila Mobility Hub and metro travelers. The population of the study covered the commuters of the metro rail services in Kochi who also used to frequent the Vyttila Mobility Hub to board buses and water metro. From different metro stations, one station located in the Vyttila Mobility Hub was chosen to select the sample for the study. From a list of regular commuters, a sample of 200 commuters was chosen at random. The contact information, including phone number and email id, was collected, and respondents were contacted using different modes of communication. A pilot survey was conducted with passengers using the mall intercept method. The data were collected using telephonic surveys, sometimes and in some conditions, using face-to-face interview methods. No scale data was used in the study. However, categorical data like place of origin, gender of commuters, and the purpose of the journey were collected from the respondents. Likert scale was used to analyze the opinion and perception of commuters with different aspects like the comfort of the journey, the fare of metro rail service, green transport, and inclusiveness of the metro and mobility hub.

## RESULTS AND DISCUSSION

### Gender Wise Ridership

Of the total commuters chosen at random, 69 percent were females, and only 31 percent were males (Figure 1). One plausible reason

for this female-centric ridership is that male commuters have alternative modes of transport like motorcycles, scooters, and cycles, and therefore, they do not use the metro and hub. Therefore, females still dominate the commuters in both metro and Vyttila Mobility Hub. Unsurprisingly, this revelation of ridership by gender that more women use Kochi Metro compared to their male counterparts corroborates the findings of many other studies on the gender-wise use of Metros (Sullivan, 2013).

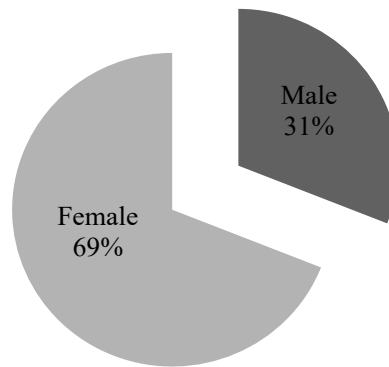


Figure 1. Gender wise ridership

### Purpose of Journey

It has been well acknowledged that as people get access to places and jobs, the problem of unemployment could be reduced to a certain extent. The role of a cheap, comfortable, and reliable public transport system to facilitate people to get accommodated in jobs has remained unquestionable (Bastiaanssen et al., 2021). A glance at Figure 2 reveals that most commuters (41 percent) relied on Hub and metro for occupation-induced traveling, followed by education (28 percent) and health (20 percent). It corroborates the fact

that public transport facilities elsewhere in the world are primarily used for job and education-related activities. Nevertheless, it is interesting to note that health has also become an important reason, driving the

travel need of people. Growing demand for specialized health services and the availability of health infra in relatively large cities have become a force in driving the need for urban transport.

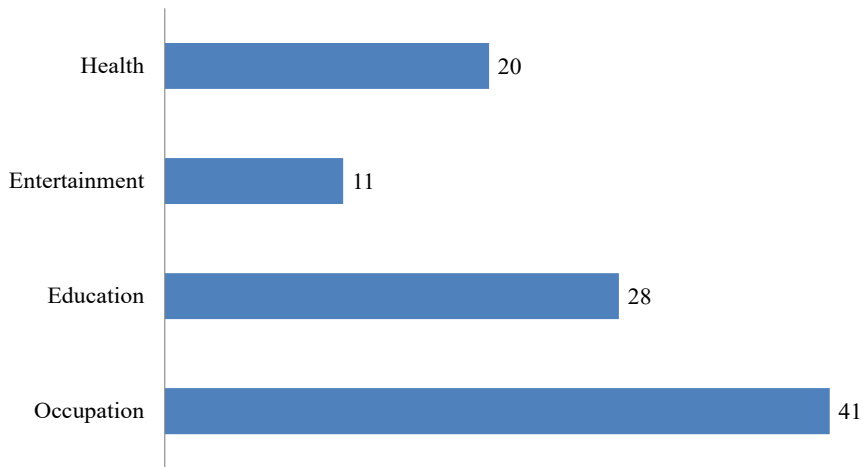


Figure 2. Purpose of journey

Gender-wise distribution of purpose journey clearly reveals that among the male commuters, for almost half, the occupation has been the main purpose for which they use metro rail and mobility hub facilities, while only 9.68 percent rely on the metro for education activities (Table 1). In contrast to this, among the female, while 36.23 percent

depend on the metro for education purposes, only 37.68 percent consider occupation as the purpose of the journey. Drawing on inferences arrived from the Chi-square analysis, and it is obvious that gender has been significantly associated with the purpose of the journey.

Table 1  
Purpose of journey-gender-wise distribution

Purpose of Journey	Gender	
	Male (%)	Female (%)
Occupation	48.39	37.68
Education	9.68	36.23
Entertainment	9.68	11.59
Health	32.26	14.49
	100	100

Note. *p* value is .024

**Origin of Location of Commuters**

Studies have shown that rural-urban linkage has had an influence on ameliorating poverty in developing economies (Von Braun, 2007). Transportation linkage has played a vital role in materializing the rural-urban linkage. Access to cheap, reliable, and comfortable transportation often attracts rural people to urban areas to engage in gainful employment activities (Sharma, 2019). It is obvious that Kochi city is a destination for many people from at least three neighboring districts: Thrissur, Kottayam, and Alappuzha, besides people

from the Ernakulum district. However, instead of the district-centric origin of the commuters, it is worthwhile to note that 26 percent of the commuters come from semi-urban areas, while 20 percent come from long-distanced areas (Table 2). It is interesting to note that 22 percent of the commuters come from rural areas of other districts. It shows that more than city-bound commuters, people from other areas use the mobility hub and metros more frequently. It is evident that 68 percent of metro travelers come from semi-urban, rural areas of other districts and long distant places.

To analyze whether there is any association between the place of origin of commuters and their purpose of the journey, a Chi-square analysis has been executed (Table 3). Commuters from rural areas in the district and urban peripheral areas mainly travel and use the Kochi Metro and Vyttila Mobility Hub to perform their occupation-induced journeys, whereas commuters from the urban center travel in the Kochi Metro mainly for education-induced work. It is worthwhile to note that long-distance

Table 2  
*Place of origin of commuters*

Where are you from?	Percentage (%)
Urban centre	19.0
Urban peripheral	13.0
Semi-urban	26.0
Rural areas of district	22.0
Long distance traveler	20.0
Total	100.0

Table 3  
*Place of origin of commuters and the purpose of the journey*

Purpose of Journey	Urban Centre (%)	Urban Peripheral (%)	Semi-Urban (%)	Rural Areas of District (%)	Long Distance Traveler (%)
Occupation	25.00	51.43	40.00	55.56	38.46
Education	53.57	25.71		33.33	7.69
Entertainment		2.86	20.00	11.11	46.15
Health	21.43	20.00	40.00		7.69
Total	100.00	100.00	100.00	100.00	100.00

Note. *p* value is .00

travelers mainly use it for entertainment purposes, followed by occupation-induced journeys. Since the  $p$  value in the Chi-square analysis turns out to be less than .05, it could be concluded that the origin of the place of commuters and the purpose of the journey are associated with each other, meaning both influences each other.

### Kochi One Card

KMRL (Kochi Metro Rail Limited) has introduced the ‘Kochi One Card,’ a multi-purpose debit card-like device that would tie up the passengers to a number of services connected to the Kochi Metro. Although many promotional adventures and offers in the form of discounts have been given by the KMRL to popularize it among the commuters, only a few, that is close to 23 percent of commuters, really hold it (Figure 3). It is observed that commuters are indifferent to the holding and use of these kinds of debit cards, which have been designed for specific purposes.

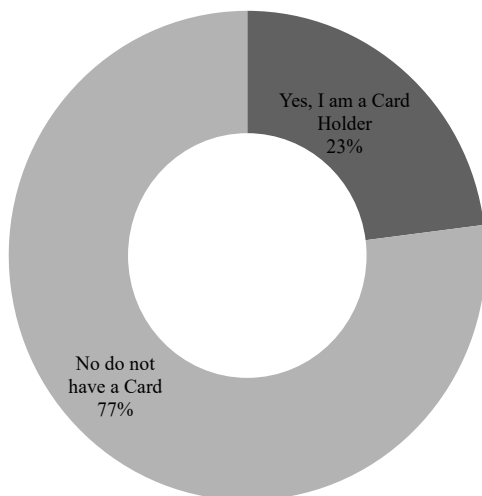


Figure 3. Do you have Kochi One Card?

### Opinions About the Fare Structure of Metro

Fare is something that most commuters take into account while making a choice regarding the mode of transport. Since most commuters of public transport are either low-income earners or middle-income groups, the fare determines the success of the Kochi Metro and the existence of the mobility Hub. Quite unfortunately, it is revealed that the existing fare of Kochi Metro does not appear to be attractive to passengers. A little more than 55 percent of the respondents of this study opine that the fare is high, and almost 35 percent believe that the fare is ‘very high.’ Put together, almost 90 percent consider fares as either high or very high (Figure 4). It points toward the fact that the future of the Metro lies in reducing the fare to attract more passengers—only this way the Metro services can be made more financially viable.

Now, we look into the association between the purpose of the journey and the opinion about the fare rate of the Kochi metro (Table 4). Among the occupation and education-induced travelers, respectively, 63.41 percent and 60.71 percent opine that fare is ‘high,’ and those who rely on the Kochi metro occasionally for entertainment purposes also have the view that fare is too high. The Chi-square analysis done to find out the association between the purpose of the journey and the opinion about the fare rate has turned out to be significant at a five percent level, showing that the purpose of the journey influences the opinion of people about the fare rate of metro services. It

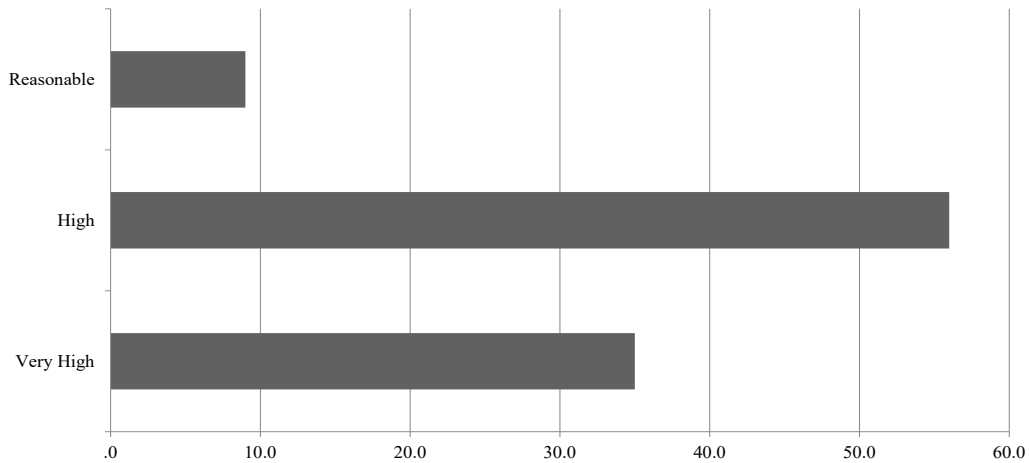


Figure 4. Opinion about the Metro fare

Table 4  
Opinion about the fare rate and the purpose of journey

Opinion About the Fare Rate	Purpose of Journey			
	Occupation (%)	Education (%)	Entertainment (%)	Health (%)
Very high	34.15	21.43	72.73	35.00
High	63.41	60.71	27.27	50.00
Reasonable	2.44	17.86		15.00
Total	100	100	100	100

Note. *p* value is .025

calls for making differential treatment in the determination of fare rate considering the purpose of the journey performed by commuters of Kochi metro, which may even make the service more popular and justifiable.

**Opinion About the Comfort of Travel**

Next, comfort is another factor influencing the passenger, especially somewhat high-class passengers who otherwise would have used their private vehicles. It is obvious that Metro trains provide reasonable

comfort to passengers. The present study also corroborates this. It is evident that 42 percent opine that they are satisfied with the comfort aspect, and 15 percent are very much satisfied, implying that 57 percent are satisfied with the comfort being offered by Metro Services (Table 5). Only 13 percent of commuters have expressed dissatisfaction over the quality of the comfort of Metro Services.

Having discussed the opinion about the comfort level of Metro services, we now move on to analyze the gender-wise

Table 5  
*Opinion regarding the comfort of the journey*

Level of Satisfaction	Percentage (%)
Very much satisfied	15.0
Satisfied	42.0
No opinion	27.0
Dissatisfied	13.0
Very much dissatisfied	3.0
Total	100.0

analysis of opinions regarding the comfort level. It is interesting to note that males are dissatisfied with the comfort level while an overwhelming percentage of females (around 50 percent) opine that they are satisfied with the comfort of travel offered by the metro services. Further, to understand the association between gender and the opinion about comfort level, a Chi-square analysis has been done, and it unequivocally reveals that gender has an influence in determining the opinion of people about the comfort level of travel in the metro (Table 6).

Table 6  
*Gender-wise distribution of opinion regarding the comfort of travel*

Opinion Regarding the Comfort of Travel	Male (%)	Female (%)
Very much satisfied	12.903	15.942
Satisfied	25.806	49.275
No opinion	29.032	26.087
Dissatisfied	22.581	8.696
Very much dissatisfied	9.677	
Total	100	100

Note. *p* value is .012

### Hub as an Integrated Transport Infrastructure

The Mobility Hub undoubtedly could be reckoned as a step towards materializing the objective of establishing integrated transport infrastructure on a wide scale in Kerala. In this respect, the study enquired about its acceptance among commuters as a model of integrated infrastructure. Quite the opposite to our theoretical perceptions, commuters opine that as an integrated infrastructure mode, Vyttila Mobility Hub has yet to travel a lot (Table 7). Drawing on a Likert Scale presentation of the statement that Hub is an integrated transport infrastructure, only a meager 16 percent strongly agree with the view that Hub is an integrated transport infrastructure, where almost 40 percent ('Disagree' and 'Strongly Disagree' taken together) do not subscribe to this view. From this, it could be understood that commuters do not appear to be getting the complete advantage of it being a destination of integrated infrastructure. Problems lie more in getting the bus services on a satisfactory scale. However, a cause of the sigh is that the

Table 7  
*Hub as an integrated transport infrastructure*

Hub as an Integrated Transport Infrastructure	Percentage (%)
Strongly agree	16.0
Agree	37.0
No opinion	7.0
Disagree	25.0
Strongly disagree	15.0
Total	100.0



percentage of people who strongly disagree with the view that Mobility Hub works as an integrated public infrastructure mode is slightly high compared to other opinions.

The study attempts to analyze whether there is any association between the sector of employment and the opinion about the statement that a Hub is an integrated transport infrastructure. The study considers commuters from three sectors: the private sector, the government sector, and the informal sector. Among the commuters working in the private sector, more than

47 percent agree with the view that the hub is an integrated infrastructure, whereas only 33.33 percent and 30.3 percent, respectively, from the government sector and informal sector, agree with this view (Table 8). The Chi-Square test executed to understand the association between the sector of employment and the opinion of commuters regarding the status of the hub as an integrated infrastructure has turned out to be significant at a five percent level, showing that both are associated with each other.

Table 8  
*Hub as integrated infrastructure and the sector of employment of commuters*

Hub as an Integrated Infrastructure	Sector of Employment		
	Private Sector (%)	Government Sector (%)	Informal Sector (%)
Strongly agree	8.82	18.18	21.21
Agree	47.06	33.33	30.30
No opinion	2.94	18.18	
Disagree	32.35	21.21	21.21
Strongly disagree	8.82	9.09	27.27
Total	100	100	100

Note. *p* value is .019

**Inclusiveness of the Transport System**

Inclusiveness is an attribute of modern public transport systems. Inclusiveness of transport system is understood to mean whether the system is tailor-made to cater to the needs of all people irrespective of their physical and social disabilities. In fact, it is apparent that most modern public transport systems appear to have been more inclusive. In the present study, most commuters of Metro Train services and Mobility Hub

share the view that these are inclusive or mostly inclusive (Table 9). It is further interesting to note that only a negligible three percent opine that Metro and Mobility Hub are not inclusive.

Having observed the opinion of commuters regarding the inclusiveness of the Kochi metro and mobility hub, we now turn to analyze whether the gender status of commuters has any association with the opinion regarding inclusiveness. The present

Table 9  
*Inclusiveness of the metro train and the Vyttila Mobility hub*

Inclusiveness	Percentage (%)
Yes, inclusive	32.0
Mostly inclusive	44.0
Rarely inclusive	21.0
Not at all inclusive	3.0
Total	100.0

study shows that females outnumber males in expressing the view that the metro and mobility hub is inclusive (Table 10). Even an overwhelming percentage of women, to the tune of a little more than 52 percent, share the view that metro and mobility hub is ‘mostly inclusive.’ It is obvious that this view of inclusiveness from the perception of commuters, particularly females matter a lot. On the other hand, it is surprising to note that 38.71 percent of males consider it ‘rarely inclusive.’ Further, it needs to be pointed out that the Chi-square test done to reveal the association between the gender status of commuters and their opinion about the inclusiveness of metro and mobility hubs has become significant at a five percent level revealing that gender plays a significant role in shaping the opinion regarding the inclusiveness of metro and mobility hub.

### Green Metro and Mobility Hub

Metros are supposed to be eco-friendly as it causes little harm to the environment by way of not polluting the air (Thawadi & Ghamdi, 2019). Many of the metro cities and transport in such cities have adopted the green mode of operations. For instance, most buses

Table 10  
*Gender-wise opinion about the inclusiveness of metro and mobility hub*

Is Metro Inclusive?	Gender	
	Male (%)	Female (%)
Yes, inclusive	25.81	34.78
Mostly inclusive	25.81	52.17
Rarely inclusive	38.71	13.04
Not at all inclusive	9.68	
Total	100	100

*Note.* *p* value is .001

in New Delhi, the capital of India, have become CNG-driven (Krelling & Badami, 2016). The most noteworthy aspect of Metro and Hub is that they are eco-friendlier and sustainable. It is remarkable to observe that 32 percent of the respondents regard Kochi Metro and Mobility Hub as sustainable and eco-friendly, while 56 percent consider both as mostly sustainable (Table 11). Only a meager 12 percent share the view that Kochi Metro and Mobility Hub remain not at all sustainable and eco-friendly. The view of an overwhelming majority of respondents shows that Kochi Metro and Mobility Hubs have continued to be the greener modes of transport infrastructure.

Now looking into the gender dimension of the opinion of commuters about the sustainability of Kochi Metro and Mobility, the study finds that females have high regard and optimism regarding the sustainability and eco-friendly nature of mobility hub and metro services. An overwhelming majority, to the tune of 63.77 percent of females, opine that metro and hubs are

Table 11  
*Sustainability of services*

Sustainability	Percentage (%)	Cumulative Percentage (%)
Yes, sustainable and eco-friendly	32.0	32.0
Mostly sustainable	56.0	88.0
Not at all sustainable and eco-friendly	12.0	100.0
Total	100.0	

mostly sustainable, whereas among the males, only 38.71 percent share this view (Table 12). The Chi-square test conducted to know the association between gender dimensions of commuters and the opinion regarding sustainability has turned out to be

significant at a five percent level showing unequivocally that gender has an influence in shaping the opinion of commuters regarding the sustainability and eco-friendly nature of metro and mobility hub.

Table 12  
*Gender-wise distribution of opinion regarding the sustainability of the metro and the hub*

Is it Sustainable and Eco-friendly?	Gender	
	Male (%)	Female (%)
Yes, sustainable and eco-friendly	32.26	31.88
Mostly sustainable	38.71	63.77
Not at all sustainable and eco-friendly	29.03	4.35
Total	100	100

*Note.* *p* value is .001

## CONCLUSION

This paper has made a twofold attempt to dwell on the current status and experiments of the urban public transport system in a developing economy like India. It first chose to present the scenario of the urban transport system in India along with some specific problems plaguing the sector. Secondly, it chose Vyttila Mobility Hub and Kochi Metro, two frontrunners in urban infrastructure in Kerala, a State in the southern tip of India, as a case to analyze

the customer’s perception regarding newer experiments towards modernizing urban transport infrastructure. It is viewed that the allocation of road space has been improperly designed in the sense that the public transport system has been given the least priority on the road compared to private vehicles. It is really disheartening to note that while the number of vehicles, especially cars get, increased the size and the length of the roads and the parking areas remain the same. It has continued to be a lacuna of urban

transport infrastructure planning, especially in developing economies. Hence, a greener urban transport policy has to incorporate these concerns, and while designing roads, ample space must be segregated for pedestrians and cycle riders. The study also revealed that to attract car users to public transport, the services in public transport must have good quality in terms of comfort and journey time.

Coming to the second objective, it is observed that the Vyttila Mobility Hub, established in 2015, is an important step toward the establishment of integrated infrastructure in Kerala. As the meeting point of three modes of transport: road, rail, and water, meeting together enables passengers to switch to alternative modes of transport as per their requirements. This study looks at the sustainability and inclusiveness of Kochi Metro and Mobility Hub. The study has found that Females dominate the commuters in both metro and Vyttila Mobility Hub. Of the total commuters chosen at random, 69 percent were females, and only 31 percent were males. The study reveals that most commuters (41 percent) relied on Hub and metro for occupation-induced traveling, followed by education (28 percent) and health (20 percent). Obviously, 26 percent of the commuters come from semi-urban areas, while 20 percent are from long-distance areas. It is worth interesting to note that 22 percent of the commuters come from rural areas of other districts. It is revealed that the existing fare of Kochi Metro does not appear to be attractive to passengers. A little more than 55 percent of

the respondents of this study opine that the fare is high, and almost 35 percent believe that the fare is very high. Put together, almost 90 percent consider fare as not reasonable. It is obvious that Metro trains provide reasonable comfort to passengers. The present study also corroborates this. Most commuters of Metro Train services and Mobility Hub share the view that these are inclusive or mostly inclusive. The study shows that the metro rail services must be accessible and affordable to the people. As commuters express dissatisfaction with the fare structure, it appears important for metro authorities to make policy decisions to rationalize the fare rates. As the commuters from the city area are averse to using the metro services, steps need to be taken to encourage the urban passengers to use the metro services.

#### **Limitations of the Study, Policy Input, and Suggestions for Future Research**

Although all possible efforts have been taken to complete the study, certain factors like the absence of sufficient time, unwillingness on the part of the respondents to reveal their opinion, and the lack of time on the part of respondents to give information accurately on the queries contained in the interview schedule and questionnaire have put limitations on the execution of the study. Obtaining passenger information seemed difficult as passengers were busy boarding the train. We also attempted to collect information about traveling along with some passengers wherever possible.

Metro and integrated transport mobility hubs are a new development in

the urban transport sector in Kerala. As urbanization has been increasing in Kerala at an unprecedented rate, there has been a growing need for urban metro services and integrated mobility hubs. Many such projects have been in the offing as well. The study shows that the metro rail services must be accessible and affordable to the people. As the commuters express dissatisfaction with the fare structure, it appears important for metro authorities to make policy decisions to rationalize the fare rates in accordance with the time of journey performed by the travelers. As the commuters from the city area are averse to using the metro services, steps need to be taken to encourage the urban passengers to use the metro services.

As is well known, the integrated urban infrastructure is a new area that offers a lot of scope for further research. More in-depth analysis can be done by researchers on the issue of inclusiveness, comfort, and sustainability of metro rail services and mobility hubs using qualitative methods like focus group discussions. Moreover, viability studies can also be conducted using the data on revenue generation and expenditure of the metro and mobility hub. As the metro service is an eco-friendly and non-pollutant transport service, the qualitative improvement it creates in the environment can also be studied using tools in environmental economics. Moreover, a study on the nature and pattern of using private modes of transport before and after the coming up of Metro services can also be conducted by researchers interested in the area of urban transport.

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## **The Rise of Islamic Populism and Social Alliances of the Muslim Middle-Class in the West Sumatra**

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### **ABSTRACT**

This study explores the manifestation of religious populism through a case study in West Sumatra, highlighting its rise to power and the consequent shift towards religion as a central factor in public policy decisions. In West Sumatra, where the *Minangkabau* reside, Islamic populism received support from the economically established, middle-class traders. It occurred due to the change within *Minangkabau* society, where the clan's traditional role in meeting the needs of its members has been disrupted by modernization. Replacing the clan's roles, financially stable middle-class Muslims have come to support the needy and community activities, eventually leading to the rise of Islamic populism. This transformation, from clan-based to multi-clan alliances, has provided the consolidated middle class with the impetus to advocate for a conservative Islamic agenda. The research findings also underscore the necessity of considering contextual factors, including urban-rural dynamics and community-specific socio-cultural structures. Data for this research were collected by employing vis-à-vis interviews and active observation from August 2019 to December 2020 in West Sumatra, Indonesia.

*Keywords:* Islamic populism, middle-class, social alliances, West Sumatra

### **INTRODUCTION**

The rise of populism has often been explained from the perspective of a structural, political, economic, and political style, yet less by society or communal identity. This article links to the change from traditional to modern society that contributed to the development of Islamic Populism in West Sumatra. In this article, we analyzed how changes in *Minang* society strengthened the sense of community or *Minang* communal identity, which further made the moral intervention

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by the middle class to the poor stronger, more expansive, and more legitimate. The rise of Islamic populism occurred not just due to concerns but also due to social capital generated by the middle class to form an interclass alliance with the lower class. Meanwhile, conservative Islamic groups in West Sumatra encourage politicians to bring up the issue of morality in the public sphere. With support from local politicians and the government, Islamic groups dispelled the inflow of Chinese conglomerates that had long been assumed to have been able to disrupt economic dominance. Chinese entrepreneurs are assumed as potential anxiety, yet in other areas such as Jakarta, Surabaya, and Medan, the Chinese have long dominated the economy.

The support from the local politicians is a logical consequence of the strength of Islam in West Sumatra. Supported by politicians and clerics, the local government implemented local regulations pertaining to moral politics. By using moral anxiety, particularly the issue of the spread of LGBT and the potential anxiety that will dominate the Chinese' economy, Islamic populism targets mostly the middle class in West Sumatra.

The development of populism has become a phenomenon in several countries. In Indonesia, according to Hadiz and Robison (2017) and Hadiz (2018), the strengthening of populism is due to the pressure to elevate or survive has made Muslim youths and professionals turn to religion for their life. This situation follows the characteristics of urban society, where

the pressure to survive and succeed must be added to an urban environment that tends to be individualistic. Jati (2013) also views the urbanization of rural communities into cities as a trigger for economic inequality. Hadiz and Robison (2017), Hadiz (2018), and Jati (2013) emphasize the socio-historical aspect of the emergence of populist Islam in Indonesia, especially during the New Order era, where Chinese entrepreneurs received various economic privileges.

This situation follows the characteristics of urban society, where the pressure to survive and succeed must be added to an urban environment that tends to be individualistic. However, the debate on Islamic populism brought by Hadiz (2018) leaves a gap between Indonesia's socio-economy, which can vary greatly, and what he describes as the typical characteristics of urban society. Meanwhile, rural area people who still rely on communal life - helping each other will have different conditions. His approach also lacks an explanation for how we understand the local community's social structure so that it can strengthen populism. Unlike Hadiz and Robison (2017), who stated that Islamic populism supporters come from an anxious middle class concerned about their future, West Sumatra's key supporters of religious populism come from the established middle-class, especially traders. More importantly, the support from the middle class raises a puzzle as to why the middle class resonates with Islamic populism in West Sumatra while they are not economically threatened and unstable.

Despite the success in economic growth, the inflow of Middle Eastern immigrants has triggered concerns over economic stability and disruption of local culture. Similarly, with the populism in the United States, where Trump, under the slogan of 'Make America Great Again' had garnered support from various white privileged groups, in Europe, the anti-immigrant issue has become the platform of political parties as the concern over the immigrant's inflow disrupts the economic stability. The notion that the development of populism targets more on the middle class has also been suggested by Mietzner (2020), who claimed that populism no longer attracts the poor but instead, the middle class that feels anxious and has anxiety that the other groups could overtake their domination.

## METHODOLOGY

Data were collected by means of employing face-to-face interviews and active observation. The researcher herself is part of the local community, who has lived and become part of the *Minangkabau* community in West Sumatra. As a local, the author has observed the rise of identity politics followed by the attempts to illegitimate minority groups, especially the Lesbian, Gay, Bisexual Transgender (LGBT) community. One of the events that served as a milestone of the attempt to illegitimize the group initiated by the government was the event that took place in November 2018, where the Mayor of Padang, Mahyeldi, presided over the anti-vice and anti-LGBT declaration.

The researcher also documented several local mass media as well as conversations on social media, including WhatsApp groups, as references to the discourse on Islamic Populism. The aspiration of the authoritarian mostly dominated local media, whereas social media and WhatsApp groups contained more diverse members with variations in opinions.

Before conducting the interview, the researcher provided an overview of the questions. The selection of informants was conducted by means of both purpose and snowball samplings. Within the time range from August to September 2019, the researcher initially interviewed the informants that the researcher had known to obtain the background of conditions in West Sumatra. The researcher asked about the general condition of life in West Sumatra, especially the informants with minority backgrounds (LGBT, non-Muslim, and non-*Minangkabau*). There were ten informants interviewed as part of the initial data collection.

Subsequently, within the time range from September 2019 to December 2021, equipped with the initial data, the researcher conducted further interviews with local politicians, merchants, journalists, and religious-based groups and organizations. The questions were on the rise of Islamic movements in West Sumatra and the involvement of mostly merchants' Muslim groups that supported the Islamic activities in West Sumatra. Further interviews involved 15 informants.

Due to the Covid-19 pandemic, the researcher could not return to West Sumatra, and thus the data collection was performed by an assistant researcher from November 2020 to December 2021. Besides the data collected by the assistant researcher, the researcher also conducted online interviews.

### Islamic Populism

According to Oztas (2020), Islamic populism is a subtype of populism. Islamic populism aims to replace the secular authoritarian system with religious people who run the government for the benefit of the *ummah* (the whole community of Muslims bound together by ties of religion) to attract the attention of its supporters. Oztas uses the AKP party in Turkey and the PKS (*Partai Keadilan Sejahtera*: Prosperous Justice Party) in Indonesia as examples of politicians' efforts to use Islamic populism to gain support, especially from the conservatives. This opinion is in line with Nilan and Wibowanto (2021), who see Islamic populism as a form of opportunist politics that utilizes political identity. Yilmaz et al. (2021) argue that in a country with a majority Muslim population, Islamic populism creates a categorization of supporters based on religious identity and the degree of piety of religious adherents.

In his work, Oztas (2020) proposed Islamic populism as a political approach aimed at supplanting a secular government while highlighting the influence of Islamic political parties in promoting identity-based political rhetoric. Meanwhile, Hadiz (2018) expressed that Islamic Populism

accepted democracy by entering formal institutions and implanting their agenda into the democratic system. Democracy became the path to obtaining social and economic benefits so *ummah* could prevail. He then made the Muslim middle class the basis for Islamic Populism. While Hadiz and Oztac highlighted Islamic Populism and criticized the establishment that was considered not in favor of the Islamic groups, in West Sumatra, the Islamic groups implemented identity politics to sustain power. In line with Hadiz's structural political and economic approach that capitalism serves as the horseblock of Islamic Populism, the West Sumatran middle class, as a group with good financial capacity and established, became supportive and even nurtured capitalism as the basis for the growth of the Islamic environment.

However, the debate on Islamic populism brought by Hadiz leaves a gap between Indonesia's socio-economy, which may vary greatly, and what he describes as the typical characteristics of urban society. The pressure of having to face class systems within larger groups of society has made Muslim youths and professionals turn to religion in their life. This situation follows the characteristics of urban society, where the pressure to survive and succeed must be added to an urban environment that tends to be individualistic. Meanwhile, people in rural areas who still rely on communal life—helping each other will have different conditions. Hadiz's approach also lacks an explanation of how to understand the local community's social structure so that it can

strengthen populism. The study of populism is inseparable from the character of society. His argument about Islamic populism is characterized by a class antagonism between Islamic middle classes who are frustrated because they feel structurally discriminated. Expectations as middle class and educated to be able to move up the class; in fact, the structural power of the economy dominated by Chinese Non-Muslims made it difficult for them to develop. Hadiz's approach can explain this phenomenon at the macro and structural levels. Nevertheless, every region and the cases that emerge could be the cause of the emergence of the phenomenon of Islamic populism, not only because of class antagonism.

## RESULTS AND DISCUSSION

### Minangkabau Society Transformation

In order to track the development of Islamic Populism in West Sumatra, one needs to understand the socioeconomic changes and cultural transformation in West Sumatra. Changes that occur under the migration and high mobility in the *Minangkabau* community have had implications for changes that occur in the social and economic structure of the hometown. Along with the modernization of clan property that initially served as the economic support for the clan and community members, it has become impossible for clan property to accommodate all the needs of its members. This condition forced the *Minangkabau* to expand their affiliation to rely on the clan and the community. As a well-established economic group in West Sumatra, the

Muslim middle class is the economy's driving force that provides jobs and economic support to those in need.

The traditional system in *Minangkabau* can provide for the needs of clan members through communal land that is jointly cultivated for the benefit of the clan. Oki (1977) quotes Schrieke, a professor of ethnology and history of Indonesia, who uses the term "primitive communism" to explain the communal workings of traditional *Minangkabau* society. It is in line with a statement from a senior journalist from West Sumatra, Hasril Chaniago, who revealed that the *Minangkabau* were never too rich or too poor. According to Fanany and Fanany (2018), this way of life is to avoid the possibility of poverty and suffering, especially for *Minangkabau* women and children. Along with modernization, social changes within the *Minangkabau* community have also undergone several shifts. We will explain the transformation experienced by the *Minangkabau* society, especially how social migration has resulted in changes to the role of *Mamak* (maternal uncles), changes in systems and customary land ownership, and expanding affiliations.

On 15 February 1958, in Padang, West Sumatra Province, the Revolutionary Government of the Republic of Indonesia (*Pemerintahan Revolusioner Republik Indonesia, PRRI*) officially declared a revolt against the central government of the Republic of Indonesia. The revolt broke out partly due to regional dissatisfaction with the central government led by Soekarno. The province later became the center stage

of the battle and struggle of the uprising. The defeat of the PRRI left the *Minangkabau* wounded and traumatized, which up to the present, has become a key part of the disinclination of the *Minangkabau* to vote for PDIP (Indonesian Democratic Party of Struggle), a party with strong historical ties to Soekarno. Many *Minangkabau* decided to leave their home villages. Naim (1984) noted that prior to the PRRI uprising, the *Minangkabau* in Jakarta was estimated to have reached one hundred thousand people. After the defeat of PRRI, the figure doubled.

Following the end of the PRRI and Soeharto dictatorship, the *Minangkabau* community underwent a significant transformation characterized by extensive and enduring migration. Migrants, who previously tended to be individuals (Kato, 1978), were dominated by *Minangkabau* men in the search for wealth and knowledge. After PRRI, the migration pattern was transformed from individual to familywise: men brought their children and wives from their hometowns (Kato, 1978). It is possible that at the early phase of migration, a man would go alone, and once he finds a good livelihood, his wife and children would be taken along with him. Being far from the home village makes the father much more responsible for the well-being of the children. Fathers cannot rely on rice fields (agriculture) anymore. Likewise, not everyone can afford and have access to education. It makes the trade sector a main and rational livelihood. *Merantau* (out-migration) is also a livelihood transformation from the original agrarian society by the

cultivation of tribal land as the economic foundation into more reliance on the trade sector, primarily by making relations or contacts as a founding capital in the world of business. In the beginning phase of *merantau*, men will serve as apprentices in a business owned by relatives. Once they understand the business's ins and outs, they will establish their own business and become independent. Once they manage to become established traders, *Minang* migrants will invite their relatives and provide them with starting capital or teach them business and even access to education overseas (Iman & Mani, 2013). The notion that support from families became an important factor was also suggested by Hastuti et al. (2015); extended family kinship adopted by the *Minang* ethnic groups was in the hope of upholding the family's common interests.

The transformation that initially took place among migrants eventually spread to their hometowns, a logical consequence of modernization. The population in the home village was increasing while the *pusako* (inheritance) land was limited, making the existing assets no longer capable of sustaining their livelihood. On the one hand, modernization requires land for development; land without legality and entitlement paper works creates skepticism for investors. On the other hand, according to Hanandini (1996), through the Agrarian Act of 1960, the government mandates the certification of custom-based lands, changing the nature of customary land that initially belonged to the clan to be in the name of individual ownership.

This social change has encouraged the *Minangkabau* people, especially those living in the cities of Bukittinggi, Payakumbuh, and Padang, to seek other forms of affiliation outside their clan. The cities of Padang, the capital city of West Sumatra, and Bukittinggi, the trade center, have become places of migration for residents of regencies within West Sumatra. Many have migrated to Padang City, leaving their hometowns and customary lands. In Padang, they had to find a new source of income.

Despite the shift in the characteristics of the traditional *Minangkabau* communal society, it is still practiced outside their hometown. Simon (2007) explained that the demand for integration is very high in the West Sumatra neighborhood. Research from Hofferth and Iceland (1998) suggests that people from urban areas are required to be independent and individualistic, which is different from rural area communities with stronger bonds with the family. If they experience difficulties, they will likely be given financial support from their family. Communities used to be communal, but they had to expand other affiliations because their land or clans could no longer afford all the needs of their clan members. In order to survive, they have to find assets for livelihood outside their clan; economically weak clan members get support from the clan and outside the clan, especially the middle class in their community. Aside from the support obtained from family, support could also be gained from the surroundings of the community. For instance, the top minimarket chain in West Sumatra,

“Budiman,” is owned by Yasmar. Suppliers of cakes in the minimarket chain came from the circles of friends from *majelis taklim* (Islamic Forum). Likewise, suppliers for plastics in Pasar Aur Kuning also came from the circles of friends from *majelis taklim*.

### **Muslim Middle-Class Challenging the Stability**

The strengthening of identity politics marks the critical point for the transformation of populism in Indonesia, and it places polarization based on religious sentiment as a precondition for the effectiveness of populist strategies in electoral mobilization (Margiansyah, 2019). This finding is in line with Garadian (2017), who assesses grassroots strength as the key to the success of Islamic populism. This condition is also supported by robust political vehicles and populist narratives that can attract people from various classes. The roles of regional regulations that have *Sharia* (Islamic Law) nuances have undeniably played a vital part, but those regulations emerge because there is support from the community. The shift toward greater regional autonomy in Indonesia since 2000 has enabled regional and local governments in West Sumatra to institute.

The trade sector in the provinces of Sumatra was controlled mainly by *Minangkabau* traders, while the Chinese-descent control agents or trade representatives. At the same time, the West Sumatra government issued a policy to ban the operation of small store chains to protect local businesses within the province.

Besides the retail trade, the apparel industry, such as the manufacture of uniforms, is also ethnically dominated by the *Minangkabau*. The industry is indeed a small-scale industry that, yet, has the ability to employ many workers. Usually, confection entrepreneurs involve tailors to make their ordered clothes. West Sumatra's economy depends on small industry that is very dependent on markets. Bureaucrats, traders, medium-scale entrepreneurs, and professionals in Jakarta are lower-middle class, but in a city in West Sumatra, they may be considered "elites" (Van Klinken, 2014). The middle-class Islamic group comes from the circle set up, which depends on the real sector, namely the basic needs of society, such as clothing and groceries.

Why are traders involved in religious activities in West Sumatra? There are several reasons. First, from observations and interviews, it appears that relatively established traders are more interested in being active in religious activities. Businesses that already have trusted people and are relatively stable give traders more time to devote themselves to religion. The second factor is that traders have flexible time. If office workers are bound by working hours, traders are relatively more independent and can arrange their time to participate in the *majelis taklim* (religious study groups). In contrast to traders who are already involved in religious activities at their productive age, employees usually start their involvement after entering the retirement period. In their retirement, they spend much time in the mosque, join

*majelis taklim*, and dedicate time and energy to the community where they live. One of them is Yenmis, a 69-year-old retiree of West Sumatra Public Works Agency. After retiring, he actively participated in religious studies. Where he lives, Yenmis is a prominent citizen who will not hesitate to help residents that are in trouble, ranging from providing financial assistance even up to providing capital for trading.

### **Patron Client; Middle Class and Local Politicians**

According to Winters (2013), wealth is the most potent power source in influencing political decisions; in oligarchy theory, power resources are essential. The power resources possessed by the middle class are not as crucial as in the oligarchy. Historically, the middle class has had a vital role in Indonesian politics. Structurally, the middle class is closer to the lower groups, and this facilitates coalitions between classes when mass mobilization is needed to confront problems. The 1998 demonstration serves as evidence of the role of middle and upper-class groups who support the 1998 movement financially by providing food supplies to demonstrators and students who incidentally come from the educated middle-upper class. The middle class of West Sumatra is the supporter and activator of Islamic groups such as the *Subuh Berjamaah* movement (consisting of 212 West Sumatra alumni), Front Pembela Islam (FPI), and the Community Development Forum (FPU). Most of its members work as traders and entrepreneurs in West Sumatra. They are



willing to allocate time and funds for the development of *dakwah* (preaching of Islam) in West Sumatra. An established economy allows them to provide financial assistance to the surrounding community, including those closely related to the local political figures.

The support of the upper-middle class to Islamic politicians, especially those from West Sumatra, is not new. The closeness between the middle class and politicians started because of the same mission, but it is undeniable that this closeness eventually gave rise to a pattern of patron-client; no free lunch. We interviewed using Zoom Buya Gusrizal, head of the West Sumatra MUI (Council of Ulama). He also received support from traders, especially from Bukittinggi. With their support, he founded the *Surau* Buya Gusrizal in Bukittinggi. According to Buya Gusrizal, constructing the three-story building cost him 8 billion Rupiahs. He had dreamed that this *Surau* would become a center for the study and guidance of the *ummah*.

Buya Gusrizal lives in the *surau*. There, he usually meets directly with the community, conducts teaching, and *taklim*. In keeping up with contemporary development, Buya Gusrizal also utilizes communication technology in preaching. During the COVID-19 pandemic, many people experienced economic difficulties, yet the government was slow to assist. The community turned to clerics or their closest relatives for help during the pandemic. He expressed that should anyone need help. He would just share the information on

WhatsApp groups. Later, other congregation members who are financially more capable would donate in response. *Ulama's* ability to raise funds and provide assistance directly to society is a form of community belief as well as trust, and this shows strong root movements. In political matters, Buya Gusrizal has never been directly involved in the world of practical politics, but if someone asks for support and the programs carried out are in the interests of the *ummah*, he will provide support. He also carried out relations with Middle Eastern donors. As a graduate of the region, he maintained good relationships with several donors for constructing the mosque in Padang. It is not unusual for middle eastern graduates to return to Indonesia to bring knowledge and connections; they can connect to donors who will later be targeted to help the Islamic activities in their area.

The community also actively carried out fundraising per group Khairul Azmi, who coordinated *Umrah* pilgrims' alumni through his travel agent. The group itself is the average merchant by profession. Azmi directed the funds he earned for orphans and orphanages. In addition to using the WhatsApp group, Azmi also made use of a Facebook page. For example, in April 2020, he raised funds for 600 grocery packages at the beginning of the pandemic. In addition to raising funds from alumni donors for the *Umrah* pilgrims, Azmi also received assistance from Andri Warman (candidate Mayor for Agam Regency) for Rp 10 million.

Hadiz and Robison (2017) argue that the absence of liberal and left-wing groups contributes to the rising right wing in Indonesia. So far, the liberal group (Hayamotsu, 2013) has been overwhelmed to hook up the Muslim community's attention. Apart from the lack of government support (Hayamotsu, 2013), the narrative and the values expressed by the liberals are still unfamiliar to the Muslim grassroots. Unlike the conservative groups working at the grassroots by carrying out social activities like philanthropy, the liberal groups practically only spread discourse without forming grassroots groups. In the Soeharto era, the elite determines who is the leader of a region. Following Soeharto's collapse, the political system also changed, for instance, the implementation of local elections and decentralization. Local elections are expensive and require intensive, significant efforts for resources. It is no wonder local politicians rely on support groups to help their maneuvers. Local politics election involvement: Religious leaders are not directly involved, but grassroots are moving to raise funds and support groups.

What motivates the middle class to dedicate their time, energy, and money to be actively involved in society? The most important factor is the demands of religion. In Islam, *dakwah* is crucial in inviting people to be kind. *Dakwah* can be performed in any form according to individual abilities. For instance, giving alms and inviting people to be kind. The call to do *dakwah* is the main reason for activating religious activities, and aside from religious obligation, giving

charity a ladder to climb political life. However, Fauzia (2013) believes that religion-based generosity gives rise to patron-client relationships. Donors have a political interest in attracting the attention of their voters by helping community members. Especially in the era of local elections, one vote is important. Therefore, it becomes relevant that givers of charity, society, and politicians have their respective interests. According to Fauzia (2013), there is a link between the state and philanthropic practice. If the state is not powerful and weak, Muslim civil society will use philanthropic practices to support social change to challenge the state.

Patron-client relationships are not always in the form of money but can also be connections. Khairul Azmi, the owner of *Umrah* travel in Bukit Tinggi, is one of Mahyeldi's campaign team members. When running for Governor of West Sumatra, Mahyeldi was nominated by the Prosperous Justice Party (PKS) and was finally elected Governor of West Sumatra for 2020–2024. As a campaign team member, Azmi struggled to visit residents' homes to campaign for the Mahyeldi ticket. Before becoming a travel entrepreneur, Azmi had worked in the USA, Bali, and on cruise ships. With his tourism experience, he aspired to advance the field of tourism in West Sumatra. "He (Mahyeldi) will put the right people in each institution. It is good that I have experience in the field of tourism."

Besides maneuvers in close proximity with candidates of regional leaders, Islamic groups coalesce with *adat* groups

in encouraging the government to protect local entrepreneurs, especially from the onslaught of Jakarta-based conglomerates dominated by Chinese entrepreneurs. In 2013, Mayor Fauzi Bahar of Padang granted the work permit for the construction of Lippo Mall and Siloam Hospital in Padang City. The Lippo Group was owned by the Chinese-descent conglomerate James Riady. The closeness of James Riady with Evangelical Christian groups had sparked fear over Christianization in Padang. The joint meeting of *Majelis Ulama Indonesia (MUI)* and *Lembaga Kerapatan Adat Alam Minangkabau (LKAAM)* with Islamic groups in West Sumatra on 3 June 2013 decided to deny the construction of Lippo/Siloam Super Block and demanded the government to revoke the work permit.

The rejection was initiated by one of the Islamic groups called *Forum Masyarakat Minangkabau* (Minangkabau Community Forum), an organization chaired by Irfianda Abidin, a *Minangkabau* entrepreneur who was also actively involved in politics. In order to accomplish the struggle to reject Lippo business in the city, FMM demanded commitment from candidates running for the mayoral election in 2013 to sign a statement to scrap Lippo Group's investment in Padang if elected. In the end, the planned establishment of Lippo Mall was finally canceled. In the end, Lippo Group had to withdraw their Rp 2 trillion investment plan.

The incident should not be understood as a rejection of Lippo Group as a business holding that stands close to the Non-Muslims, but more as a form of dismay from

the Muslim middle class with the economic stability they have managed to maintain. Embracing capitalism is a consequence of globalization and consumerism, an act that the middle class does to compete with the Chinese-descent entrepreneur group. Unlike in other areas of Indonesia, especially Jakarta, the indigenous-Chinese descent relations in West Sumatra are based on economic envy. Although the tension merged due to differences in ethnicity and devout conviction, they are unequivocally tied to running the local economy, politics, and other public issues. In the context of business, they are viewed as good for businesses. For *Minang* people, the Chinese are trustworthy and professional business partners; establishing business relationships with the Chinese can make a business grow faster (Alfirdaus et al., 2014).

Even though the Chinese are considered a profitable business partner, the *Minang* people still want to be dominant and in control. Reflecting on the condition of other provinces, where local entrepreneurs do not play an important role in the economy, *Minangkabau* entrepreneurs approach politicians to keep the interests of local entrepreneurs in mind. Khairul Azmi states:

“For the Muslims to grow and develop, they have to be meticulous. Pardon me for expressing that or political issues. Why have I from the very beginning been persistent on voting for Buya and Audy (Gubernatorial and Lieutenant-gubernatorial candidate of West Sumatra (2021–2024)). That is for the sake of the *ummah*. When he is governor, there will be no more *Indomaret*

or anything like it. My sole concern is only the improvement of the people's economy. We can see that in the neighboring province, particularly Pekanbaru, now you can't find stalls by the road, just because *Alfamart* and its kind are allowed to run."

Khairul Azmi expressed his concerns if no protection is provided to local entrepreneurs. It is then imperative for the local entrepreneurs and the regional government to have a similar vision to support a condition where the existing dominance of local entrepreneurs in the economy remains in place. Moreover, he thinks those convenience stores will shut down local businesses, which will only profit Jakarta, the people in West Sumatra will just be pure consumers. In his mind, a popular political economy is an economy that defends and benefits the local economy.

The dismay can be perceived from the perspective that Chinese descent will seize and disrupt the domination of the Muslim middle class that had been constructed for quite a long time. As Jean Baudrillard (2019) mentioned, the middle class is also an anxious class, ever aware that there is a limit to their social mobility. It is this very concern that led them to reject the granting of business permits for *Indomaret* and *Alfamart* convenience stores in West Sumatra. Potential anxiety would be dominated by concerns over the Chinese grip on the economy, particularly upon glancing at the national economy and comparing it to the surrounding areas of West Sumatra (Riau, Jambi, and North Sumatra). There will be potential anxiety if the economic protection that has run so

far ceases to be in effect. Populism serves as an instrument to maintain the political and economic stability dominated by the Muslim middle class in West Sumatra. Rather than disrupt the system and stability, Islamic populism in West Sumatra is a kind of attempt from the conservative Islamists to maintain proximity to the power and, at the same time, gain access to benefiting access on economy and politics.

### **Conformity, Morality, and Identity Politics**

While the concern over the inflow of Chinese entrepreneurs to West Sumatra became the populist's agenda to maintain the interests of local entrepreneurs to economic dominance, the issue of morality became the populist's attempt to maintain far-right supporters. Kitley (2008) explains why Indonesia considers morality issues necessary, especially in the post-reform era. Kitley argues that the freedom and democracy emerging after the fall of Soeharto's governance caused the Muslim conservatives to fear uncontrolled freedom from happening caused by Westernization and globalization. One example of Western-style liberation being feared is pornographic content in *Playboy* magazine, an adult magazine franchise from America. Conservatives argue that the content on *Playboy* is dangerous if viewed by minors since it is difficult to monitor and distribute in Indonesia. The presence of LGBT, pornography, and free sex induces moral panics. Therefore, it is no wonder many parents persuade their children to go into

Islamic education and wish to be introduced to the religion early.

Conformity is part of West Sumatra culture. Simon (2012) argued that conformity ties to tradition and religion. The desire to be a good Muslim is encouraged not only by individuals but also by society and institutions. This statement is supported by the research of Indrizal et al. (2009), which describes the implementation of moral selection for mosque aid programs. The aid recipient is supposed to be amid misfortune, be a good Muslim, and uphold Islamic religious values. Less religious people would find it difficult or be unprioritized to receive aid. This scheme is carried out by *Forum Ummat Islam* (FUI), which provides basic needs assistance to the congregation, intending to make the community loyal and motivated to pursue the studies they hold.

Furthermore, according to Simon (2012), strong social bonds are linked to the nuances of a binding tradition. At this stage, one Muslim's mistake belongs to the individual and is formed and bound by the community, where religious ideology is not the central aim, but the realization as a pious human being is prioritized and has the primary place in society. Simon believes that this strong kinship bond is an influential factor in imposing group rules at the expense of the individual. Individuals are shaped and evaluated by the community perspective. The belief that obedience does not belong to the individual but must be spread throughout the community motivates people to correct, control, and remind one another.

Efforts to remind each other are joint in communities in West Sumatra. For example, Irsyad, a cellphone shop owner in Bukittinggi, admitted that he did not hesitate to immediately warn if he found actions and thoughts considered different and not following religious teachings. "One of my employees is gay, I advise him, I invite him to pray, he does it because of the influence of his friends. In my opinion, being LGBT is the worst sin against Allah wrath and is worse than other sins, such as alcohol consumption and adultery."

How does religion come into play with populism? Riesebrodt (2010) argued that the intersection of faith and populism is superficial, merely a continuation of tradition instead of a form of religious obedience. The piety depicted is more related to cultural righteousness, which he refers to as religious tradition. Religious populism is more readily accepted and grown in society when linked to culture. Alienation was successfully established through empowerment between religious institutions and populist actors to maintain power. Besides, populists could sustain alliances with religious institutions as long as they could 'impose their vision of religion' on the religious authorities or co-opt them Roy (2016). The populist did that in West Sumatra and received support from the administration and traditional leaders.

In West Sumatra, the Islamic and cultural groups collaborate to gain power by utilizing morality issues. Andoni (2009) argues that the cultural group tends to benefit from their control over Nagari resources, but the religious group can frame morality

issues as something to be fought for in the form of ABS-SBK (*Adat basandi Syarak, Syarak basandi Kitabullah*, which means “Customs is based on the *sharia*, the *sharia* is based on the Holy Book.” ABS-SBK became the reference for the legalization and promulgation of regional ordinances with *Sharia* nuances in West Sumatra. According to Hadiz (2018), local customs act as a cultural idiom, unifying varying interpretations of religion. Those who support the *Minangkabau* customary rules also use *Sharia* to legitimize their point of view. Solok City is a pioneer in issuing regulations with nuances of *sharia* in West Sumatra by issuing regulations on reading and writing the Holy Quran in 2001 and a law concerning the obligation to wear Muslim clothes (hijab) for women in 2002. After Solok issued these regulations, other cities in West Sumatra followed. During the administration of Fauzi Bahar as Mayor of Padang City (2003-2013), a local regulation concerning the obligation to wear Muslim clothes for women was issued for civil servants and students at public schools in Padang.

One of the indications of strengthening Islamic populism is the emergence of the dichotomy of “us” versus “them.” Polarization is essential for populism to create images of who is part of the group and who is not. In Indonesia, to attract voters from the Islamic background, religious and nationalist political parties support *Sharia*-based regulations. It is due to the fluidity of Indonesian parties’ ideology which quickly changes depending on their interests. This

condition is under the political logic of populism initiated by Laclau (2005). In our case study, I believe that, following decentralization, the opportunity to gain power provided a way for developing Islamic populism. By utilizing an identity politics approach politicians and the Muslim middle-class use *adat* (*customary law*) approach, especially the ABS-SBK jargon, which emphasizes that in West Sumatra, customs and religion go hand in hand. This argument is in line with Simon (2009), who stated that decentralization stimulates the growth of moral politics in Indonesia, mainly West Sumatra Decentralization, which has brought changes in the boundaries of social and political systems in the province. The changes in the political system to a direct election system open up opportunities for patronage between local elites and community leaders in a community; this raises public pragmatism that considers politics as only an elite game. The customs (*adat*) revitalization also brings religious revitalization, in line with the philosophy of the *Minangkabau* people, that custom is based on religion, and religion is based on tradition.

In the end, the politicization of morals dissolved the real problem of corruption. Kahin (1999), a researcher with a broad research experience in West Sumatra, is concerned about the increasing number of corruption in West Sumatra. Oztas (2020) also viewed that the populists were much too occupied by the doctrines of the faith, while the main issues the constituents are facing remain forgotten. Although corruption

occurs nationwide, Kahin concerns the political system as the cause for West Sumatra being left behind compared to other regions. According to him, West Sumatra no longer surpassed other areas in the quality of education available for its people, and its people are no longer highly represented in Indonesia's intellectual and political life.

## CONCLUSION

What occurred in West Sumatra was an example of how religious populism came to power. Yabancı (2016) argued that when populists are in a ruling position, religion becomes the primary reference in public policymaking, and there are only things pinned to populists as a representation of the people. With authority given to them, populists can take action or condemn those who criticize their actions. One of the indicators of the strengthening of religious populism is the silencing of civil rights. Civil rights indicators include freedom of speech, discriminatory rules, and the threat of violence due to gender and ethnic reasons. In addition to the action initiated by the Muslim group, the government supports the campaign to issue a regulation, especially relating to anti-LGBT issues. The impartiality of the group of minorities is causing the homosexual community to conceal their identities as homosexuals, especially those affiliated with the government and education institutions. Moreover, political morality is one indicator of the strengthening of Islamic Populists.

The research revolves around the strengthening of Islamic populism in West

Sumatra. The author criticizes Hadiz's opinion about the anxious middle class being a supporter of Islamic populism. In West Sumatra, cohesive social alliances emerged due to traditional into modern transformations that changed the *Minangkabau* cultural order and values. This transformation has made the social alliance of the *Minangkabau* community expand not only to a clan alliance but also to a multi-clan alliance. An established middle class supports this cohesive alias. This middle class is capable of moving forward with the conservative Islamic agenda in West Sumatra. These findings differ from Hadiz's, which claims that class conflict is the cause of Islamic populism. The style of urban and rural settings and differences in the social structure and culture of the community should be considered when analyzing Islamic populism.

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## **Virtue Language in the Time of the Coronavirus: A Cross-Cultural Triangulation Study Based on Speeches From Three National Leaders**

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### **ABSTRACT**

Work on this article was motivated by a speech given by the British Queen on April 5<sup>th</sup>, 2020, *A Rare Public Address Concerning the Ongoing Pandemic*. The speech was infused with virtue terms. Using investigator and data-source triangulation, the authors juxtapose Queen Elizabeth II's speech with two similarly motivated speeches by Chinese President Xi and Chilean President Piñera. As these three heads of state represent different socio-political cultures, it is academically interesting to explore (i) to what extent their speeches reflect universal versus local values/virtues and (ii) how their selection of virtues fits into current taxonomies of positive character traits. This article aims to make a contribution to the proverbial universalism versus relativism debate about morality and human values, as well as to the discourse on neo-Aristotelian character education and the psychological discourse on recovering an apt virtue terminology as a task that each of us needs to pursue in our endeavour to understand everyday virtue talk.

*Keywords:* Cross-cultural values, head-of-states' speeches, triangulation, virtue language, virtue literacy

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### **INTRODUCTION**

The socio-moral, psycho-moral, and economic reverberations of the 2020–2022 COVID-19 pandemic have led to a proliferation of debates in public media that closely connect to standard debates about human values and virtues. As scholars interested in the role of virtues and character strengths in the good life in general, and character education in schools in particular

(Huo et al., 2021), we have followed with some concern and frustration the efforts by many academic colleagues—in various blogs, newspaper columns, and on social media—to encourage ‘virtuous’ reactions to the ongoing crisis by promoting what nowadays tend to be called ‘performance virtues’ (Jubilee Centre, 2022). Those ‘virtues,’ such as resilience and grit (as explained, e.g., by Duckworth, 2016), are amoral performative competencies that help us, inter alia, to ‘hang in there’ in times of crisis and bounce back from negative experiences. The founder of Western virtue ethics, Aristotle, refused to call them ‘virtues’ because of their amoral and instrumentalist nature and only referred to them as technical skills: *techné* (Aristotle, 1985). We worry about the over-emphasis on those ‘virtues’ (or quasi-virtues) in public discourse because educational research has shown that schools which articulate and foreground *performance* virtues elicit progress in those virtues only among students, not in *moral* or *civic* virtues, let alone *intellectual* ones; there is, unfortunately, little pedagogical or developmental spill-over effect between the virtue groups (Seider, 2012).

If the elision of moral and civic virtues in the discourse among academics about reactions to the coronavirus crisis reflects fear of sounding moralistic and of invoking inherently relativistic values—when science is meant to be value-free (Weber, 1949)—this fear is not replicated among the general public. Polls of ordinary people in countries such as the United Kingdom have found that they have valued the moral virtues of care and compassion most of all during the crisis

(with resilience and grit hardly mentioned), and a majority also agreed that the health of today’s older generations is more important than long-term economic prosperity of future generations (Arthur, 2020).

The spur to the writing of this article was a speech given by the British Queen Elizabeth II (who sadly passed away in 2022) on April 5<sup>th</sup>, 2020: a rare public address concerning the pandemic (Queen Elizabeth II, 2020). The address was watched live by an estimated 24 million viewers in the United Kingdom alone. The speech was permeated with virtue terms<sup>1</sup>, and her choice of terms coincided much more with the public focus on the moral and civic than the academic obsession with the performative by Kristjánsson (YTL Foundation, 2020). We began to wonder whether heads of state perhaps have a keener sense of the public mood and how a societal crisis could be ameliorated than academics. To test this hypothesis, the first author, Chinese, decided to subject a similar speech given by Chinese President Xi to scrutiny and made a comparison with British Queen Elizabeth II’s speech (Huo & Guo, 2022). Finally, a Chilean author joined in and did the same for a speech by Chilean President Piñera. All of the speeches were given at a critical time when the countries were facing the challenge and uncertainty of COVID-19. Those speeches were meant to be uplifting and encourage their citizens’ spirit in a difficult time.

<sup>1</sup> There were eight virtues identified by Kristjánsson (YTL Foundation, 2020), who gave a keynote speech entitled “Character education in the time of the coronavirus.”

Juxtaposing these three speeches does have some curiosity value; however, we aim for more explicit academic benefits. These three heads of state represent three very different socio-political cultures, and it is academically interesting to explore (1) to what extent their speeches reflect universal versus local values/virtues and (2) how their selection of virtues fits into current academic taxonomies of positive character traits. We hope, therefore, that this article can make a contribution to the proverbial moral universalism versus relativism debate, as well as to the discourse on neo-Aristotelian character education and the psychological discourse on recovering an apt virtue terminology as a task that each of us needs to pursue in our endeavour to understand lay virtue talk (Kristjánsson, 2015).

### **Virtue Language and Virtue Literacy**

Virtue language, that is, the use of the vocabulary of the virtues, is closely connected to the context of moral education (Vasalou, 2012). Gadamer (1983) said that “language is the universal medium in which understanding occurs. Understanding occurs in interpreting language” (p. 389). Language is permeated with values and ethical terms (Mingers, 2003), and there is little hope of any neat separation of facts and values to satisfy the early 20<sup>th</sup>-century call (harking back all the way to Hume) for a strict fact–value dichotomy. According to virtue ethics, which has been enjoying a resurgence as a powerful ethical paradigm in the last 50 years, the first step to cultivating virtue is to

acquire virtue literacy: an understanding and command of relevant virtue terms.

*Virtue ethics*, harking back to Aristotle and Confucius, has since the 1960s become the third alternative, alongside Kantian deontology and consequentialist theories, as an ethical theory of choice both for moral philosophers and applied professional ethicists. According to virtue ethics, an action is right not because it is required as one’s duty in accordance with a formalistic principle (as in Kantianism) or because it has desirable overall consequences (as in consequentialism) but because it exhibits good character. In contrast to other moral theories, the concept of good character is thus what is foundational in virtue ethics, rather than the concepts of duties or consequences; and what defines acting well is derivative or a matter of what is consistent with good character (Annas, 2011). Thus, although virtue language or the application of virtue language does not necessarily lead to acting well, it is invaluable to recover some perennial ways of speaking (as virtue-infused; Arthur et al., 2014)

*Character* in Aristotelian theory, upon which most contemporary virtue ethics in the West draws (rather than Confucius), refers to one’s make-up of virtues and vices (and other intermediate states of being and doing in the ethical sphere). Aristotle’s (1985) understanding tallies with the modern conception of character as the reason-responsive, morally evaluable and educable subset of personality—although Aristotle did not have a discrete concept of non-moral personality at his disposal. Good

character, in an Aristotelian view, involves the cultivation and execution of *virtues* as specific human excellences. What sort of capacities are the virtues? Unfortunately, most general terms that can describe them carry unfortunate connotations in modernity. The closest answer is perhaps ‘traits,’ but in psychology, the term ‘trait’ typically refers to attributes that are (at least partly) inherited. The virtues, however—or so the Aristotelian story goes—are acquired, first through upbringing (esp. habituation and role modelling), and later through one’s own repeated choices, coalescing into stable patterns.

In all events, let us say here that the virtues constitute stable dispositional clusters concerned with praiseworthy functioning in a number of significant and distinctive spheres of human life (Annas, 2011; Kristjánsson, 2015). Each virtue is typically seen to comprise a unique set of *components*: perception/recognition, language, emotion, desire, motivation, behaviour and comportment or style, applicable in the relevant sphere, where none of the components (not even ‘correct’ behaviour) can be evaluated in isolation from the others. The person possessing the virtue of compassion, for example, notices easily and attends to situations in which the situation of others has been undeservedly compromised, is in command of a language to express those perceptions, feels for the needs of those who have suffered this undeserved misfortune, desires that their misfortune be reversed, acts (if humanly possible) for the relevant (ethical)

reasons in ways conducive to that goal, and exudes an outward aura of empathy and care. The virtues Aristotle talks about are ethical, political and intellectual. It corresponds reasonably well to the typical modern philosophical taxonomy of virtues mentioned above, as moral, civic and intellectual (Jubilee Centre, 2022), although the fourth category extolled in modernity, that of performative virtues, would have been designated by Aristotle not as a set of virtues but of useful skills (*techné*). The scientific (psychological) taxonomies of virtues will be discussed later.

Returning to the issue of virtue language, according to virtue ethics, the virtue inherent in language and the virtue inherent in behaviour does not allow for any unproblematic separation; they are essentially intermingled (Huo & Guo, 2022; Jubilee Centre, 2022; Vasalou, 2012). It is why there is reason to worry that the use of some common virtue terms has declined substantially in ordinary language in the West in the last 100 years (Kesebir & Kesebir, 2012). The decay of moral language is, analogously, tied to the decline of morality. In our view, some current tensions on how to distribute the COVID-19 vaccine fairly (e.g., between the UK and the EU) have not so much reflected conflicts between cultures and borders as more pervasive tensions and deficiencies in the application of moral-language terms, such as ‘equality’ and ‘justice’ (Arthur et al., 2021). A more refined language of virtue may not be a vaccine for COVID-19 but may be understood as a vaccine for moral decay.

Moral language is embedded within forms of life. 20<sup>th</sup>-century social science was obsessed with cultural variance among the different forms of human life and hence with moral relativity, culminating in postmodern moral cynicism. However, dissenting voices kept reminding us of ways to build bridges between different moral languages and various moral dialects across time and space (Sichel, 1991). With the 21<sup>st</sup>-century decline of postmodernism, moral relativism is on the wane—also coinciding with the increased focus on universal problems facing humankind, such as global warming. The current authors have engaged in significant cross-cultural work in the past (Huo & Kristjánsson, 2021, on comparisons between an Aristotelian and Confucian lens on ethical consumption; and Huo et al., 2021, on comparisons between Western and Chinese approaches to character education). The current article builds on some of those previous insights and takes them further.

### Taxonomies of Virtue

We briefly mentioned a standard philosophical taxonomy of virtues as moral, civic, intellectual, and performative. However, various other, more nuanced, virtue-and-value taxonomies are on offer.

For example, the core socialist values in China are summarised into 24 terms (in Chinese) and 12 key virtues: prosperity, democracy, civilisation, harmony, freedom, equality, justice, the rule of law, patriotism, dedication, honesty and kindness—issued by the General Office of the CPC Central Committee in 2013 and representing central and guiding core values in China. Those virtues are considered to form a three-level structure: prosperity, democracy, civilisation, and harmony at the *national* level; freedom, equality, justice, and the rule of law at the *social* level; and patriotism, dedication, honesty, and kindness at the *individual* level (General Office of Central Committee of the Communist Party of China, 2013; Table 1).

Table 1  
*Three-level structure of virtues representing the core socialist values in China (General Office of Central Committee of the Communist Party of China, 2013)*

Value goals	Socialist core values/virtues
National level	Prosperity, Democracy, Civilisation, Harmony
Social level	Freedom, Equality, <b>Justice</b> , Rule of Law
Individual level	Patriotism, Dedication, <b>Honesty</b> and <b>Kindness</b>

*Note.* Virtues in bold are shared with character strengths in VIA; see later.

Not surprisingly—at least for those inclined towards moral universalism—some Chinese core virtues can be observed to have direct similarities with the most

widely-used Western social scientific virtue-and-character framework: Values in Action (VIA). This framework categorises positive personal characteristics in terms of

24-character strengths reflecting six more general cross-culturally endorsed virtues: wisdom and knowledge, courage, humanity, justice, temperance, and transcendence (Peterson & Seligman, 2004; Table 2). Those 24 strengths are regarded as ‘general principles of socially or morally desirable functioning as demonstrated by

their common mention in works of moral philosophy and religion’ and are shown empirically cross-culturally applicable (McGrath, 2015). This assumption of ‘empirically cross-culturally applicable’ is crucial in the present study, making cross-cultural comparisons possible and meaningful.

Table 2  
Six-factor structure of the VIA classification (Peterson & Seligman, 2004)

Character-strength classifications	Virtues
Creativity, Curiosity, Judgment, Love of Learning, Perspective	Wisdom
Bravery, Perseverance, <b>Honesty*</b> , Zest	Courage
Love, <b>Kindness</b> , Social Intelligence	Humanity
Teamwork, Fairness, Leadership	<b>Justice</b>
Forgiveness, Humility, Prudence, Self-regulation	Temperance
Appreciation of Beauty and Excellence, Gratitude, Hope, Humour, Spirituality	Transcendence

Note. \*Character and virtues in bold are shared with the core socialist values in China

While we are aware of the fact that the two frameworks of values and virtues were derived differently in terms of context and purpose, shared virtues can be directly identified, such as that justice, honesty and kindness (bold in Tables 1 & 2) are included in both the Chinese socialist core values and the VIA classifications (Peterson & Seligman, 2004). Interestingly, justice is grouped under social-level virtue in China whilst classified as a virtue of individuals in VIA. It may raise concerns that using the same term does not always indicate a shared conceptual understanding: an issue that we return to briefly in the discussion. However, developmental theories of justice show its meaning to be constrained by common childhood experiences of

perceived deservingness or lack thereof within families (Damon, 1981); and as those familial experiences are essentially universal, they limit the scope for cultural variance.

Despite the original theoretical six-factor structure of the VIA, subsequent factor analysis of data has revealed a variance of empirically adequate structures, ranging from a five-factor to a one-factor structure (Macdonald et al., 2008; McGrath, 2015). We rely here on a three-factor model that is both conceptually and empirically defensible (McGrath, 2015). We support this assumption for the following reasons: a three-factor model comprising caring, inquisitiveness, and self-control was identified by McGrath (2015); in addition,



a highly similar three-virtue model was also identified by Duan et al. (2012) in a Chinese context where the factors were referred to as interpersonal, vitality, and cautiousness. Having said this, it does not imply that our study solely counts on McGrath (2015), as we mentioned above; rather, it is informed by a variety of taxonomies of virtues (General Office of Central Committee of the Communist Party of China, 2013, Peterson & Seligman, 2004).

### **Motivation**

The study's background has elucidated some of the issues that motivated us to conduct this cross-cultural study of virtue language in the speeches of the three heads of state: namely, their relevance to ongoing academic debates about the nature of moral language, and virtue literacy, taxonomies (national and international) of virtue; and debates about virtues as local or universal (Webber, 2021).

We originally considered analysing only Queen Elizabeth II's speech and comparing/contrasting it with the academic discourse on pandemic-relevant virtues. However, for reasons already clear in the study's background, we decided that a universal lens on virtues would be more instructive, hence adding the speeches by Chinese President Xi and Chilean President Piñera to the mix. It will arguably contribute to a fuller analysis for several reasons. First, in terms of location, the three countries are located on three continents: Europe, Asia, and South America. Second, regarding socio-political and ideological contexts, President Xi represents a country practising communist

social values. It is well-known that the late British Queen practised Christian values as well as representing a typical Western liberal society, and Piñera is a confessed Roman Catholic, as well as representing a developing country. This diverse cultural and ideological provenance will enrich the analysis and enable fruitful discourse comparisons. Third, with respect to time, Piñera's speech was delivered before Chile hit its peak of contagion. It contrasts countries where the pandemic was already peaking or on the rise.

### **MATERIALS AND METHODS**

The current study utilises the power of triangulation as a research method (Carter et al., 2014) via two dimensions: investigator triangulation and data sources triangulation. 'Triangulation refers to using multiple methods or data sources in qualitative research to develop a comprehensive understanding of phenomena' (Patton, 1999). It is viewed as a qualitative research strategy to test validity by converging information from different sources (Carter et al., 2014). According to Denzin (1978) and Patton (1999), there are four types of triangulations: (1) method, (2) investigator, (3) theory, and (4) data source. In our research case, we utilise two types of triangulations: investigator and data source. Our investigators are from China, Chile, and the UK (Table 3). It can be argued that the sample of the authors represents haphazard convenience sampling.

However, there was considerable thought given to the third author's discussion.

For example, we did consider colleagues from Germany and Japan, but none of them would bring an interesting mix from the third continent as the colleague from Chile does. Therefore, instead of considering it as a simple convenience sampling, it was more of a selective and thoughtful sampling method. However, we are aware that due to the limitations of the personal academic

network, the first author could not invite a third colleague from another country (e.g., Brazil, Argentina). Whilst our methodology contains certain limits and biases regarding the authors' sampling, it does not cancel out the confirmations of findings from three different perspectives that add breadth to the phenomenon of interest (Denzin, 1978).

Table 3  
*Basic information about the three investigators' triangulation*

Items	Investigator 1	Investigator 2	Investigator 3
Nationality	Chinese	Chilean	Icelandic
Residence	China	Chile	UK
Gender	Female	Male	Male
First language	Chinese	Chilean	Icelandic
Second language	English	English	English
Cross-cultural life experiences	Nearly 10 years	6 years	Over 20 years
Years of working experience in Character Education	Nearly 5 years	4 years	Over 15 years

Based on the strengths of three cross-cultural investigators, the three data sources were also selected from three languages (Table 4). This study initially utilised a comparative research approach. To establish valid comparisons, the speeches needed to share the same purpose: to outline strategies to meet the challenges imposed by COVID-19. Also, a specific time frame (three weeks) was imposed so the three leaders shared the same information about the spread of the virus worldwide. The three speeches were given in official contexts and produced to appeal

to wide audiences.<sup>2</sup> Finally, despite not being identical, the speeches were similar in that all were short (Table 4).

<sup>2</sup> For example, if Queen Elizabeth's speech had over 404,000 views based on a single YouTube platform, it would have been watched by more people considering other alternative channels and the live broadcast. For Chinese President Xi's speech, there is a lack of statistics coverage; it is safe to say that it has had more views simply because the Chinese population is much larger, and a critical speech like this would have been widely promoted in workplaces, communities and public media. Regarding President Pinera's speech, it was broadcast on all Chilean channels and watched live by 43.3% of the total number of homes with a television (Prieto, 2021); then, it was uploaded to other platforms.

Table 4  
*Three data sources were used for the triangulation*

Speaker	Time	Location	Length	Source
Chinese President Xi	On March 31, 2020	Wuhan, China	About 5600 words (in Chinese)	Xinhua news
Queen Elizabeth II	On April 5, 2020	London, UK	About 500 words (in English)	Royal.uk web
Chilean President Piñera	On April 19, 2020	Santiago, Chile	About 2600 words (in Spanish)	Presidency press department

Reflecting on our study method, we concede the study was not as sophisticated as one might ideally have aspired to; after all, it was based only on three leaders' speeches. However, as simple as it is (and similar to that of other researchers such as Brown & Levinson, 1987), we believe this study adds value to the existing literature by promoting the notion of virtue language or the use of certain virtue terms/vocabularies, which itself has important value in it.

### Data Analysis

Once familiarised with the speeches, two members of the team conducted a thematic analysis (Braun & Clarke, 2006) to extract words and phrases that conveyed a sense of 'virtue' (such as broadly understood in the VIA classification above). The virtues mentioned by the leaders were listed individually regardless of the number of appearances during the speech to structure the analysis. Given the focus of the analysis, it was decided on the presence/absence of these words, not their quantity or magnitude. There were also virtues embedded in the speeches but not explicitly mentioned; these were included if they referred indirectly to

some of the virtues included in the VIA. For example, the virtue of heroic spirit was extracted as President Xi (2020) claimed,

Wuhan is worthy of being a heroic city. The people of Wuhan are worthy of being heroes. The whole Party,<sup>3</sup> the whole nation and the people of all ethnic groups in China are moved in praise for you! (p. 1)

The comparative task would ideally have required a deep bilingual comprehension of virtue terms in three languages. In default of that competence, the authors had extensive experience in international discourses on virtue and character education and were reasonably well equipped for this task. The researchers involved in the codification of the speeches were native speakers of Chinese and Spanish correspondingly and had a good command of English as their second language. Once the codification process was over, the virtue terms were translated into English to facilitate cross-comparisons.

<sup>3</sup> Referring to the Communist Party of the People's Republic of China

**RESULTS**

After President Xi’s and Piñera’s speeches were analysed separately, the virtues selected were translated into English and listed in conjunction with those previously identified in the Queen’s speech. The virtue list can be seen in Table 5. Virtues in bold are shared between President Xi’s and the Queen’s speeches; underlined virtues are shared between President Xi’s and President Piñera’s speeches; and virtues in italics are shared between the Queen’s and President Piñera’s speeches. It can be easily observed that there are more commonalities between

President Xi’s and Piñera’s speeches, where there are 10 shared virtues (perspective, perseverance, teamwork, compassion, leadership, prudence, self-regulation, awareness, duty/responsibly, hope). There are five shared virtues between President Xi’s and the Queen’s speeches (appreciation, duty, resolution, help, compassion), and there are only three shared virtues between the Queen’s and President Piñera’s speeches (compassion, pride, and duty). All in all, the virtues shared in all three speeches are compassion and duty, which notably are both moral virtues, not performative ones.

Table 5  
*Virtues identified through the triangulation study*

Speaker	Queen Elizabeth II’s speech	President Xi’s speech	President Piñera’s speech
Time	On April 5th, 2020	On March 31st, 2020	On April 19th, 2020
Virtues identified	Selflessness, <b>Appreciation</b> , <b>Duty</b> , <b>Resolution</b> , <i>Pride</i> , Humour, <b>Helping others</b> , and <i>Compassion</i>	<u>Perspective</u> , Bravery, Persistence/perseverance, Striving spirit, Sacrifice, Dedication, <u>Teamwork</u> , National spirit, Heroic spirit, Respect, <b>Appreciation</b> , <b>Compassion</b> , <u>Leadership</u> , Confidence, Scientific spirit, Accuracy, Effectiveness, Alertness, <u>Prudence</u> , Care, Love, Protection, <u>Self-regulation</u> , High-spiritedness, Being civilised, Environmental awareness, Service, <u>Awareness</u> , <b>Resolution</b> , <b>Duty/Responsibility</b> , Humanness, Wisdom, <b>Help</b> , Tolerance, Law-abidingness, <u>Hope</u> , Purpose	<u>Teamwork</u> , <u>Prudence</u> , <u>Responsibility and Duty</u> , <u>Perseverance</u> , <u>Leadership</u> , Solidarity, Gratitude, Optimism, <u>Hope</u> , <u>Compassion</u> (empathy), <i>Pride</i> , <u>Self-regulation</u> and Judgement, <u>Awareness</u> , <u>Perspective</u> , Resilience, Appreciation

We next arranged the virtue terms from the three speeches into the three-factor model of virtue (McGrath, 2015), as we already justified in the study's background. It can be seen that some of the virtue terms from the three speeches fit into the model quite well, apart from one column, self-control, which is absent from the Queen's speech and relates to her omission, mentioned in the introduction, of performance virtues and her focus on the moral/civic. Some virtues simply do not fit into the three-factor model. We decided to leave those of consideration for the moment, pending further discussion.

### **Recap of the Queen's Speech and Chinese President Xi's speech**

During her speech, the Queen focused on the virtues needed to take us through the pandemic, revealing that her ultra-short speech included no less than eight virtue terms. Interestingly, six of the eight terms referred to the realm of the moral/civic rather than the psychological/performance, for example, selflessness, helping others, and compassion. Although her choice of words differs slightly from those categorised by McGrath (2015), 'compassion' would, for example, fit snugly into the Caring (moral) as the approximate equivalent of 'kindness.'

Recap of Chinese President Xi's speech from President Xi's speech, 37 virtues were extracted (Table 5) during this process. We also identified three strong sub-themes: 'people-centred,' 'party-centred,' and 'nation-centred.' These three sub-themes were closely bonded together as a coherent

big theme that the destiny of the people, the nation, and the party are closely related rather than be seen as separated.

'Heart' (心 in Chinese) seems to be the keyword that links the virtues together. During the speech, 'heart' was mentioned several times, such as "warm people's hearts and gather people's hearts" (Xi, 2020, p. 6); and "we should strengthen our sense of victory in heart, responsibility in heart, humanness spirit in heart, prudence in heart" (p. 7). In addition, with 'remain true to our original heart,' this original reference was repeated towards the end of the speech, conveying a strong sense of mission and purpose.

### **Recap of President Piñera's Speech**

Overall, 18 virtues were extracted from President Piñera's speech (Table 5). Despite not having a large number of virtue terms, the speech was structured in such a manner that each one seemed to fulfil a purpose. The introduction begins with a call to be strong and unite as a country, to believe in the action of the political institutions, the scientific community and the authorities in charge. After the introduction, the speech describes the number of policies implemented to face the catastrophic effect of the pandemic. Prudence and responsibility are portrayed as the main strengths needed to overcome the difficulties arising. Then, President Piñera points out how the pandemic will impact everyone's lives and how it is a personal duty to care for the ones in danger. To counter terrible times, Piñera argues that there are no easy solutions but large

responsibilities and that time will judge our decisions. He pledges to understand the distress experienced by Chilean society and thinks that he will persevere even if this means taking unpopular decisions.

Near the end of the speech, President Piñera shows his gratitude to the people working in health services and encourages all to follow their example and love their country and their fellow citizens. He finally stresses that Chileans will overcome these tragic times with faith and optimism.

**DISCUSSION**

Huo and Guo (2022) offered a comparison of President Xi’s and Queen Elizabeth II’s speeches, in which they highlighted the shared virtues: a sense of duty or

responsibility when facing the ongoing challenge, a sense of compassion towards others, a willingness to offer help to others, a sense of appreciation and the resolution of the challenge and winning the battle. The addition of President Piñera’s speech added further insights.

It is noticeable how a juxtaposition of President Piñera’s speech with President Xi’s speech relates to the virtues listed and how these virtues fall into McGrath’s (2015) three-factor classification. As can be seen in Table 6, most of the virtues in these two speeches fell into the Caring and Self-control categories. This fact might be associated with a common perspective on how both leaders believe citizens should act under these circumstances. This commonality

Table 6  
*Fitting the identified virtues into McGrath’s three-factor model (2015)*

Three virtue type	Caring	Inquisitiveness	Self-Control
Virtues	Fairness	Bravery	Honesty
Character	Forgiveness & Mercy	Creativity	Judgement
	Gratitude	Curiosity	Perseverance
	Kindness	Love of Learning	Prudence
	Leadership	Perspective	Self-Regulation
	Capacity to Love and be Loved	Social	
	Teamwork	Intelligence	
President Xi’s virtue terms	Teamwork, Love, Appreciation/gratitude, Leadership	Perspective, Bravery	Persistence/perseverance, Self-regulation, Prudence,
President Piñera’s virtue terms	Teamwork, Leadership, Gratitude, Appreciation	Perspective	Prudence, Perseverance, Self-regulation and Judgement,
Queen’s virtue terms	Appreciation	Humour*	n/a

*Note.* Humour was not included in McGrath (2015) but in Duan et al. (2012)

could respond to the status of both leaders in their respective countries. Chile is a highly centralised and ‘presidential’ country where citizens are expected to obey and follow the chain of command descending from the top, whilst President Xi is the leader of the Communist Party in China: with another highly hierarchical political structure. It could be why in both cases, the pledge made by the leaders is to care for others but understand that the best way of practising this is through self-control and obedience. In this regard, their use of virtue language could be described as instrumentalist, allowing the leaders to maintain control of the situation. It can be understood to reflect the political function of virtue language.

‘Selflessness’ was mentioned in the Queen’s speech directly; it signals a shift from self-centred to others-centred concerns. It shows some similarities with President Xi’s ‘people-centred’ speech, including virtues such as service, sacrifice, and dedication to describe a clear sense of selflessness. Meanwhile, two virtues in the Queen’s speech did not appear in President Xi’s speech: pride and humour. Interestingly, pride was included in President Piñera’s speech but not humour. It may call for some cultural and historical explanations. For example, Chinese traditional culture encourages virtue such as modesty rather than pride, and humour is not a traditional Confucian virtue, although it is an Aristotelian virtue called ‘wit’ (Aristotle, 1985). Notably, in the Queen’s speech, performative virtues (or what McGrath calls Self-control ones) are notable by

their absence, indicating a society where interpersonal virtues take precedence over intrapersonal ones, at least in times of crisis.

Obviously, deeper moral and philosophical issues are at stake here than those relating directly to a comparative analysis of three speeches from different cultures. In simple terms, the very fact that there is considerable overlap between the virtues foregrounded by leaders of three culturally and geographically distinct countries does not allow us to infer that virtues are fundamentally universal rather than local. In other words, we have by no means dealt a death blow to the spectre of moral relativism.

Webber (2021) provides a helpful conceptualisation that explains the difficulties with cross-cultural comparisons of this kind. After explaining how each virtue’s motivational structure consists of a cluster of related evaluative attitudes, Webber employs the metaphor of high and low resolutions. Our ordinary virtue talk specifies complex motivational states in fairly low resolution allowing for a universalist interpretation. However, suppose we zoom in for a higher-resolution image that presents the relevant set of attitudes or even further for an even higher-resolution image that presents the evaluative attitudes’ clusters of associated desires and beliefs. We have much more localised (culture-specific or even situation-specific) variance in that case. For example, even if Chinese, Chilean and British speakers would agree that gratitude is a virtue, the word used to convey the virtue of gratitude in the three

languages might have local connotations that only reveal themselves if we study the virtue term in ‘higher resolution.’ Webber allows for the possibility that this zooming exercise may yield different results in the case of different virtues: namely, that some virtues are universal down while others lose their universalist resolution fairly quickly as we zoom in on the specifics.

Webber offers suggestions that potentially change the constitution of the universal-versus local debate on moral values and virtues from the universality or locality of virtue to the universality or locality of particular virtues. For some virtues, such as honesty, likely, universality remains even in Webber’s ‘high-resolution’ mode simply because being faithful to the truth does not allow for as much cultural variance as, for instance, judging when one should be grateful for a particular favour.

Despite this caveat, we believe that the only way to study the issue of moral relativity versus universality is to engage in repeated exercises as we have conducted in our study. Just as a tree is known by its fruit, virtues are known by how people apply and speak about them. Nevertheless, while it can be argued that the study of three short speeches from the three head-of-states offers some enlightenment regarding the research objective, to what extent do the three leaders’ speeches reflect universal versus local values? There are two ways to answer this question: first, if the study solely focuses on the ‘three leaders’ one-time speech,’ the answer then is properly not to a great extent. Second, if the study change perspective

slightly, the three short speeches do not seem to tell the whole story of virtues; the timing of the speeches was critical and worthy of noting. They were not every ‘now and then’ speeches; they were perhaps some of the most special and distinctive ones over the past decade; hopefully, speeches like such will not be called for again in the many years to come. So, considering the specialness of the speeches under unusual circumstances (the crisis and challenge of COVID-19), the three seemingly short speeches carry much meaning regarding the content of each speech itself and its effects on the people it was speaking to. Therefore, we consider the analysis of the three speeches to reflect universal and local values, as can be judged from the shared and differentiated virtue language employed in these speeches.

## CONCLUSION

Virtue language, throughout history, has had a significant cultural, psychological, and socio-political role to play (Creyghton et al., 2016). It remains relevant in contemporary societies, especially under the pandemic challenge that the world has been facing.

## Implications of Study

Our study findings suggest that virtue language is vibrant and powerful in the speeches given by the three primary leaders from three countries, Britain, China and Chile, which we have analysed in this article. There are shared virtues across languages and cultures, such as duty and compassion, in evidence. Take the virtue of duty as an example; which country would



not wish citizens to have a sense of duty to contribute to society and the public good? Moreover, which parents/teachers would not wish their children/students to be equipped with a sense of duty or responsibility? It is worth noting that compassion is also the most valued in a recent quantitative study in the UK context (Arthur, 2020). Similarly, compassion is regarded as the top virtue among the four virtues/hearts in the Chinese classic *Mencius* (Mencius, 2018). Likewise, in the Chilean context, compassion is incorporated as a core virtue by Pope Francisco's agency, which is followed by more than half of the population and is regarded as one of the key virtues to practise and develop (Serrano, 2017). Thus, such virtues should be given universal attention and cultivated systematically among global citizens.

### Limitations and Recommendations

We concede that our findings are limited by the small sample of speeches (namely, three) selected for the present study. It is telling that we only found two shared virtue terms. These two virtue terms should be highly valued, however, as they are not only cherished by one country/culture but shared in three countries and surely many other countries and cultures. Thus, our study is not intended to offer a holistic virtue list; that should be saved for another day. Rather, our study examines these three short speeches by key leaders at critical junctures, which can remind us of the often-forgotten value of virtue terms (such as duty and compassion), which are essentially universal.

Having couched most of our findings in the language of 'virtue terms' and 'virtue literacy,' our findings of a shared language regarding virtues such as duty and compassion are not limited to the mere use of words; we hope that an enhanced universal focus on the terms can direct more interest to their shared meanings also and eventually turn mere virtue literacy into true virtue practice. We encourage (i) further research investigating virtue vocabularies and terms from other languages and cultural traditions—that will contribute to a more comprehensive list of universal virtues, (ii) further explorations of their perceived meanings and relevance in the situated cultures and contexts, to add richness to the existing findings.

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## **Constraints in Developing Ecotourism Based on Protected Areas: A Case Study of Jaffna District, Sri Lanka**

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### **ABSTRACT**

Ecotourism provides simultaneous benefits for conserving nature, respecting local cultures, and benefitting local communities. Generally, protected areas provide a suitable physical setting for ecotourism development, but they have various limitations in biodiversity conservation as well as the promotion of ecotourism. This study aims to assess the constraints in developing ecotourism in protected areas. Chundikulam, Delft National Park, and Nagar Kovil Nature Reserve were declared as protected areas after the end of the last thirty years of ethnic unrest in Jaffna district, Sri Lanka. The methodology includes qualitative interviews with key stakeholders such as government officers, managers of the private sector, and workers in non-governmental organizations. Twenty respondents were selected, and semi-structured interviews and focus group discussions were employed to collect qualitative data. The collected information was thematically analyzed. The categorized themes include awareness of the protected areas and ecotourism principles, biodiversity conservation, public participation, the livelihood of the local community, utilization of resources, and coordination among stakeholders. The results revealed that the respective government departments failed to gain support from stakeholders during the process of protected area boundary demarcation, as most people were against the initiative. As a result, this has become a barrier to gaining stakeholders' support which stifled ecotourism development. This study suggests that proper engagement and training for stakeholders should be a pre-

requisite for protected area management and ecotourism development, implementation of co-management activities, re-demarcation of boundaries of protected areas, and creation of buffer zones within an ecotourism park to develop ecotourism effectively.

*Keywords:* Constraints, ecotourism, local community, participation, protected area, stakeholders

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## INTRODUCTION

Sri Lanka is a well-known tropical island destination among international tourists. It encompasses a wide variety of ecotourism destinations, such as physical and ecologically important natural habitats. Tropical rainforests, pristine beaches, mountains, waterfalls, different protected areas, and small islands are among the various attractions to visit. Tourism is one of the fastest-growing sectors in Sri Lanka, ranking as the third-largest exchange earner in the economy until the unexpected COVID-19 incident (Central Bank of Sri Lanka, 2020). The Sri Lankan Government has implemented many initiatives to make Sri Lanka one of the world's premier international destinations with the slogan: "Wonder of Asia." As a result, Sri Lanka was listed by the World Travel and Tourism Council in 2019 as one of the top 20 fastest-growing travel and tourism economic countries (Sri Lanka Tourism Development Authority, 2019). In Sri Lanka, different protected areas are declared under the flora and fauna protection ordinance. The country's tropical climate and topography have nurtured and produced a sunny climate, pristine beaches and warm seas, tropical forests, and rich biodiversity, all tourist attractions. There are more than 500 protected areas in Sri Lanka, and 109 protected areas are managed by the wildlife conservation department, which is well-established for tourism purposes (Department of Wildlife Conservation, 2020).

During the thirty years of civil war, the northern and eastern provinces of Sri Lanka were badly affected without any conducive environment for tourism development in these provinces. As far as Jaffna district is concerned, it is located right smack in the war zone and had to suffer until the reawakening after the end of the civil war 2009. Currently, there are many initiatives carried out to enhance the socio-economic condition of the local community and enhance the environmental condition. There is a possibility of more arrivals of tourists in the study area (District Secretariat Jaffna, 2018). Accordingly, tourism is an important sector in National and Provincial development plans. Foreign and local tourist arrivals have been increasing continuously since 2012 (Centre for Cultural Fund, 2019). Therefore, development initiatives are being accelerated to provide infrastructure and service facilities to promote the tourism sector (Northern Provincial Council, 2019). The study area has immense untapped potential for ecotourism, including seven small, inhabited islands, lagoons with mangrove vegetation, migratory birds, wild horses, intensive fishing sites, coral reefs, a beautiful coast with pristine dune beaches, and crystal-clear seas and plenty of tropical sunshine (Fernando et al., 2017).

Recently, different protected areas have been declared in the study area. It is one of the environmental conservation efforts which provides opportunities to promote ecotourism. For instance, Delft and Chundikulam National Parks have resource potential for ecotourism development.

At the same time, priority also has been given to promoting tourism based on these resources in the tourism agenda. At this juncture, developing ecotourism in protected areas will help to achieve some Sustainable Development Goals (SDGs), including SDG-3 (improve the well-being of local communities living in the marginal area, women empowerment) and SDG-15 (promote sustainable use of terrestrial ecosystems, sustainably manage forest and biodiversity). However, some weaknesses remain, such as the lack of public participation and awareness in protected area management and a lack of coordination and training among tourism stakeholders in utilizing these resources properly to promote ecotourism. Thus, this study tries to identify the constraints in developing ecotourism along the protected area.

## LITERATURE REVIEW

### Theoretical Framework

Engagement and integration of the role of various stakeholders have given ecotourism stakeholders a chance to acquire knowledge, share the benefits and address many conflicts and issues in ecotourism. It also offers opportunities for bottom-up partnerships in ecotourism development and research. Stakeholder engagement in the initial phase of ecotourism planning enables planners to identify and address conflicting preferences among stakeholder groups (Tekalign et al., 2018).

Many countries have begun to focus on sustainable tourism development

policies, but the policies are challenging due to the lack of shared responsibility. Therefore, stakeholders need to participate in sustainable tourism policy development and implementation to achieve greater tourism sustainability (United Nations World Tourism Organization, 2017).

In the study area, priority has been given to promoting tourism after the end of the protracted war in 2009, and also efforts have been taken to conserve the biodiversity in this region. As a result, national parks and nature reserves have been declared in 2015 and 2016. Undeniably, there is huge potential in a protected area to develop ecotourism. However, the concept of the protected area and ecotourism development are new aspects, and it is essential to increase the awareness and support from the stakeholders first. The government sector has complete control over managing protected areas in this region. In the context of ecotourism development, an integrated approach should be initiated. The delivery of responsibilities and services by the government, private sector, NGOs, and local communities is essential in developing sustainable ecotourism. In this respect, stakeholder theory can be applied to ensure the participation of stakeholders in this regard.

### Protected Areas

The concept of protected areas attempts to promote biodiversity conservation with the socio-economic development of local communities living in surrounding areas. The International Union for Conservation of

Nature (IUCN) has contributed to tourism and conservation. Accordingly, ecotourism is considered to conserve nature (Feyers et al., 2017). The world conservation union defines a protected area as “a clearly defined geographical space, recognized, dedicated and managed through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values” (United Nations, 2012). IUCN categorized protected areas into different levels and launched a global protected area program. The following are the various categories of the protected area: Strict Nature Reserve (Ia), Wilderness Area (Ib), National Park (II), Natural Monument or Feature (III), Habitat/Species Management Area (IV), Protected Landscape/Seascape (V), Protected area with sustainable use of natural resources (VI; Feyers et al., 2017).

The earliest initiative to conserve biodiversity in developed nations was relatively successful because of low population densities. Controversially, most developing countries with large rural populations depend on extractive activities in protected areas (Heinsen, 2012). Rural poverty exacerbates the need for access to natural resources in protected areas. Such a situation created conflicts between the local community and protected area management (Fedreheim & Blanco, 2017). Conservationists have insisted that the successful management of protected areas must include local people’s participation. It will help to increase the quality and effectiveness of conservation.

### **Protected Areas and Ecotourism Development**

Over the last two decades, protected area policies have initiated sustainable tourism ideas (Mellon & Bramwell, 2016). Nature-based tourism in the protected area is increasing globally (Horton, 2009). Protected areas have huge potential for ecotourism development. Its goal is to conserve ecosystems and create environmental awareness among people (Azmaiparashvili, 2017). Most countries established protected areas, which later became iconic ecotourism attraction sites. In 1981, the Great Barrier Reef Marine Park in Australia was granted World Heritage status by UNESCO. The Port Douglas area claims to be the World’s only region of marine and terrestrial world heritage sites (White & King, 2009). Grand Canyon and Yellowstone National Park in the United States of America are well-known protected areas. Eighty percent of Chinese nature reserves employ ecotourism as a tool for economic growth (Feyers et al., 2017). In China, Yunnan and Sichuan provinces have rich flora and fauna, but these resources rapidly declined. As a result, it has established numerous protected areas (158 nature reserves) to conserve nature (Li et al., 2018). Worldwide conservationists have promoted ecotourism as a tool for conserving natural resources (Das & Chatterjee, 2015). Research has found that 91% of ecotourism operations were carried out in protected areas (Feyers et al., 2017). Many developed, and developing countries have declared protected areas to protect biodiversity through ecotourism development (Fennell & Cooper, 2020).



There are many studies linking protected areas and ecotourism development. In the last few decades, European countries such as the United Kingdom, France, Italy, and Germany have promoted nature conservation through ecotourism to protect the pristine conditions of mountain regions (Stubelj & Bohanec, 2010). In many countries, protected area-based ecotourism has evolved as an important destination, leading to improved ecotourism sustainability (Cini et al., 2012). For instance, the Celestina Biosphere Reserve in Mexico promoted as an ecotourism site in 1990, became an internationally competitive eco-tourist resort (Azcarate, 2010). In the 1980s, Costa Rica had very limited services for tourists. In the 1990s, the government expanded protected areas and established the new ecotourism hub from 1970 to 1980 (Horton, 2009). In the 2000s, Costa Rica became one of the world's leading ecotourism destinations. National parks and reserves included  $\frac{1}{4}$  of the land area in Costa Rica (Jone & Spadafora, 2016). Likewise, Luang, Namtha, a protected area, is the leader in ecotourism and was a successful example of community participation, and this became a model for the development of rural livelihood and forest conservation (Roche, 2009). This type of tourism is the primary income earner in developing countries like Kenya, Nepal, Tanzania, Costa Rica, and Botswana (Mbaiwa et al., 2018). African countries also have become famous for wildlife tourism. For instance, in southern Africa, the tourism industry is mostly based on national parks and protected areas (Adeleke, 2015).

Ecotourism development is carried out based on natural resources. Marine-based ecotourism is increasing attraction. For instance, fisheries-based ecotourism is essential for sustainable human development (Mozumder et al., 2018). International tourist generates much higher income in Yunnan and Sichuan provinces in China and also encourage the Chinese youth to stay in their province rather than migrate to export processing provinces. Another story from the Sundaraban tiger reserve shows the generation of more income as well as improving human capital through children's education, proving that it is the ideal activity of ecotourism (Das & Chatterjee, 2005). Over the past two decades, ecotourism has played a meaningful role in the country's economy, mainly in low-income rural communities (Sanchez, 2018). Ecotourism addresses issues in a variety of dimensions, such as the support for wildlife and protected areas, diversification of livelihoods, environmental conservation and ethics, and strengthened resource management (Stronza et al., 2019)

### **Stakeholder Theory and Tourism Development**

This study attempts to apply stakeholder theory in the tourism sector. Integration of various stakeholders has given a chance to enrich public knowledge and decision-making to solve the conflict. It offers the opportunity for bottom-up partnerships in tourism research (Tokhais & Thapa, 2019). Participation of stakeholders is crucial for tourism development in developing countries (Tekalign et al., 2018). Policymakers pay

attention to tourism economic income and prioritize the minimization of conflicts among multiple stakeholders (Gossling et al., 2012). Lack of community awareness and stakeholder participation in ecotourism were the main challenges that caused illegal activities resulting in severe challenges to park authorities. For instance, the park authorities established checkpoints to control the illicit activities of the local community with the help of militarization to protect the resources in the Maya biosphere reserve (Devine, 2014). Tanoboase is a sacred natural site in Ghana that has not been adequately regulated to involve the local people in the planning and development of ecotourism.

The co-management approach in ecotourism development is an appropriate method, and it is essential to arrange professional training with NGO's help and offer financial aid to startup capital to implement this approach (Adom, 2019). According to the study of Tekalign et al. (2018), a conflict has been identified between forest management and the local community in the Menagesha Suba forest reserve in Ethiopia, and the study revealed that stakeholder engagement in the initial phase of tourism planning enables to identify conflicting preferences among stakeholder group. The study indicated that lack of information, training, ineffective centralized public administration, and coordination are the main constraints for successful ecotourism development along the protected area (Bello et al., 2017).

The literature survey clearly shows that most countries that promote ecotourism in protected areas have achieved great success through the engagement and involvement of stakeholders. Hence, in Jaffna District (the study area), protected areas are envisaged to have great potential in promoting ecotourism. However, it is also envisaged that there are many difficulties faced by the tourism sector in integrating stakeholders into mainstream tourism development initiatives. This study tries to identify these constraints and find solutions to the development of ecotourism in protected areas.

## **METHODOLOGY**

### **Study Area**

Sri Lanka is divided into nine provinces, and the Jaffna district is in the Northern province. The Northern province comprises five districts, and Jaffna District is one of them. The North and Eastern provinces were badly affected and damaged during the internal war. After the end of the internal war in 2009, possibilities arose for the promotion of the tourism sector, which was identified as one of the strategies for the reconstruction of the economy. However, tourism development in the study area is slow, resulting in it languishing in the initial stage of development. Presently, there are many development activities carried out to enhance the socio-economic and environmental sectors of this region. At this juncture, priority has been given to Jaffna to promote the tourism sector in national and regional development plans. Significantly, Jaffna District is the main center of the

Northern Province, possessing a variety of rich natural resources such as abundant fisheries, scenic coastal landforms, pristine beaches, beautiful warm seas, enchanting small islands, unique geology, long history, mystical culture, and rich biological features. After the end of the war on ethnic conflict, different types of protected areas have been declared in this region, including Chundikulam and Delft national parks and Nakar kovil Nature Reserve.

A major part of Chundikulam National Park is located in Vadamaradchi East Divisional Secretariat Division along the Eastern coastal belt of Jaffna district with other parts in Kilinochchi and Mullaithevu districts. The existing Chundikulam bird sanctuary was declared in 1938 to conserve the biodiversity along the Chundikulam lagoon, but it was included only in Chundikulam village (J/435). In 2015, the sanctuary area was upgraded to National Park status with boundary expansion (19565 ha). It comprises the following villages-Chundikulam (J/435), Pokkaruppu (J/344), Mullian (J/343), and Vettilaikkerny (J/432), all within Jaffna District. Interestingly, migratory birds are found to make their stopovers here during the seasonal change. Adjoining the Chundikulam lagoon is a dense area of mangrove forests that serves as a habitat for a great variety of native species of birds and animals. Moreover, this lagoon has excellent potential for prawn and crab culture.

The Nakar kovil Nature Reserve is a typical mangrove forest area along the Thondaimanaru lagoon, which is a habitat

for migratory birds and was declared a nature reserve in 2015. This boundary has included nineteen GN divisions, and most of the land area has been included in the Vadamaradchi East Divisional secretariat (J/423, J/424, J/425), with the remaining area in a lagoon.

The Delft National Park has its major part located on Delft Island and was declared a national park in 2015, mainly for the conservation of wild horses as well as other natural conservation. However, one-third of the total area of this island, which is meant for various development activities, has come under this National Park boundary and includes the Grama Niladari divisions of Delft South (J/02), center west (03), center (J/04), center east (J/05) and east (J/06) region. Figure 1 shows the location of national parks in the study area.

### Data and Methods

Qualitative methods are employed in this study. This method is largely used to explore the inner experiences of participants (Corbin & Strauss, 2013). Qualitative data collection methods include interviews, focus group discussions, and field surveys to identify the constraints related to ecotourism awareness, protected area management, biodiversity conservation, and utilization of local resources for ecotourism development. Based on the stakeholder theory, members of community-based organizations, officers of government departments working in tourism and environmental conservation works, officers of non-governmental organizations, and hoteliers have been included as stakeholders in this study.

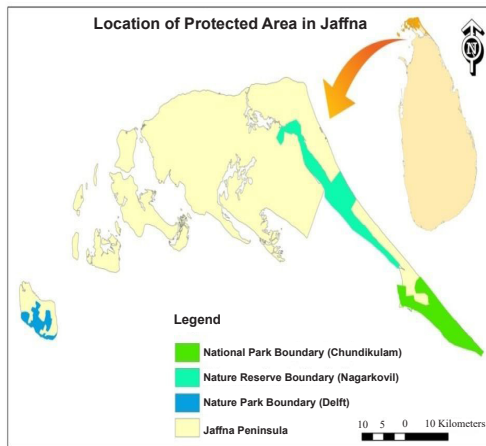


Figure 1. Study area

Focus Group Discussions (FDG) were set up among those living near the protected area. Members of Community-Based Organizations (CBOs) with functioning effectively to ecotourism have been selected as focus groups to discover villagers' views during the first phase of the field visit. A total of six focus groups have been selected for the FGD discussion sessions. The introductory information was provided by the researcher who participated in the discussion. Additionally, assistance has been received from Grama Niladaris in respective areas to identify the Community-Based Organizations. People from the adjoining areas of Chundikulam National Park, Delft Nature Reserve, and Nagar Kovil Nature Reserve have been chosen for discussion. Six to eight members participated in each group. Information related to the knowledge of protected area management and its importance, ecotourism development, community awareness, and willingness to participate in protected

area management and ecotourism-related activities, opportunities, and challenges in ecotourism development were collected. This focus group discussion was conducted from January 2020 to March 2020.

In-depth semi-structured interviews were also conducted with key stakeholders. The stakeholders selected include Northern Province Tourism Bureau officers, the Department of Wildlife Conservation, the Coastal Conservation Department, the Central Environmental Authority, the Vadamaradchi-East Divisional Secretariat, the Delft Divisional Secretariat, Non-governmental organizations, and Hoteliers. The length of each interview was 30-45 minutes. A total of 20 officers were selected for the interview. Judgment sampling was used as an appropriate method at the initial stage to identify the officers with experience in ecotourism-related administrative work. Subsequently, the snowball sampling method was used to identify appropriate respondents. Semi-structured questions were designed to measure knowledge, awareness, and challenges concerning ecotourism development in protected areas.

Field visits were carried out in three phases from January 2020 to February 2021. The first phase of the visit focused on familiarizing with the study area and observing the site's potentials and issues, viz., the real situation. Following this, subsequent arrangements were made to conduct focus group discussions. Finally, revisits were made to observe the changes or progress.

The thematic analysis method has been used to analyze primary data collected via In-Depth semi-structured interviews and focus group discussions. Accordingly, major constraints on ecotourism development in protected areas have been identified through this analysis. The interview was transcribed in English with related data in the first step. Then coding was employed. Based on the coding, themes have been defined and categorized. Finally, the report has been written descriptively. Accordingly, the following themes have been classified: awareness of the protected area and ecotourism development, biodiversity conservation and public participation, the livelihood of the local community, utilization of resources, and lack of coordination among the stakeholders.

## **RESULTS AND DISCUSSION**

### **Awareness of Protected Areas and Ecotourism Development**

The employment of protected areas, together with an in-depth understanding of ecotourism, are vital ingredients for the development of successful ecotourism projects in an area. There should be clear knowledge, awareness, and understanding among the stakeholders, with no conflict. Opinions have been collected from stakeholders to identify the perception of ecotourism development along the protected area. Accordingly, more than half of the officers (60%) from the interview respondents have knowledge and ideas related to protected areas and ecotourism development. Particularly, hoteliers have

clear knowledge and idea about ecotourism in comparison to other stakeholders. Hoteliers have to work in a competitive market and satisfy tourist expectations. They are aware of ecotourism-related activities. However, even though hoteliers are interested in expanding ecotourism-related activities in the study area, they face many difficulties in gaining support from other stakeholders.

In addition, the local community's knowledge and awareness are essential to achieve a successful expected outcome in ecotourism development. Community views have been assessed through focus group discussions. Accordingly, five focus groups among six showed a lack of understanding about the importance and management of protected areas and opportunities to develop ecotourism. Focus groups adjoining the Chundikulam National Park and Delft Nature Reserves show a lack of awareness and interest in participating in ecotourism-related initiatives. As far as Jaffna District is concerned, tourism has developed gradually since 2009. Local communities were trapped in the long-term ethnic war. Therefore, they generally lack the awareness of the potential of ecotourism to enhance their livelihood and are not interested in participating in ecotourism development activities. During the interview, government officers mentioned that the most important challenge in ecotourism development is the lack of awareness and participation among the local communities in ecotourism-related projects. Results indicate that the majority of the local communities were not aware

or convinced of the importance of the involvement of the local communities in ecotourism development initiatives. They also lack an understanding of how they can play a vital role in developing ecotourism and protected area management. If the local communities have awareness and interest, they can get employment and income from the ecotourism sector, and it can be supported to reach sustainable development goals such as improvement of well-being and empowerment of women.

Non-governmental organizations can directly or indirectly support and promote ecotourism in their activities, such as coastal conservation and cleaning, motivation of eco-friendly products, increasing vegetation cover, and environmental education. Unfortunately, these initiatives were unsuccessful due to the lack of support from the local communities as well as government institutions. Consequently, NGOs are only working with selected interest groups on an ad hoc basis in environmental conservation with the support of well-wishers.

### **Biodiversity Conservation and Public Participation**

National parks' demarcation and existing sanctuary boundary expansion were implemented in 2015 after thirty years of protracted ethnic war ended in 2009. The Wildlife Conservation Department did all these boundary demarcations. The result created an adverse situation among the stakeholders. It led to a negative impact that hindered the participation of local people in protected area management. The public

made their complaint to the concerned authority to re-demarcate the boundary. Regional administration also facing many difficulties in this regard. It is the major challenge that remains unresolved in the management of protected areas. At this juncture, tourism authority faces many difficulties in promoting ecotourism based on a protected area, and they cannot gain public participation because the local people fear that the land utilized for their livelihood activities will be further encroached upon within the protected area. Under this circumstance, it has become a barrier to the implementation of ecotourism development initiatives.

Furthermore, it was found that the activities of the protected area management authority are not people-friendly and threatened the people by various restrictions. Due to this reason, the respective authorities failed to get support from the public to manage the protected areas. It has created conflict between people and the park. Further, strict restrictions have been enforced to control public activities, such as restrictions for fishing, agriculture activities, and natural resource collection within the park. It is very important to note that environmental management practices will not be successful without public participation.

Moreover, proper environmental conservation initiatives have not been taken by the park authority until now. For instance: The area of wild horses at Delft Island is considered an important ecotourism site in Delft Island. Here, food and water are scarce for horses, and it is a major problem

during drought seasons as many incidences of death of horses have been reported during acute drought seasons. At this juncture, there are no active plans to sustain this habitat and supply enough food and water during the adverse drought seasons. In the future, this biological diversity will be threatened due to the impact of climate change, and no measures have been taken by the respective authorities to protect the physical and biological resources within the protected area. It has also become a barrier to ecotourism promotion. Undeniably, gaining public support and proper management practices will help to carry out biodiversity conservation within protected areas.

### The Livelihood of the Local Community

The livelihood of the local community has also been affected by the protected area

declaration. Chundikulam bird sanctuary included only a Chundikulam Village (J/345) within the Jaffna District. This bird sanctuary has been upgraded to the status of a national park, and the new boundary has been expanded to adjacent three Villages (J/344, J/343, J/342) in the Vadamaradchi Divisional Secretary area. The following Figure 2 shows the boundary of the Chundikulam National Park.

Another important aspect is the huge loss and damage of properties because of the protracted ethnic war and the 2004 tsunami. At present, people have resettled and started their livelihood activities. Meanwhile, the boundary expansion notice threatened the adjoining area inhabitants, and they are against these activities because their private lands included within this boundary are being used for various purposes such

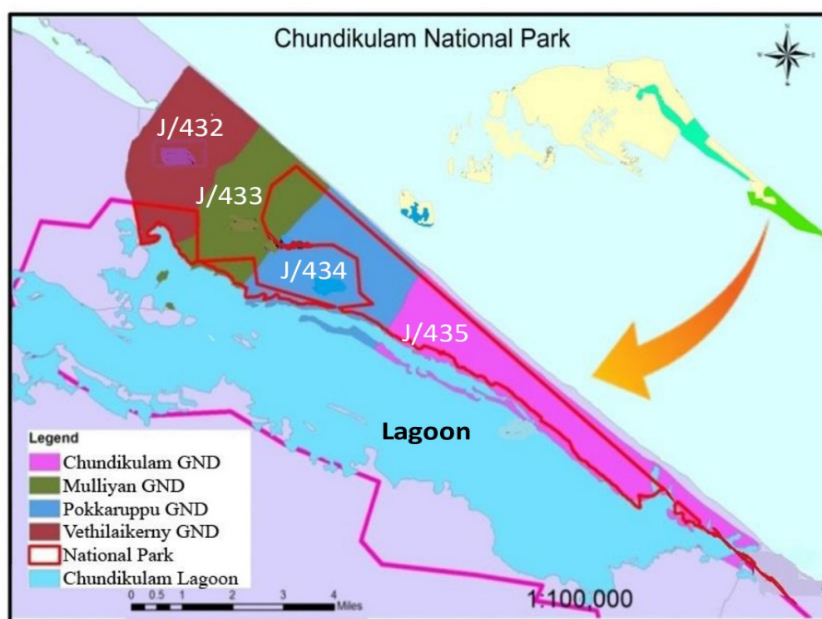


Figure 2. The boundary of Chundikulam National Park  
 Source: District Secretary, Jaffna (2020)

as tsunami housing schemes, schools, hospitals, religious centers, community infrastructure, paddy land, agriculture lands, coconut and Palmyra, fishing huts, farming, and dry fish production sites. People from Chundikulam village have not yet resettled due to a lack of infrastructure and livelihood facilities and their paddy land; coconut land and fishing sites are also included within the boundary. A school in Mullian GN Division (J/433) is the only secondary school that served the adjoining 4 GN division within the boundary. During the field visit, it could be identified. The northern part of the National Park boundary has 31 km along the coastal line. The “Madal” fishing site is one of the significant livelihoods with long history along the coast of the designated area. However, the control measures strictly implemented by the wildlife conservation department hinder the livelihood activities within the park. Therefore, fishermen face many difficulties in carrying out their livelihood activities. A total of more than 300 fishing families (lagoon fishing, deep sea fishing, and dry fish production) at Mulliyan (J/433) and Pokkaruppu (J/434) have been affected by these initiatives. Due to this reason, local people adjoining the protected area are against any initiatives of development within the park. Meanwhile, ecotourism initiatives will not be possible without the contribution of the local community.

Nagar Kovil Nature Reserve includes 19 GN Divisions. Most land area is included within Vadamradchi East DS Division. The

three villages of Nakar kovil East (J/423), Nakar kovil West (J/424), and Nakar kovil south (J/425) are included in this area. A tsunami housing scheme area, home garden, grazing land, Palmyrah land, coconut land, proposed settlement area, paddy land, lagoon fishing, deep sea fishing, and dunes sites are also included within this boundary. Furthermore, the cottage industry based on coconut and palmyrah, which used to thrive in this area, has also been negatively affected. Land adjacent to the protected area is remote and marginal, and the people in this area have limited infrastructure and services compared to other parts of the Jaffna District. These people depend on resources within the protected area for their livelihood. Under these circumstances, it is unsurprising that local people are reluctant to implement the tourism project within the protected area. The following Figure 3 shows the boundary of the Nakar Kovil nature reserve.

Delft National Park is one of the most important wildlife sanctuaries in Sri Lanka, as it is the only region for wild horses in the country. The declaration of the national park is one of the important initiatives in environmental management practices. However, one-third of the total area of the island meant for developmental activities has come under this National Park boundary. It included the Grama Niladari division of the south, center, and west region. As such, although the park is good for wild horses, it has created a barrier to local people in their livelihood activities. Even development



activities by the government institutions park. Figure 4 shows the boundary of Delft are also unable to be implemented in the National Park.

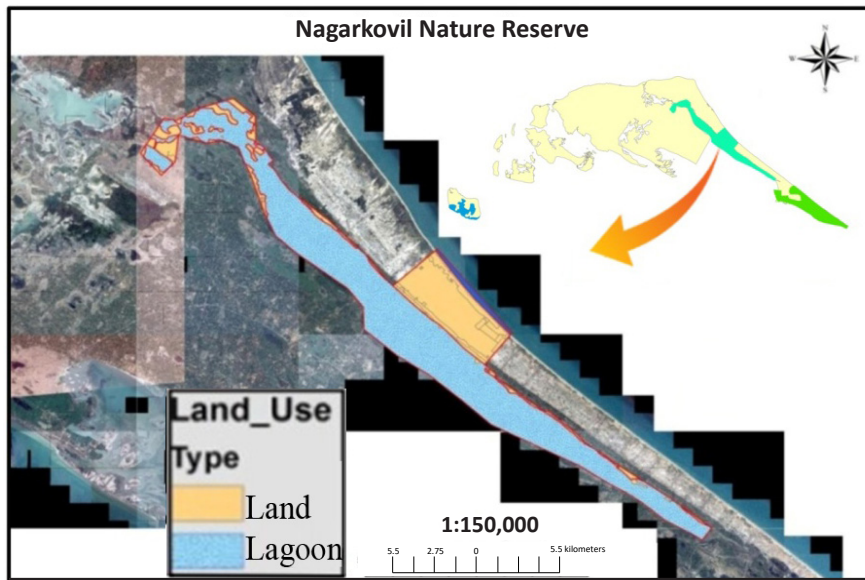


Figure 3. The boundary of Nakar Kovil Nature Reserve  
Source: District Secretary, Jaffna (2020)



Figure 4. Boundary of Delft National Park  
Source: District Secretariat, Jaffna (2020)

The wildlife conservation department enforces boundary expansion notices and restrictions. These initiatives threatened the local people, and they feel and fear that their land will be further encroached upon by these activities. In the initial stage of the protected area declaration, respective government departments failed to gain stakeholder opinion. As a result, there are barriers to gaining public participation to initiate ecotourism development projects.

### **Utilization of Resources**

National parks located along the coastline have great ecotourism potentials such as bird watching, wild horses watching, sight-seeing of white dune coastal beaches, and enjoyment of marine-based ecotourism activities. However, the tourism authority faces challenges in getting approval from the park authority to establish basic amenities for ecotourism development, like bird watching and site seeing. Although a variety of resources is available for ecotourism development in the study area, it is important to notice that there is a lack of awareness and training among tourism stakeholders and under-utilization of available resources to attract tourists. It is one of the major constraints in developing ecotourism in the study area.

Delft Island has been prioritized to promote ecotourism in regional and national tourism strategic plans and targeted to utilize the local resources, especially fishing and Palmyra resources. More than half of the population living on this Island is involved in fishing activities. However, the fishing

community is not interested in reaping the potential of ecotourism. They are only fisher folks and do not have other skills to maximize these resources for ecotourism development. Further, the Palmyra trees spread abundantly within the protected area, and there has been increasing demand for Palmyra products among the tourists in the Jaffna District. Still, the Palmyra resources have not been utilized optimally so far. If these resources are exploited and utilized properly, there are huge opportunities to promote small-scale industries to attract tourists with different experiences to this Island. It will create job opportunities and income generation for the local people on the island. The younger generation of youths can also be involved in the provision of tourism products and services.

### **Lack of Coordination Among the Stakeholders**

In the study area, it was found that some of the ecotourism sites failed to get the expected outcome without proper stakeholders' consultation during site selection. One of the ecotourism sites developed at "Mandaithevu Island" did not attain the status of a tourist attraction site because of a lack of coordination among the stakeholders. Local people were not aware of it. Local authorities and Divisional Secretariat were struggling to monitor this site.

In addition, there is a lack of environmental concern among the stakeholders. Even though private investors are interested in investing in

ecotourism-related services in the study area, the concerned authorities did not find a mechanism to guide the investors to find out the possible investment for ecotourism promotion. Private investors are only actively purchasing land along the coastal site and constructing restaurants and other facilities. However, the investors focus solely on profit and disregard environmental conservation. Further, Casuarinas Forest, located along the coastal belt near the Nagar Kovil nature reserve, has been identified for ecotourism development. An awareness program on Casuarinas tree plantation has been initiated to protect the forest from adverse anthropogenic activities. It has not reached the expected success level because of a lack of stakeholder participation.

In the case of government institutions concerned with ecotourism, there is often a lack of inter-departmental coordination in relation to ecotourism and environmental conservation activities, particularly on resource utilization and protected area management. For instance: there is a lack of coordination among the Wildlife Conservation Department, Central Environmental Authority, and Divisional Secretaries in managing the protected area. The Wildlife Conservation Department has carried out protected area boundary demarcation without proper consultation with stakeholders. Therefore, regional administrators face many difficulties in managing parks and public complaints. It was also observed that there are no concerted efforts among the government institutions for integrated and comprehensive management

of the protected areas. Each government department is merely managing the parks within its jurisdiction.

## CONCLUSION

This study concludes that tourism development, especially ecotourism development, has been given much attention in Jaffna District after the long civil war. It is both good for economic gain as well as environmental conservation in general. The thrust for ecotourism has been a milestone as far as tourism is concerned. Jaffna district is special and unique in many aspects. It has many unique and interesting physical and biological resources. However, despite these efforts, there are some weaknesses that are barriers to successful ecotourism development. One weakness is that the rich natural resources in the area have not been fully tapped but are underdeveloped. Declaration of protected areas also creates opportunities to promote ecotourism. However, people did not realize its effects on local communities. Activities of the park authority are not people-friendly, and the strict rules and regulations of the park are barriers against the people's livelihood activities. Hence, while parks are generally beneficial to natural resources and environmental conservation, they are negatively affecting people's livelihoods. It has resulted in many difficulties and hurdles in the promotion and development of ecotourism based on protected areas. Overall, the lack of comprehensive understanding among stakeholders on basic ecotourism principles and sustainable

ecotourism has resulted in an ineffective state of ecotourism in the Jaffna District.

### Recommendation

Responsibility for protected area management must be shared among the government, NGOs, the private sector, and local communities. Co-management activity is the suitable way forward to achieve effective management of protected areas. For the successful participation of the local people, there is a need to increase awareness among people living adjoining the protected area. It is essential to re-demarcate the boundary with stakeholders' participation. It will be possible to avoid conflict between the protected area authority and other stakeholders. Nagar kovil Nature Reserve boundary can be shifted along the Point Pedro–Maruthankerny road. Likewise, there is the possibility of moving the Chundikulam national park boundary to the existing sanctuary boundary (included only with Chundikulam village). In addition, there is a necessity to establish buffer zones (500m) within the protected area and clearly define the public activities within that zone.

Meanwhile, public behavior needs to change in an environmentally friendly manner within the protected area while utilizing the resources. There is a need to conduct awareness programs and proper training for the local people as well as other stakeholders. While initiating the ecotourism project along the protected area, adjoining area resource potentials like traditional fishing sites, pristine beaches, and dunes sites should be taken into consideration.

These can provide opportunities to increase different types of ecotourism products in this region. Local people's participation should be given emphasis in ecotourism, and it is considered a tool for strengthening the socio-economic and environmental conditions of the local people. Optimum utilization of local resources with the involvement of the local community will create new job opportunities and enhance the economic condition as well as biodiversity conservation. It will then, in turn, support the achievement of Sustainable Development Goals (SDGs).

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## **Cultivating 21<sup>st</sup>-Century Learning Skills: The Effectiveness of Song-based Music and Movement for Improving Children's Social Skills**

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### **ABSTRACT**

Researchers and educators asserted that music-based intervention is more effective than traditional teaching approaches when educating children due to the fact that music-based intervention promotes students' memory and interest. An ongoing imbalance in education that stands to be corrected is how parents and teachers may be more concerned with children's academic achievement than their social skills. In that context, this quantitative study aimed to investigate the effectiveness of song-based music and movement intervention in improving social skills among elementary-age children. The sixty participants (aged 7–9 years) were divided equally into three experimental groups (song-based, music and movement as well as song-based music and movement intervention) and a control group (no treatment). Quantitative data collected through pre and post-tests were assessed by three independent evaluators using the researcher-adapted Intrapersonal and Interpersonal Skills Measurement Form (IISMF). Participants' physical reactions, such as facial expressions, behaviours, and emotions, were observed. The results indicated that the song-based music and movement intervention had significantly improved the social skills on both dimensions of intrapersonal and interpersonal compared to the other interventions.

This study provides insights to promote the implementation of song-based music and movement intervention for schoolteachers to improve young age children's social skills. Furthermore, social skills are one of the crucial elements in 21<sup>st</sup>-century learning skills that contribute to their future success.

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## INTRODUCTION

The 21<sup>st</sup>-century learning skills allow students to embrace real-life scenarios that teach them to plan, work as a team and develop skills. Erdogan (2019) surmised that the traditional teaching approaches, which emphasise students' mastery of knowledge through reading, writing, and arithmetic, are no longer effective. Thus, emerging 21<sup>st</sup>-century learning skills have attracted researchers' and educators' attention and interest. The 'four Cs' in 21<sup>st</sup>-century learning skills include critical thinking, communication, collaboration, and creativity (Anugerahwati, 2019; Shabrina & Astuti, 2022), which essentially determine how learners are able to engage with new knowledge. Saleh (2019) states that 21<sup>st</sup>-century learners are encouraged to be creative and critical thinkers. Unlike traditional teaching approaches, problem-solving projects are widely infused in the curriculum and require students to analyse problems, assess the information's value, make informed decisions, and take action. Lázaro et al. (2018) studied that the group activities such as discussions, presentations, and question-and-answer (Q&A) sessions are ideally included as fundamental components to allow participants to communicate, cooperate, and compromise with group members. Through group participation, learners have opportunities to exchange ideas and experiences with others, which promotes the consideration of multiple perspectives and diversity of thought. Undoubtedly, 21<sup>st</sup>-century learning skills have drawn new learning approaches

by providing opportunities for learners to engage knowledge through classroom experiences.

Both intrapersonal and interpersonal social skills play a crucial role in preparing students to become proficient communicators (Gardner, 2011). The intrapersonal skills allow individuals to understand personal desires, fears, and traits, whilst the interpersonal skills underpin how learners understand other people's emotions, intentions, and motivations (Armstrong, 2018). The intrapersonal skills were investigated to guide the learners to understand themselves well by identifying personal strengths and weaknesses. By participating in the designed 21<sup>st</sup>-century group activities such as group discussions and Q&A sessions, learners develop self-confidence and self-motivation to achieve their goals (Perea & Ruz, 2014). On the other hand, the 21<sup>st</sup>-century problem-solving projects were proven effective in encouraging learners to practice interpersonal skills by learning to interact effectively and respectfully with peers, which are especially valuable in multinational communities (Erdogan, 2019; Saleh, 2019). However, according to Mohamed et al. (2020) and Nadesan and Shah (2020), the school curriculum in Malaysia overwhelmingly emphasises students' cognitive development on science and mathematics skills. Social skills are often considered lesser important and sometimes neglected. Most children are judged on their academic success rather than abilities and intelligence outside of basic academics. Thus, one of the objectives



of this study is to draw the awareness and importance of social skills in the Malaysian education industry.

Various educators and researchers concurred that music and movement intervention align with 21<sup>st</sup>-century learning skills (Davidova, 2019; Mustikawati & Astuti, 2019; Reynolds, 2018; Vasil et al., 2018). According to Nurgiyantoro (2005b), music and movement intervention includes dance, speech, role-playing, and other musical activities. Music and movement intervention can ease stress and promote relaxation, attention, and interest. Both music and movement intervention and 21<sup>st</sup>-century learning skills promote experiential and learner-centred approaches where learners can play the main roles in assimilating new knowledge from the assigned projects. Chua and Ho (2017) found that the popular music classroom has a widely infused learner-centred approach and group activities that allow learners to show their voices. Learners developed self-confidence by practising critical thinking and collaborative skills while involved in musical group work. Machfauzia et al. (2018) utilised Indonesian folk songs to improve collaboration and communication skills. Musical group activities, which widely include games and singing, have successfully improved children's communication and collaboration skills by providing opportunities to learn how to cooperate and respect their peers.

The song-based intervention in this study primarily involves group singing activities. Watson (2012) identified the importance of singing in young children's

growth developmental and early exposure through their mothers singing lullabies and rhymes. Enjoyable and interesting social activity suitable for children to relieve their stress while singing. Singing allows humans to express feelings, experiences, and moods (Kim, 2000; Welch, 2012). Welch (2012) noted that choral singing enhances self-confidence, self-efficacy, social awareness, and positive group identity. Jensen (2000) and Governor et al. (2013) also agreed that singing can be an effective teaching tool for transferring knowledge and information. Students can engage in stronger memorisation and the ability to recall through practising music.

From the existing studies, few individuals have investigated the combination of song-based intervention and music and movement intervention with social skill development. For example, Cochran (2008), Carter (2015), and Good et al. (2014) investigated only song-based intervention on social skills. Nevertheless, elementary-age children's social skills have been neglected in various studies. Many studies involved preschool-age children (Blanky-Voronov & Gilboa, 2022; Ozturk & Can, 2020; Simpson, 2013) and children with autism (Bharathi et al., 2019; Eren, 2015; LaGasse, 2014) as their studies' participants. However, social skills still play a crucial role in elementary-age children's growth development (Selimović et al., 2018).

Several quantitative and qualitative studies collected data through questionnaires and interviews involving children's parents and teachers. However, these studies

reported ambiguous results, potentially due to the personal perspectives and bias of these adults in reporting on the children’s outcomes (Good et al., 2014; Intani, 2012; Isabel, 2015). Austin and Sutton (2014) noted that qualitative research practices that ask children to share feelings and opinions may be inherently subjective or biased. Personal emotions, such as nervousness or hesitation, on the part of children and researchers, may cause differences in expressing interpretations and behaviours. This study implemented task-based observation to overcome such issues, where three professional evaluators directly observed and rated children’s performance.

The knowledge gap was identified as limited studies employed music movement and song-based intervention combinations to investigate the social skills among elementary-age children. Furthermore, the task-based observation of this study

addressed the limitations of previous studies. Therefore, this study aims to examine the effects of song-based music and movement intervention on elementary-age children’s social skills.

**METHODOLOGY**

This study employed a randomised pre-test–post-test between subjects’ experimental designs. The participants for this study consisted of 60 children aged seven to nine years old selected from four childcare centres in Malacca, Malaysia. They were subjected to no treatment, song-based music and movement, as well as song-based music and movement treatment interventions. The intervention comprised eight 30-minute sessions within a 3-month data collection timeframe. Figure 1 shows the variables, measurements, participants numbers, and treatment duration engaged in the study.

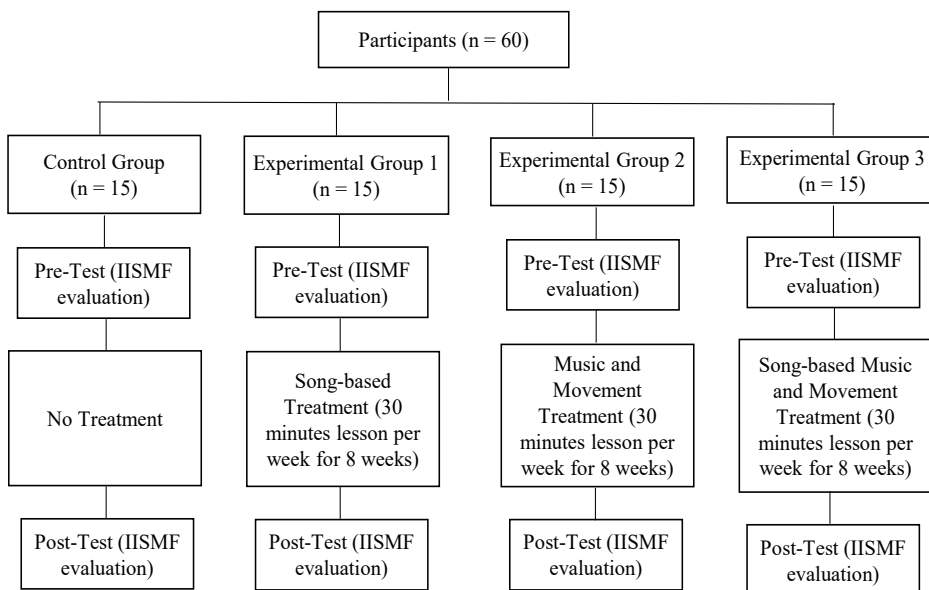


Figure 1. Assignment path of variables, measurements, participants numbers, and treatment duration

### Participants

Purposive sampling was employed, and participants ( $n = 60$ ) were chosen according to the following selection criteria: (1) children of seven to nine years old; (2) no formal music training prior to the study. The pre-test was used to evaluate each participant's ability. They were randomly assigned into four groups through random sampling: Group 1 with song-based intervention ( $n = 15$ ), Group 2 with music and movement intervention ( $n = 15$ ), Group 3 with song-based music and movement ( $n = 15$ ), together with a control group ( $n = 15$ ).

### Independent Variables

The independent variables for this study were the four different treatment interventions: (i) no treatment, (ii) song-based (SB), (iii) music and movement (MM), and (iv) song-based music and movement (SBMM). The first SB intervention involved vocal warmups and required participants to learn a new song during each session with the music teacher's piano accompaniment. These songs were taught by rote (echo singing), with students sitting in a circle. MM and SBMM interventions included musical activities such as role-playing, dance, storytelling, playing unpitched percussion instruments, and playing musical games. However, the MM intervention participants had not been involved with singing activities, whilst singing activities had been widely infused in SBMM intervention by requiring participants to learn a new song for each session.

### Dependent Variables

The two dependent variables in this study were intrapersonal and interpersonal skills. The interpersonal variable requires individuals to establish intentions and motivations while participating in group activities. The intrapersonal variable allows individuals to understand their desires, fears, and capacities (Gardner, 2011). Both skills play an essential social value to understand themselves well and improve the capability to communicate with others. Four experienced primary school teachers were invited to discuss the appropriateness and suitability of each item in the Intrapersonal and Interpersonal Skills Measurement Form (IISMF) to ensure the content validity of the dependent variables in this study. The intrapersonal and interpersonal variable consists of 15 measuring items, respectively. This IISMF was adapted from the existing social measurements, namely School Social Behaviour Scales-Second Edition (SSBS-2; Merrell, 1993), Home and Community Social Behaviour Scale (HCSBS; Merrell & Caldarella, 2000), and Preschool and Kindergarten Behaviour Scales (PKBS; Merrell, 1994). The intrapersonal skills were (i) postural attention, (ii) movement, (iii) interest and confidence, (iv) understanding problems, (v) appropriate manner, (vi) following rules, (vii) concentrating, (viii) calmness, (ix) self-restraint, (x) not prompted, (xi) temper control, (xii) distress, (xiii) paranoid and obsessive behaviours, (xiv) self-reflection, and (xv) beliefs. The interpersonal skills were (i) facial expressions, (ii) not interrupting-teacher,

(iii) sharing intentions, (iv) enjoyment, (v) encouragement, (vi) getting information, (vii) not interrupting-group members, (viii) speaking up, (ix) compromises and cooperation, (x) offering help, (xi) verbal politeness, (xii) praise, (xiii) lack of criticism, (xiv) showing empathy, and (xv) humorous.

### **Instrumentation**

The IISMF was adapted from existing social skills measurement rating forms referred to as the Home and Community Social Behaviour Scale (HCSBS; Merrell & Caldarella, 2000), Preschool and Kindergarten Behaviour Scale 2 (PKBS-2; Merrell, 1994), and School Social Behaviour Scale (SSBS; Merrell, 1993). Four experienced music teachers were invited for two 60-minute discussion sessions, in which they recommended professional suggestions and provided advice pertaining to structure suitable criteria for the IISMF. Three primary teachers also evaluated the IISMF to analyse the appropriateness of the measurement form.

The IISMF used a five-point Likert scale to allow the evaluators to perform objective evaluations of participants' intrapersonal and interpersonal skills. The IISMF measurement form was designed in Google Forms and sent to each evaluator. The evaluative criteria in the IISMF were designed with detailed descriptions that characterised the social skill levels. Three professional evaluators were invited to complete the rating form after observing the participants' performances. Each evaluator

was given explanations regarding each criterion on the rating form to ensure inter-rater reliability. They were asked to rate the score most accurately, describing the participants' behaviours and emotions. The inter-judge reliability for IISMF was utilised with Cronbach's alpha correlation coefficients and calculated for each item. The inter-judge reliabilities from 0.60 to 0.96 corresponded as moderate to high. Jasmi (2012) claimed that the acceptable  $\alpha$  value is 0.60 to 0.99. Therefore, all of the items for the Intrapersonal Skill test and Interpersonal Skill test are reliable for this study.

### **Materials**

The SB, MM, and SBMM intervention sessions were carried out by introducing a new children's song for every session, such as Baa-Baa Black Sheep, Ten Little Indians, I am a Little Tea Pot, and The Captured Bird, accompanied by a piano. The music teacher introduced a new song for every session to attract the participants' interest with a simple and fun melody. The selected songs' melodies were within an octave and employed simple rhythmic value. The selected vocabularies were discussed with three elementary school English teachers to suit the lower elementary level. The music teacher taught the songs by echo singing and telling the story of the music. The participants were welcome to share their ideas and stories during the interventions. The MM and SBMM interventions were mainly fulfilled through utilising body movement, musical and

unpitched percussion instruments (e.g., triangle, wooden T-shape block with mallets, castanets).

### **Data Collection Procedure**

The interventions were conducted in eight 30-minute sessions for each experimental group. The SB intervention was designed around introducing a new song to the participants in every session with piano accompaniment. Participants were asked to sit in a circle and go through a vocal warmup before learning the new song. The MM intervention was introduced by conducting a musical play without singing. The SBMM intervention was introduced by learning new songs and concurrently involved different musical activities in every session, such as role-playing, musical games, dance, and unpitched percussion instrument ensembles.

Both pre-and post-tests involved the same procedures to measure participants' intrapersonal and interpersonal skills. Participants were asked to form a circle, hold hands with their peers and pass through a hula-hoop without letting go of their hands to evaluate their social skills. The whole process of pre-and post-test evaluation was video recorded from four different angles to capture participants' facial expressions, reactions, behaviours and emotions. Three evaluators were asked to rate the participants' physical reactions to IISMF using a 5-point Likert Scale. Participants were observed through three sessions before, during, and after the group task.

### **Data Analysis Procedure**

The collected data was analysed according to the criteria stipulated in the IISMF. The results were analysed in descriptive and inferential statistics. The descriptive analysis included mean scores, the mean difference and standard deviation. The inferential analysis involved one-way ANOVA to determine the effectiveness of the song-based music and movement interventions.

## **RESULTS**

The data were analysed using SPSS software to investigate the effectiveness of different interventions on participants' social skills based on age elements. Participants ( $n = 60$ ) were grouped into a control group and three experimental groups, that are described as Control Group ( $n = 15$ ), Experimental Group One ( $n = 15$ ) was exposed to the SB intervention, Experimental Group Two ( $n = 15$ ) was guided with MM intervention, Experimental Group Three ( $n = 15$ ) was exposed to the SBMM intervention. The participants' social skills were measured in two main dimensions, referring to interpersonal and intrapersonal skills. Both dimensions included 15 items to describe each skill criterion.

### **Descriptive Statistics**

The descriptive statistics included the mean, standard deviation, mean difference, and mean difference percentage, through which we investigated the effectiveness of each intervention. Data comparison was carried

out for the pre-test and post-test between one control group and three experimental groups.

Table 1 shows the data of intrapersonal variables for the Intrapersonal and Interpersonal Social Measurement Form (IISMF). The pre-test intrapersonal mean scores for the 15 individual items ranged from 2.98 (*self-restraint*) to 3.49 (*postural attention*) for the Control Group, ranged from 3.31 (*calm*) to 3.91 (*movement*) for Experimental Group 1 (SB), ranged from 3.13 (*same manner*) to 3.82 (*self-restraint*) for Experimental Group 2 (MM), and ranged from 3.20 (*same manner*) to 3.91 (*concentrations*) for Experimental Group 3 (SBMM). The post-test mean scores ranged from 2.00 (*follow rules*) to 2.56 (*believes*) for the Control Group, ranged from 3.53 (*interest and confidence, understanding problem, same manner*) to 3.93 (*self-reflection*) for Experimental Group 1 (SB), ranged from 3.56 (*self-restraint*) to 4.33 (*understanding problem*) for Experimental Group 2 (MM) and ranged from 3.82 (*self-restraint*) to 4.78 (*distress, not paranoid*) for Experimental Group 3 (SBMM). By comparing the pre-and post-test, the mean differences for Control Group, Experimental Group 1, 2, and 3 ranged from -1.16 (*understanding the problem*) to -0.47 (*self-restraint*), -0.22 (*movement*) to 0.49 (*calm*), -0.26 (*self-restraint*) to 0.94 (*same manner*) and 0.42 (*self-restraint*) to 1.22 (*distress*) respectively.

The results in Table 1 show higher mean values and mean differences for the SBMM intervention (Experimental

Group 3) than the Control Group, SB intervention (Experimental Group 1) and MM intervention (Experimental Group 2) respective to the intrapersonal variables, as revealed in the Intrapersonal and Interpersonal Social Measurement Form (IISMF).

Moving forward, Table 2 displays the data of interpersonal variables as listed in the IISMF. The pre-test interpersonal mean scores for the 15 individual items ranged from 2.76 (*verbal politeness*) to 3.44 (*enjoy, get information*) for the Control Group, ranged from 2.93 (*praise*) to 3.89 (*share intentions*) for Experimental Group 1 (SB), ranged from 2.69 (*praise*) to 3.93 (*not interrupting the teacher*) for Experimental Group 2 (MM) and ranged from 3.04 (*humorous*) to 3.73 (*get information*) for Experimental Group 3 (SBMM). The post-test mean scores ranged from 1.91 (*not interrupting the teacher*) to 3.09 (*get information*) for the Control Group, ranged from 2.64 (*praise*) to 4.04 (*not interrupting the teacher*) for Experimental Group 1 (SB), ranged from 2.80 (*verbal politeness*) to 4.44 (*not interrupting the teacher*) for Experimental Group 2 (MM) and ranged from 4.20 (*praise*) to 4.78 (*share intentions*) from Experimental Group 3 (SBMM). By comparing the pre-and post-tests, the mean difference scores for Control Group, Experimental Group 1, 2, and 3 ranged from -1.29 (*not interrupting the teacher*) to -0.27 (*speaks up*), -0.54 (*encouragement*) to 0.24 (*not criticism*), 0.15 (*praise*) to 0.75 (*humorous*) and 0.96 (*facial expression*) to 1.45 (*not criticism*) respectively.

Table 1  
*Pre- and post-tests mean, standard deviation, and mean difference for intrapersonal variables in Intrapersonal and Interpersonal Social Measurement Form for the Control Group, Experimental Group 1, Experimental Group 2, and Experimental Group 3*

Variable	IISMF											
	Control Group (n = 15)			Experimental Group 1 (n = 15)			Experimental Group 2 (n = 15)			Experimental Group 3 (n = 15)		
	Pre- test Mean (SD)	Post- test Mean (SD)	MD	Pre- test Mean (SD)	Post- test Mean (SD)	MD	Pre- test Mean (SD)	Post- test Mean (SD)	MD	Pre- test Mean (SD)	Post- test Mean (SD)	MD
Postural Attention	3.49 (0.69)	2.38 (0.68)	-1.11	3.89 (0.32)	3.69 (0.63)	-0.20	3.60 (0.75)	4.29 (0.66)	0.69	3.84 (0.80)	4.73 (0.45)	0.89
Movement	3.36 (0.61)	2.42 (0.75)	-0.94	3.91 (0.29)	3.69 (0.63)	-0.22	3.67 (0.83)	4.18 (0.75)	0.51	3.67 (1.00)	4.76 (0.43)	1.09
Interest and Confidence	3.40 (0.65)	2.42 (0.69)	-0.98	3.53 (0.66)	3.53 (0.55)	0.00	3.31 (1.00)	4.11 (0.80)	0.80	3.40 (0.96)	4.56 (0.76)	1.16
Understanding Problem	3.27 (0.91)	2.11 (0.78)	-1.16	3.56 (0.69)	3.53 (0.79)	-0.03	3.47 (0.97)	4.33 (0.64)	0.86	3.44 (0.97)	4.56 (0.89)	1.12
Same Manner	3.16 (0.67)	2.40 (0.78)	-0.76	3.69 (0.51)	3.53 (0.59)	-0.16	3.13 (0.94)	4.07 (0.78)	0.94	3.20 (0.84)	4.40 (0.99)	1.20
Follows Rule	3.11 (0.88)	2.00 (0.90)	-1.11	3.64 (0.53)	3.80 (0.81)	0.16	3.69 (0.73)	4.20 (0.76)	0.51	3.58 (0.92)	4.51 (0.84)	0.93
Concentrations	3.16 (0.60)	2.04 (0.82)	-1.12	3.62 (0.61)	3.76 (0.83)	0.14	3.80 (0.63)	4.29 (0.51)	0.49	3.91 (0.90)	4.73 (0.50)	0.82

Table 1 (Continue)

IISMF												
Variable	Control Group (n = 15)			Experimental Group 1 (n = 15)			Experimental Group 2 (n = 15)			Experimental Group 3 (n = 15)		
	Pre-test Mean (SD)	Post-test Mean (SD)	MD	Pre-test Mean (SD)	Post-test Mean (SD)	MD	Pre-test Mean (SD)	Post-test Mean (SD)	MD	Pre-test Mean (SD)	Post-test Mean (SD)	MD
Calm	3.02 (0.75)	2.24 (0.83)	-0.78	3.31 (0.70)	3.80 (0.76)	0.49	3.64 (0.57)	4.09 (0.73)	0.45	3.80 (0.97)	4.76 (0.48)	0.96
Self-restraint	2.98 (0.92)	2.51 (0.82)	-0.47	3.44 (0.69)	3.69 (0.950)	0.25	3.82 (0.98)	3.56 (0.99)	-0.26	3.40 (0.78)	3.82 (0.96)	0.42
Not prompted	3.29 (0.97)	2.38 (0.98)	-0.91	3.40 (0.86)	3.64 (0.77)	0.24	3.27 (0.99)	4.04 (0.80)	0.77	3.53 (0.97)	4.44 (0.89)	0.91
Temper Control	3.29 (0.79)	2.33 (0.90)	-0.96	3.64 (0.65)	3.87 (0.69)	0.23	3.67 (0.64)	4.18 (0.53)	0.51	3.80 (0.99)	4.76 (0.48)	0.96
Distress	3.13 (0.84)	2.16 (1.00)	-0.97	3.56 (0.69)	3.87 (0.69)	0.31	3.60 (0.62)	4.16 (0.56)	0.56	3.56 (0.99)	4.78 (0.42)	1.22
Not Paranoid	3.27 (0.81)	2.16 (1.00)	-1.11	3.64 (0.61)	3.89 (0.68)	0.25	3.62 (0.65)	4.20 (0.59)	0.58	3.71 (0.99)	4.78 (0.42)	1.07
Self- Reflection	3.18 (0.78)	2.24 (0.93)	-0.94	3.73 (0.50)	3.93 (0.62)	0.20	3.42 (0.69)	4.00 (0.71)	0.58	3.80 (0.94)	4.69 (0.51)	0.89



Table 1 (Continue)

IISMF												
Variable	Control Group (n = 15)			Experimental Group 1 (n = 15)			Experimental Group 2 (n = 15)			Experimental Group 3 (n = 15)		
	Pre-test	Mean (SD)	Post-test	Pre-test	Mean (SD)	Post-test	Pre-test	Mean (SD)	Post-test	Pre-test	Mean (SD)	Post-test
Beliefs	3.36 (0.71)	2.56 (0.94)	-0.80	3.78 (0.42)	3.84 (0.64)	0.06	3.62 (0.61)	4.16 (0.60)	0.54	3.73 (0.99)	4.67 (0.52)	0.94
Mean Difference Average		-0.94			0.11			0.57				0.97

Note. MD = Mean difference

Table 2

Pre- and post-test mean, standard deviation and mean difference for interpersonal variables in Intrapersonal and Interpersonal Social Measurement Form for Control Group, Experimental Group 1, Experimental Group 2 and Experimental Group 3

IISMF												
Variable	Control Group (n = 15)			Experimental Group 1 (n = 15)			Experimental Group 2 (n = 15)			Experimental Group 3 (n = 15)		
	Pre-test	Mean (SD)	Post-test	Pre-test	Mean (SD)	Post-test	Pre-test	Mean (SD)	Post-test	Pre-test	Mean (SD)	Post-test
Facial Expression	3.27 (0.69)	2.11 (0.88)	-1.16	3.60 (0.62)	3.47 (0.69)	-0.13	3.44 (0.87)	4.07 (0.45)	0.63	3.51 (0.94)	4.47 (0.66)	0.96

Table 2 (Continue)

IISMF												
Variable	Control Group (n = 15)			Experimental Group 1 (n = 15)			Experimental Group 2 (n = 15)			Experimental Group 3 (n = 15)		
	Pre- test Mean (SD)	Post- test Mean (SD)	MD	Pre- test Mean (SD)	Post- test Mean (SD)	MD	Pre- test Mean (SD)	Post- test Mean (SD)	MD	Pre- test Mean (SD)	Post- test Mean (SD)	MD
Not Interrupting (Teacher)	3.20 (0.73)	1.91 (0.90)	-1.29	3.87 (0.340)	4.04 (0.56)	0.17	3.93 (0.86)	4.44 (0.50)	0.51	3.56 (0.97)	4.60 (0.54)	1.04
Share Intentions	3.40 (0.72)	2.64 (0.98)	-0.76	3.89 (0.32)	3.64 (0.530)	-0.25	3.58 (0.72)	4.24 (0.53)	0.66	3.67 (0.98)	4.78 (0.42)	1.11
Enjoy	3.44 (0.66)	2.78 (1.02)	-0.66	3.42 (0.58)	3.11 (0.86)	-0.31	3.33 (1.00)	3.80 (0.73)	0.47	3.29 (0.94)	4.53 (0.76)	1.24
Encouragement	3.09 (0.67)	2.42 (0.87)	-0.67	3.47 (0.55)	2.93 (0.75)	-0.54	3.31 (0.95)	3.58 (0.87)	0.27	3.40 (0.94)	4.58 (0.75)	1.18
Get Information	3.44 (0.55)	3.09 (0.90)	-0.35	3.71 (0.55)	3.67 (0.67)	-0.04	3.80 (0.59)	4.29 (0.55)	0.49	3.73 (0.99)	4.71 (0.46)	0.98
Not Interrupting (Group Mate)	3.11 (0.75)	2.09 (0.95)	-1.02	3.69 (0.47)	3.89 (0.65)	0.20	3.80 (0.66)	4.33 (0.56)	0.53	3.38 (0.88)	4.56 (0.50)	1.18
Speaks Up	3.27 (0.58)	3.00 (0.98)	-0.27	3.36 (0.74)	2.89 (0.86)	-0.47	3.13 (0.94)	3.47 (0.97)	0.34	3.36 (0.98)	4.40 (0.89)	1.04
Compromises and cooperates	3.13 (0.76)	2.09 (0.95)	-1.04	3.36 (0.68)	3.29 (0.82)	-0.07	3.11 (0.78)	3.51 (0.87)	0.40	3.40 (0.91)	4.51 (0.92)	1.11

Table 2 (Continue)

IISMF												
Variable	Control Group (n = 15)			Experimental Group 1 (n = 15)			Experimental Group 2 (n = 15)			Experimental Group 3 (n = 15)		
	Pre- test	Post- test	MD	Pre- test	Post- test	MD	Pre- test	Post- test	MD	Pre- test	Post- test	MD
	Mean (SD)	Mean (SD)		Mean (SD)	Mean (SD)		Mean (SD)	Mean (SD)		Mean (SD)	Mean (SD)	
Offer helps	3.02 (0.940)	2.24 (1.00)	-0.78	3.33 (0.71)	3.36 (0.74)	0.03	3.13 (0.87)	3.53 (0.97)	0.40	3.33 (0.90)	4.47 (0.97)	1.14
Verbal Politeness	2.76 (0.65)	2.18 (0.75)	-0.58	2.96 (0.71)	2.76 (0.77)	-0.20	2.76 (0.91)	2.80 (0.97)	0.04	3.16 (0.74)	4.27 (0.75)	1.11
Praise	2.87 (0.76)	2.07 (0.89)	-0.80	2.93 (0.75)	2.64 (0.80)	-0.29	2.69 (1.00)	2.84 (0.95)	0.15	3.16 (0.67)	4.20 (0.79)	1.04
Not Criticise	3.31 (0.76)	2.31 (0.97)	-1.00	3.67 (0.52)	3.91 (0.76)	0.24	3.87 (0.73)	4.24 (0.61)	0.37	3.31 (0.97)	4.76 (0.43)	1.45
Show Empathy	2.93 (0.72)	2.27 (0.89)	-0.66	3.47 (0.59)	3.33 (0.74)	-0.14	2.82 (0.86)	3.49 (0.92)	0.67	3.22 (0.97)	4.49 (0.63)	1.27
Humorous	3.18 (0.65)	2.56 (0.97)	-0.62	3.38 (0.58)	3.29 (0.87)	-0.09	2.96 (0.98)	3.71 (0.79)	0.75	3.04 (0.95)	4.40 (0.89)	1.36
Mean Difference Average			-0.78			-0.12			0.45			1.15

Note. MD = Mean difference

The results (Table 2) show higher mean values and mean differences for the song-based MM intervention (Experimental Group 3) higher than the Control Group, SB intervention (Experimental Group 1) and MM intervention (Experimental Group 2) with regard to the interpersonal variables for IISMF.

**Inferential Statistics**

The one-way ANOVA test was conducted to compare the intrapersonal skills among elementary-age children after they were

exposed to different interventions. The null hypothesis of this study was that there would be no statistically significant difference in the intrapersonal skills among participants regardless of different assigned groups. Table 3 shows that the calculations among these four groups have proven significantly different,  $F(3,56) = 86.031, p < 0.001$ . Following this lead, the null hypothesis was rejected as the SBMM intervention on intrapersonal skills contributed a significant effect.

Table 3  
*One-way ANOVA analysis for the effect of song-based music and movement intervention on intrapersonal skills*

	ANOVA				
	Sum of Squares	df	Mean Square	F	p
Between Group	30.157	3	10.052	86.031	<0.001
Within Group	6.543	56	0.117		
Total	36.700	59			

Table 4 displays the pre-and post-test mean scores for social skills achievement of intrapersonal variables for one control group and three experimental groups. The SBMM intervention (M = 0.968, SD = 0.244) scored the highest, followed by MM (M = 0.542, SD = 0.493), SB (M = 0.113, SD = 0.213) and control group (M = -0.940, SD = 0.346). Notwithstanding the SB intervention (Experimental Group 1), MM intervention (Experimental Group 2) and SBMM intervention (Experimental Group 3) have significantly improved the intrapersonal variables; it was; however, the SBMM achieved the highest mean

difference among the three experimental groups. Therefore, the SBMM intervention instilled significant improvement in the intrapersonal dimensions of social skills.

For the interpersonal skills, the one-way ANOVA test was conducted similarly among the elementary-age children after exposure to different interventions. The null hypothesis of this study was that there would be no statistically significant difference in the interpersonal skills among participants exposed to no treatment, SB intervention, MM intervention, and SBMM intervention. Table 5 depicts the calculations among these four groups with significantly

different variables with  $F(3,56) = 123.578$ ,  $p < 0.001$ . The null hypothesis was then rejected as there was indeed a significant effect resulting from SBMM intervention on interpersonal skills.

Table 4  
*Descriptive analysis for the effect of song-based music and movement intervention on intrapersonal skills*

Descriptive			
Group	Mean	SD	n
Control Group	-0.940	0.346	15
Song-based Music and Movement	0.113	0.213	15
Song-based Music and Movement	0.542	0.493	15
Song-based Music and Movement	0.968	0.244	15

Table 5  
*One-way ANOVA analysis for the effect of song-based music and movement intervention on interpersonal skills*

ANOVA					
	Sum of Squares	df	Mean Square	F	p
Between Group	30.141	3	10.047	123.578	<0.001
Within Group	4.553	56	0.081		
Total	34.694	59			

Table 6 displays the pre and post-test mean scores for social skills achievement for both the pre-and post-tests of interpersonal variables for a control group and three experimental groups. Again, a similar trend was observed that showed the SBMM intervention ( $M = 1.146$ ,  $SD = 0.335$ ) scored the highest, followed by MM ( $M = 0.445$ ,  $SD = 0.318$ ), SB ( $M = -0.122$ ,  $SD = 0.212$ ) and control group ( $M = -0.777$ ,  $SD = 0.258$ ). The SBMM intervention has once again achieved the highest mean difference among the three experimental groups and could significantly improve the interpersonal dimensions of social skills.

The descriptive and inferential analysis revealed that the SBMM intervention could be employed as an educational tool to achieve the highest performance compared to the three interventions in developing elementary-age children's social skills.

## DISCUSSION

The following conclusions were derived from this study on the effectiveness of SBMM intervention for social skills development among elementary-age children (aged 7–9 years). Although the SB intervention groups had shown improvement, the SBMM intervention scored significantly highest

Table 6  
*Descriptive analysis for the effect of song-based music and movement intervention on interpersonal skills*

Group	Descriptive		
	Mean	SD	n
Control Group	-0.777	0.258	15
Song-based	-0.122	0.212	15
Music and Movement	0.445	0.318	15
Song-based Music and Movement	1.146	0.335	15

among the four groups. As such, the results revealed that the SBMM intervention was more effective when compared across all the interventions in improving children's intrapersonal and interpersonal skills.

The SBMM intervention involved group music activities such as role-playing, dancing, group discussions, and games that provided opportunities for the children to practice their social skills. Meanwhile, the MM intervention encouraged children to take part in musical activities but without learning, just to sing the song. Singing can effectively improve children's social skills. Nurgiyantoro (2005a) identified that singing promotes happiness, encourages children to relieve stress and motivates them to practice communication with their peers. Kristyana and Suharto (2014) stated that a song is a communication form that includes two patterns of expression, which are musical expression and linguistic expression. Nevertheless, children exposed to MM intervention would have limited opportunities to practice their language during the intervention. The SB intervention taught children to recognise new vocabulary but did not provide them with opportunities to practice these through communication

with their peers. The children who underwent the SB intervention might have learned the specific vocabulary, but they would end up with a lack of opportunity to practice the skill in the real world. In a more effective approach, the SBMM intervention involved various tasks that required students to compromise, communicate, and collaborate with peers. Children were encouraged to exchange ideas, be good listeners and be more considerate to accept others while participating in the group tasks.

The results of the study supported Halverson's (2018) proposal that social skills are easier to activate through interaction with peers. The group discussion does not involve advanced language skills, and children of lower language proficiency can still participate in the basic discussion and easily take part in the learning process through communication with their peers. In this connection, the children can enhance their social skills through the gained experiences as they learn from others' strengths and weaknesses while participating in group tasks. This approach can serve as an effective education tool for teachers to build the children's confidence in communication and improve their language proficiency.

According to Kivunja (2014), it is wise for children to accept mistakes with an open heart in the progress of fulfilling a given task. Although success brings confidence and motivation, failure allows children to learn and prevent them from committing similar mistakes in the future. Undoubtedly, children can memorise better the learning content through real-life communication. Compared to the SB intervention participants, the participants exposed to the SBMM intervention could experience the real-world learning environment when applying their knowledge. They learned through their failures and experiences, which are in line with the engagement with 21<sup>st</sup>-century skills. On the contrary, in the song-based intervention, children only engaged in one-way learning, whereby they were taught to sing the song through imitation. In this context, although the children could memorise the tune and lyrics of the song, they might have been left uncertain of how to utilise the appropriate vocabulary with correct grammar in real-life communication.

The SBMM intervention utilised a child-centred approach comprising various curricula and devices integrated with games, singing, chanting, playing unpitched percussions, and role-playing. Children were trained to enhance their social skills through body movement and creative musical activities. The results of this study supported the proposal of Evans (1972) that movement is the main vehicle for young children to explore and learn their new world. Music and movement were utilised to teach the

young children to engage with musical learning, as well as pique the children's interest in discovering new knowledge and practising new skills. According to Edwards (2013), music and movement activities can contribute to children's growth and development by enhancing different skills such as linguistic, listening, and social skills. Accordingly, compared to the song-based intervention, the song-based music and movement intervention was more effective as it provided greater opportunities for the children to practice and enhance their social skills. The approach is also substantiated by Rabinowitch (2020), who claimed that performing music in a group can promote different degrees of interaction. In this case, music serves as a flexible channel to allow the learners to participate in formal (i.e., choir and orchestra) or informal settings (i.e., play-based musical activities and jamming) of the learning process.

Both 21<sup>st</sup>-century skills and the SBMM intervention applied here share the same ideology and concept in the learner-centred approach. The 21<sup>st</sup>-century learning skills were categorised into communication, collaboration, creativity, and critical thinking, i.e., the 'four Cs' skills that mainly focus on how learners can engage with new knowledge (Erdogan, 2019). Riggio and Reichard (2008) concluded that social skills encompass a broad range of skills that require thought and appropriate reactions to manage specific social situations. They listed three dimensions of social skills, including expressiveness, sensitivity and control. By developing these three dimensions,

learners can equip themselves well with effective communication and become mature and sophisticated listeners during social role-playing. According to Kivunja (2014), mastery of communication requires learners to interact effectively and establish appropriate behaviour with specific people. Further, Al-Mahrooqi (2012) noted how communication skill development can enable students to improve their confidence, earn respect and avoid recalcitrant behaviours during interactions. To achieve this, learners must develop appropriate manners and behaviour while interacting with others. In agreement with the literature, the results of this study showed that the song-based music and movement intervention provided opportunities for elementary school children to practice and enhance their social skills, which could serve as a base of cultivation towards 21<sup>st</sup>-century skills.

Trilling and Fadel (2009) emphasised the importance of collaborative learning that advocates group work. Through collaborative learning, students were taught to contribute different fields of knowledge, skills, and abilities to a group. In this regard, social skills were indeed directly practised in a collaborative manner, whereby the learners practised their communication skills with peers to solve a problem. In another research, Argyris (2017) stressed how social skills can guide learners to develop interpersonal skills while they work in a group. By developing social skills, individuals could develop self-awareness and self-reflection while working with others in problem-solving. Similarly, in the present study, the song-based music

and movement intervention involved a wide variety of task groups to develop the collaborative skills of the participants.

Mahpudz and colleagues (2020) denoted that the 21<sup>st</sup>-century skillset requires learners to develop social skills that include communication and collaboration. Learners should be encouraged to make new friends and communicate effectively with one another, regardless of their cultural background or ethnicity, which encourages students to develop positive attitudes and behaviours while working with their peers. Students should also be encouraged to think outside the box, imagine conducive scenarios and produce new ideas to promote creativity. Beyond this, critical thinking allows learners to assess, judge, and analyse the value of information, identify problems and make reasonable decisions (Erdogan, 2019). Critical thinking and creativity require learners to pitch in by brainstorming and creating new ideas, which is closely associated with the well-being of their social skills. Previous researchers agreed that social skills underpin communication and collaboration, the key concepts and ideas among 21<sup>st</sup>-century skills (Alismail & McGuire, 2015; Laal et al., 2012). Both these elements make learners confident and dare to compete in the real world. With that in mind, to conclude, the findings of this study indicate that the song-based music and movement intervention can significantly improve elementary-age children's social skills, which are pivotal and directly related to 21<sup>st</sup>-century skills.



## CONCLUSION

The results of this study indicated that the implementation of song-based music and movement (SBMM) can be an effective tool in educating elementary-age children. Traditional teaching approaches delivered by music educators are mostly focusing on teacher-centred delivery methods. On the contrary, the SBMM intervention that promotes a learner-centred approach can notably improve elementary school children's social skills. Educators must remain cognisant in cultivating elementary school children's social skills during their development stage. Enhancing their social skills plays a crucial part in preparing them to become all-rounded communicators.

In conclusion, children enjoy singing songs and innately respond to rhythms through body movements. It is evident from this study that children's social skills can be enhanced by participating in group music activities that include singing and movement. By creating engaging song-singing, music and movement activities, teachers develop children's social skills to be proficient communicators, which contributes to one of the main pillars of 21<sup>st</sup>-century skills.

## Recommendations for Future Research

The recommended teaching approach in this study, SBMM, may not be analogously suitable for children from different cultures and backgrounds. Future research is suggested to focus on examining the effectiveness of SBMM intervention across children in different classroom settings and

countries. Furthermore, this study involved a small sample of participants. Therefore, the intervention's effectiveness might not be generalisable to the population at large. Thus, future studies should include a larger number of study participants.

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## **Impact of Residents' Trust on Behavioral Intention to Use Social Media for E-Administration Services**

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### **ABSTRACT**

Trust is the fundamental matter that improves residents' willingness to utilize social media as a technology tool for e-administration facilities. Despite its significance in the e-administrative sector, there is a lack of empirical investigation on residents' trust in behavioral intention to use social media for e-administrative services. This study investigates the antecedents of residents' trust and its impact on their behavioral intention to use social media for e-administration services. An online survey platform was used to collect the data from Malaysian residents in Kuala Lumpur and Petaling Jaya area. Data were analyzed using the partial least square technique. The findings revealed that reliable information has a positive and highly significant influence on residents' trust, whereas attitude, subjective norms, and perceived privacy did not significantly affect residents' trust. The findings also indicated that residents' trust significantly impacts behavioral intention to use social media for e-administrative services. The findings have significant insight into the residents' trust and behavioral intention to use social media for e-administration facilities. The results of this research can help government associations and policymakers in the nation to adequately establish their systems in raising residents' trust, driving towards their engagement through information technology, particularly social media technology for e-administration services.

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### **INTRODUCTION**

Social media technology has offered the public service and platform to develop a new friendly structure for civil society. Social media refers to a part of Web 2.0 technology

described by user-selected content that can be participated in a social atmosphere (Alcaide-Muñoz et al., 2018). Social media applications are the most effective opportunities, such as knowledge sharing, relationships, and networking (Koranteng & Wiafe, 2019). Merriam-Webster (n.d.) stated that social media is a form of electronic communication through which users create online communities to share information, ideas, personal messages, and other content, such as videos. Statista (2021) reported that approximately 4.26 billion people were using online media around the world, a number expected to rise to almost 6.0 billion in 2027. The Malaysian social media statistics show that the percentage of internet users in 2018 was 87.4%, whereas the country's population was 28.7 million (Malaysian Communications and Multimedia Commission [MCMC], 2018). Additionally, the most popular social media platforms are Facebook and WhatsApp, whereas approximately 97.3% are using Facebook, and 98.1% have WhatsApp accounts for communication with each other (MCMC, 2018).

Social media platforms have been striving to establish new scopes for governments to cooperate and involve with residents and become more progressively as well as user-friendly as Picazo-Vela et al. (2016) analyzed those administrations across the world endeavor to use their possibilities to transform administrations' duties explicitly with making networking and expanding residents' engagement. E-administration sites depend on single-

direction collaboration; however, social media operates a crucial role in communication between administrators and residents (Abdulkareem et al., 2022; Hao et al., 2016; Zahid & Din, 2019). Social media offers a convenient technique for residents to get information, including communication, cooperation, sharing expression, and engaging with public organizations. These associations can bring the public area plan and give applicable data through social networking services, which are generally selected by residents as they do not have the facility to visit e-administration sites to get that data (Bonsón et al., 2012; Li & Shang 2020; Khan et al., 2021). Social media technology gives a modern way and systems for exchanging information via collaborative interaction among public administration and motivates residents' engagement in the administration's policymaking procedures. Although social media have many possible efforts in administration organizations, there is a lack of residents' involvement in applying online networking technology (Rahman et al., 2022a) for e-administration facilities, and yet it is an important issue (Aladalah et al., 2018; Azamela et al., 2022; Zahid et al., 2022).

Encouraging residents' engagement and developing a useful connection between administration and social media users, the trust issue is a fundamental measure to motivate residents' involvement (Alarabiat, 2016; Dwivedi et al., 2017; Li & Xue, 2021). There are some other scholars have identified that residents fear disclosing their private information to public organizations

because of the privacy risk issue on their information and it might be misused by the organization's personnel or informal another person (Beldad et al., 2012; Hossain & Adnan, 2021; Zeebaree et al., 2022). Alotaibi et al. (2016) stated that trust can be a crucial communication medium in social networking services in e-administration facilities. In developing countries, those residents who are used to connecting with weak administration facilities have to trust e-administration facilities if they decide to use them (Susanto & Aljoza, 2015). Siddique (2016) posited that residents' trust in e-administration can influence the performance of e-administration policy in the nation. The current study develops a resident's trust in social media for e-administration facilities.

The previous studies found that inhabitants' experience and trust were vital in using social media technology in administration services (Khan et al., 2021; Porumbescu, 2016; Zahid & Din, 2019). Few studies focused on the residents' trust in predicting the online networking sites for e-administration facilities (Khan et al., 2020). Some studies have carried out the effect of social media trust on residents' use of e-administration facilities (Park et al., 2015; Warren et al., 2014). Alzahrani et al. (2018) found that residents' trust significantly influences their willingness to continue using e-administration services in Saudi Arabia. Similarly, a study conducted by Zahid et al. (2022) and their outcomes revealed that residents' trust in e-administration facilities in Pakistan was affected by four elements,

namely trust, attitude, subjective norms, and perceived behavioral control. Trust is critical for residents' acknowledgment of e-administration in different geographical areas. Hence, trust is a new empirical investigation in the Malaysian context because there is no empirical examination of residents' trust in social networking sites in e-administration services. The current study investigates residents' attitudes, subjective norms, perceived privacy, and reliable information as significant factors that impact their trust in behavioral intention to use social media for e-administration services.

## LITERATURE REVIEW

This study employed Technology Acceptance Model (TAM) and Theory of Planned Behavior (TPB) to examine the residents' behavioral intention to use e-administrative services. TAM is the most commonly used for adopting technology for e-administration services (Wu & Chen, 2017). For instance, Alzahrani et al. (2018) considered applying the TAM model the best fit for e-administration services. Similarly, Husin et al. (2017) examined e-administration services in Malaysia by applying the TAM model. Thus, this study used the concept of the TAM model to evaluate the use of e-administrative services. In addition, TPB is used to measure the residents' attitudes, subjective norms, perceived privacy, and reliable information regarding their level of trust for intention to use e-administrative services.

According to Ajzen (1991), users' behavioral intention dependably forecasts

whether or not an individual may involve in the behavior. Several studies used the TPB to assist in describing the psychosocial constructs which predict individuals' trust in social media as a publicity tool to exchange content, newspapers reading, watch events, attend events, and use services. TPB is used in empirical research to examine the users' choice to deliver information when buying online products and services properly (Kim et al., 2018). In line with this, this study measures the determinants of residents' trust and their behavioral intention to use social media for e-administration services.

Attitude implies the apparent look of likable or dislikable behavior with a positive or negative sense about the completion of an action (Ajzen & Fishbein, 1980; Hoque et al., 2022). When a person performs a positive attitude toward social media technology, they are intended to reply with an affirmative approach. The previous studies indicated that there is a correlation between attitude and willingness to use social media, and such correlations have been examined in various frameworks for research, like the Theory of Planned Behavior (TPB) and the Technology Acceptance Model (TAM) (Bailey et al., 2018).

Many studies have revealed the direct influence of users' attitudes (Chen et al., 2022) regarding online social networking toward a willingness to utilize those social media applications. Alyoussef (2021) emphasized that during the outbreak of COVID-19, online technology has been supported for useful learning and capacity building resulting in students' attitude

towards technology motivated to continue to use online learning for their academic activities. Moreover, there are a large number of students confident in utilizing online learning technology for their academic curriculum, which may be flexible and easy for them, although some other students are less possibly to adopt the technology due to the difficulty of the learning strategy (Rezaei et al., 2020; Zhao et al., 2021;).

In using social media etiology in e-administrative services, trust is a crucial term and robust users' attitude that includes credibility and authenticity for the number of participants and online sources. Gefen et al. (2003) have provided proof of a positive connection between trust and rationale towards willingness to use social media, and it explicitly affects a user's decision to use a specific social networking application. Moreover, a study by Warner-Søderholm et al. (2018) investigated online communication, and their survey findings revealed that trust is the honesty of an internet-based stage that affects users' attitudes significantly towards online interactions. Several previous empirical findings have shown that antecedents factors of attitude such as perceived risk, security, accessibility, and operation anticipation significantly impact e-administration facilities which understand a personal belief adopting an e-administration system that can affect individual attitude and desire to utilize the e-government system (Verkijika & Wet, 2018; Zahid et al., 2022). Residents' trust can reflect their attitudes toward using social media technology. This study investigates



the impact of attitude on residents' trust towards their behavioral intention to use social media for e-administrative services.

Another potential behavioral issue is subjective norms. Venkatesh (1996) defines the subjective norms that an individual realizes pressure with the common idea that a large number of people should consider or not consider particular actions. In the context of the online community, this idea has been elucidated particularly as an assurance in information technology (Rahman et al. 2022b), and it is shown to be a crucial factor influencing the acceptance as well as utilization of information technology in numerous areas connected to information systems (Barki & Hartwick, 1994; Cooper & Zmud, 1990). Earlier investigations have shown that trust considerably influences the user's behavioral intention to use technology (Borhan et al., 2017; Kaur & Rampersad, 2018).

For instance, Hsiao and Yang (2010) noted that, in Taiwan, trust via subjective norms has a positive and indirect influence on the behavioral intention to use technology. From the Malaysian perspective, a study by Madha et al. (2016) investigated that users' have an indirect and positive effect on technological services. Additionally, Borhan et al. (2017) have shown that trust directly impacts subjective norms to use technological services. In terms of the e-administration system, some scholars have identified that utilizing the technology's subjective norms is a powerful forecaster of behavioral intention, and it also has a valid significant outcome about e-administration

facilities (Rana et al., 2015; Xie et al., 2017). Therefore, this study proposes a positive correlation between residents' behavioral perception of trust on behavioral intention to utilize online social networking for e-administration facilities.

Perceived privacy is residents' aspect about their capability to observe and manage the information, utilize, and use again of their data on an online platform. Khan et al. (2014) described that residents feared information when a third person used it without their knowledge. Residents are often worried about their privacy issues on online information or utilize e-administration services as they realize that their information might be disclosed, abused, or followed because of an invasion of privacy. In the aspect of e-administration sites, using social media technology, e-administration is quite a current trend that needs to increase privacy care among residents utilizing such facilities (Xin et al., 2013).

Moreover, Dwivedi et al. (2017) indicated a particularly detailed framework where they established the nine-research model in the context of information systems, and their outcome identified that the adoption of the e-administration system is affected by perceived privacy risk. The more power of privacy, the greater the residents' insights on trust in using social networking services. Thus, privacy concerns must be handled to improve residents' trust in e-administration facilities. The current investigation examines the perceived privacy impact on residents' trust in social networking services for e-administration facilities.

Reliable information implies information with admirable assurance. On social media, public administration posts much information regarding their facilities as well as other activities. Consequently, there needs to be trustworthy services that motivate residents to use such facilities. Additionally, the innovative social media technology in e-administration services also increases fears among residents. Thus, if the information is accurate and reliable, users are more frequently to believe virtual technology for e-administration facilities. According to Park et al. (2015), information on social networking services is one of the fundamental advantages users deem important. In an e-administration system, the reliability and quality of information have developed the trust and confidence of e-administration of users (Abdulkareem et al., 2022; Khan et al., 2021; Nulhusna et al., 2017). Therefore, worthy and better data may affect residents' trust in using online networking in e-administration facilities.

Regarding the use of online technology, trust has been deemed a key component, and according to earlier studies, trust is impacted by several issues (Shareef et al., 2020). Trust is the mechanism of interactions, care, and confidentiality of social networking users

Ayaburi and Treku (2020). Trust in online media is not between people; however, between groups of individuals who take part in the organization or individuals who need to find relevant information that is exact, helpful, and like the data got from different users or information makers. Abdulkareem and his colleagues (2022) investigated that while trust in e-administration completely mediates the link, the quality of e-administration is irrelevant to e-engagement. Based on the above explanation and justification, the current study aims to identify residents' trust towards behavioral intention to use social media for e-administration services (Figure 1). Thus, this study has proposed the following hypotheses:

- H1: Attitude and residents' trust have a substantial relation.
- H2: Subjective norms and residents' trust have a substantial relation.
- H3: Perceived privacy and residents' trust have a substantial relation.
- H4: Reliable information and residents' trust have a substantial relation.
- H5: Residents' trust and behavioral intention to use social media for e-administration services have a substantial relation.

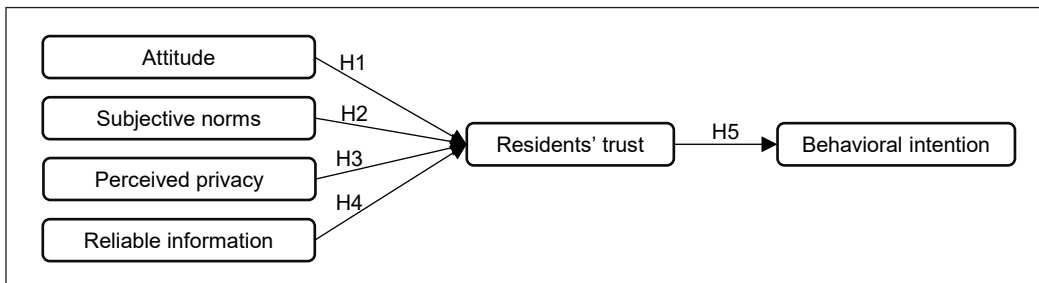


Figure 1. Conceptual model

## METHODS

### Data Collection and Sample Size

The current study applied the quantitative approach and designed the causal relationship among the constructs in the conceptual model. An online survey platform was used for distributing the questionnaire for collecting data. A self-administered questionnaire was employed to collect data from Malaysian residents, particularly Kuala Lumpur and Petaling Jaya areas. This research employed a probability sampling method. In 2022, Kuala Lumpur boasted a total population of 8,420,000 residents, as reported on [www.mbpj.gov.my](http://www.mbpj.gov.my). Simultaneously, Petaling Jaya recorded 613,977 residents. Consequently, the study's target population included the residents of Malaysia, with a specific focus on the Kuala Lumpur and Petaling Jaya districts.

Before collecting the data, the researchers carried out the pilot test from the 30 responses; the participants were 18 to 60. Browne (1995) recommended that for the pre-test or pilot study, the minimum sample size should be 30 subjects for an 80% upper confidence limit (UCL), whereas Kieser and Wassmer (1996) suggested a minimum sample size range should be 20 to 40. Thus, the current research has taken 30 respondents to evaluate the pilot test. The pilot test result was identified using Cronbach's alpha value of each construct greater than 0.70 (Hair et al., 2021), and UCL was approximately 86.5%. The pilot test was conducted between April and May 2021. Subsequently, senior academic experts have been employed to assess the

design of questionnaires for content validity to conduct the pilot study. Thereafter, bit amendment, revision, and change have been done in all measurement items. Experts have made their assessment for questionnaires in three aspects.

Firstly, the objective of the statement clearly defined the purpose of the current research. Secondly, sociodemographic questionnaires, and lastly, improving and redesigning the items of the variables. The original survey was carried out during June and August 2021 for three months. The survey questionnaire was in English as the respondents' minimum education level was SMP/Diploma degree who can answer the questions. Through Google Survey, study questionnaires are developed, and an online survey tool is transmitted via electronic devices such as social networking platforms, email, WhatsApp, and Facebook Messenger. The online survey is available as well as accessible to friends, family, relatives, colleagues, websites, and virtual platforms. Before participating in the online survey, we prepared a cover letter for participants where the study's objective is clearly stated and, in any issue, respondents can directly contact the researcher through their email address and mobile number.

Questionnaires were provided among Malaysian residents, especially Kuala Lumpur and Petaling Jaya residents. Participants willingly and gladly engaged in this survey because it was self-administrated, and there was no reward to complete the survey. A total of 400 survey questionnaires were distributed among respondents via online communication (social networking

platforms, email, WhatsApp, and Facebook messenger) and received 211 responses, with 199 responses deemed valid by removing 12 incomplete responses due to missing values and outliers. The respondent's rate represents 49.75%. According to Cohen (1988), the reliability of the sample is determined by the sample size, which acts as one of the criteria to assess the experiment's accuracy.

To determine whether the quantity of feedback is sufficient to continue with our investigation, a power analysis was done using the statistical program G\*Power. The results reveal that this study needs four predictors for at least 129 sample sizes. The results also indicate that the significant value of 0.05 was 0.95, higher than 0.80, which meant an appropriate level of sample power in this investigation (Chin, 2001). While 129 elements were needed to ensure the statistical power of the model, the current study collected data 199, which provides the model with greater consistency and reliability (Ringle et al., 2014).

### **Measurement Instruments**

The conceptual framework of this research consists of six variables. All measurement items were improved and adapted from prior literature, and based on the study-related review of the literature, we have revised as well as modified the measurement items for the study. Each item was measured using a 5-point Likert scale ranging from strongly disagree (1) to strongly agree (5). As an attitude measurement, five items were adapted from Taylor and Todd (1995) and

Hu et al. (2019). Likewise, five questions were adapted to measure subjective norms by Taylor and Todd (1995). Five items from Colesca et al. (2009) and Susanto et al. (2013) were modified to measure perceived privacy. Five items from Teo et al. (2008) and Chen et al. (2015) were modified to evaluate reliable information. Based on Teo et al. (2008) and Colesca et al. (2009), five items were adopted to evaluate the residents' trust. Similarly, five questions were adapted from Teo et al. (2008) to measure behavioral intention to use social media for e-administration services.

### **Data Analysis Tool**

In this research, the proposed hypotheses will be empirically tested by using SmartPLS 3.3.2. statistical software. The reason behind using SmartPLS is that it gives better results and deals better with simple as well as complex or large research models, and there is no requirement for normality tests also (Hair et al., 2021). This research aims to examine the factors that affect residents' trust; thus, PLS-SEM should be utilized properly. This work's PLS-SEM incorporates two analytical levels: the reflective measurement and the structural models.

## **FINDINGS**

### **Sociodemographic Information**

The findings revealed 52.8% female respondents and 46.7% male respondents. The respondents' age stands out at 65.3% from the age group of 41–50, 18.1% from 31–40, and 15.6% from the age

group of 51–60 (Table 1). In education circumstances, Diploma made up the majority of respondents (49.7%), followed by Bachelor's (18.1%), High school (16.1%), Master's/MPhil (10.6%), and Ph.D. (5.5). The majority of respondents' occupations were unemployed (38.7%). In terms of social media use experiences, respondents reported that most of the social media use experiences were 73.4%.

### Measurement Model Assessment

This study evaluated the internal consistency using the outer loadings test. Most outer loadings reached the recommended value of 0.70 (Hair et al., 2016). However, the low factor loadings were removed (AT1, AT2, SN1, SN2, PR1, RI1, RI2, and

TR4) (Table 2). In this study, the factor loading of less than 0.60 was dropped to achieve composite reliability (CR) (Hair et al., 2016). The reason behind omitting lower factor loadings (<0.60) is that these indicators recommend that they must be deleted in line with composite reliability (CR) and average variance extracted (AVE) values (Hair et al., 2016; Sarstedt et al., 2017). Table 2 shows the outer loading of the measurement items.

Next, convergent and discriminant validity are applied to calculate the measurement model's performance. The degree to which the indicators of a certain construct share or unite in terms of common variance is known as convergent validity. It calculates how well the model represents the

Table 1  
*Demographic statistics*

Items	Demographics	Sample	%
Gender	Male	94	46.6
	Female	105	52.8
Age (years)	18–30	2	1.0
	31–40	36	18.1
	41–50	130	65.3
	51–60	31	15.6
Education	SPM	32	16.1
	Diploma	99	49.7
	Bachelor	36	18.1
	Master/MPhil	21	10.6
	Ph.D.	11	5.5
Occupation	Private sector employment	55	27.1
	Public sector employment	26	13.1
	Unemployment	77	38.7
	Students	39	19.6
	Retiree	2	1.0
Social media use experiences	1–5 years	41	20.6
	6–10 years	146	73.4
	11–20 years	12	6.0
	20–30 years	8	4.3
	None	2	1.0

Table 2  
*Outer loading values*

No	Items of the construct	Outer loading
AT3	Using e-administration services is a wise idea	0.859
AT4	My experience with e-administration services is great	0.952
AT5	I think it is very convenient to check information using an e-administration service anytime and anywhere	0.850
SN3	Individuals who impact my behavior might feel that I must utilize the e-administration facilities	0.784
SN4	Individuals who are crucial to me might feel that I must utilize the e-administration facilities	0.869
SN5	Individuals who are crucial to me suggest or inspire me to utilize online social networking instruments	0.869
PR2	Public internet sites might permit a different party entry to my data without my permission	0.832
PR3	My private information might be used accidentally by the public authority office	0.886
PR4	Government organizations on social media might permit a different party to enter my private information without my permission	0.833
PR5	My private information might be used accidentally by the public authority office on social media	0.759
RI3	I am confident that the data given by government associations via social media will address my issues	0.731
RI4	The data provided by public associations via online media is related	0.900
RI5	The data provided by public associations via online media is straightforward	0.861
TR1	I expect that e-administration services will not take advantage of me	0.760
TR2	I believe that e-administration services will not act in a way that harms me	0.890
TR3	I trust e-administration services	0.899
TR5	I am confident in utilizing online social networking sites for public facilities	0.854
ITU1	I wish to keep on utilizing e-administration facilities instead of stopping utilizing them	0.815
ITU2	My wish is to keep utilizing e-administration facilities instead of utilizing different ways, such as disconnected communication with the public authority corporation	0.788
ITU3	I may not stop utilizing e-administration facilities	0.791
ITU4	I want to use the service provided by the government	0.832
ITU5	I want to use an e-administration service to connect information	0.795

*Note.* AT = attitude; SN = subjective norms, PR = perceived privacy; RI = reliable information; TR = residents' trust; and BITU = behavioral intention to use social media for e-administration services

same idea (Sarstedt et al., 2017). According to Hair et al. (2017), to evaluate the convergent validity, the composite reliability (CR) and average variance extracted (AVE) were calculated. Hair et al. (2017) suggested that the CR and AVE scores are larger than the minimum acceptable points of 0.70 and

0.50, respectively (Table 3). It demonstrates the constructs' consistency and validity via convergence.

The second method for evaluating reflective models is to verify the discriminant validity. It is implied the difference in the reflective instrument

of distinct constructions. The variance involved with other latent variables has to be greater than the variance involved with the latent variable and its indications, which is an essential precondition for discriminant validity (Hulland, 1999). Three methods were applied to test the discriminating validity. First, according to Fornell and Larcker (1981), “the average variance between individual buildings and their measurements should be bigger than the difference between the structure and the other buildings.” The results showed that all buildings obtained satisfactory “discriminative validity,” as the AVE square root (diagonal) is larger than the (off-diagonal) correlations for all structures (Table 4). The off diagonals are the links,

while the parallel lines represent the inverse of the square root of the AVE.

Next, the discriminating validity of the model is tested by corresponding “cross-loading” between variables (Table 5). It is important to observe that each indicator has a significant load on its structure but a modest burden on the other structures (Hair et al., 2016).

The results demonstrate that loadings of all items in their constructions are higher than in other constructions, which proves that discriminatory validity is achieved.

Thirdly, a Heterotrait-Monotrait Ratio (HTMT) technique was used to analyze “discriminatory validity,” which Henseler et al. (2015) developed to assess. This technique indicates that all results exceeded the HTMT

Table 3  
*Convergent validity*

Variables	Cronbach's Alpha	rho A	Composite Reliability	AVE
Attitude	0.879	1.204	0.918	0.789
Subjective norms	0.807	0.865	0.879	0.709
Perceived privacy	0.848	0.876	0.897	0.686
Reliable information	0.782	0.825	0.872	0.695
Residents' trust	0.873	0.873	0.914	0.727
Behavioral intention to use social media for e-administration services	0.865	0.870	0.902	0.647

Table 4  
*Discriminant validity using Fornell–Larcker criterion*

Variables	(1)	(2)	(3)	(4)	(5)	(6)
Attitude (1)	0.888					
Intention to use e-administration services (2)	-0.129	0.804				
Perceived privacy (3)	-0.031	0	0.828			
Reliable information (4)	-0.117	0.470	0.048	0.834		
Residents' trust (5)	-0.103	0.421	0.11	0.75	0.853	
Subjective norms (6)	-0.065	-0.049	0.718	0.061	0.103	0.842

Note. AT = attitude; SN = subjective norms, PR = perceived privacy; RI = reliable information; TR = residents' trust; and BITU = behavioral intention to use social media for e-administration services

threshold (Gold et al., 2001; Henseler et al., 2015). HTMT thresholds vary from 0.00 to 1.00, and values over 0.90 indicate a lack of discriminating validity (Hair et al., 2017). The HTMT results derived from Smart-PLS 3.3.2 are shown in Table 6.

**Structural Model Assessment**

After evaluating the measurement model, this study examined the structural model to evaluate the hypothesis relationship among the constructs. It is essential at first to measure the collinearity issues;

Table 5  
Cross-loadings

	Attitude	Behavioral Intention	Perceived privacy	Reliable information	Residents' trust	Subjective norms
Item_AT3	0.859	-0.12	-0.006	-0.034	-0.056	0.049
Item_AT4	0.952	-0.143	-0.066	-0.149	-0.126	-0.123
Item_AT5	0.85	-0.052	0.04	-0.079	-0.052	-0.018
Item_ITU1	-0.06	0.815	-0.01	0.417	0.372	-0.013
Item_ITU2	-0.106	0.788	0.039	0.374	0.326	-0.045
Item_ITU3	-0.112	0.791	0.075	0.325	0.256	0.006
Item_ITU4	-0.115	0.832	-0.038	0.372	0.357	-0.085
Item_ITU5	-0.132	0.795	-0.042	0.387	0.358	-0.05
Item_PR2	0.029	0.025	0.832	0.008	0.079	0.714
Item_PR3	-0.061	0.018	0.886	0.035	0.112	0.605
Item_PR4	-0.069	-0.026	0.833	0.058	0.093	0.556
Item_PR5	0.025	-0.023	0.759	0.061	0.072	0.52
Item_RI3	-0.146	0.451	0.006	0.731	0.45	0.067
Item_RI4	-0.085	0.332	0.086	0.900	0.727	0.098
Item_RI5	-0.082	0.431	0.015	0.861	0.656	-0.009
Item_SN3	-0.028	-0.096	0.642	0.02	0.045	0.784
Item_SN4	-0.125	-0.068	0.693	0.015	0.09	0.869
Item_SN5	-0.007	0.004	0.531	0.098	0.105	0.869
Item_TR1	-0.081	0.448	0.073	0.617	0.76	0.115
Item_TR2	-0.095	0.354	0.088	0.579	0.89	0.087
Item_TR3	-0.099	0.282	0.153	0.62	0.899	0.142
Item_TR5	-0.076	0.340	0.065	0.72	0.854	0.012

Table 6  
Heterotrait–Monotrait ratio (HTMT)

	(1)	(2)	(3)	(4)	(5)	(6)
Attitude (1)						
Intention to use e-administration services (2)	0.143					
Perceived privacy (3)	0.077	0.067				
Reliable information (4)	0.127	0.585	0.081			
Residents' trust (5)	0.113	0.474	0.126	0.88		
Subjective norms (6)	0.127	0.098	0.889	0.09	0.117	



when the variance inflation factor (VIF) is five or lower, a collinearity problem may happen, as suggested by Hair et al. (2011), some scholars even say regarding the more stringent criteria on collinearity issue that if the VIF 3.3 or lower, there is collinearity problem may exist (Diamantopoulos & Sigouw, 2006). This research report revealed that all the inner VIFs for the independent variables were 1.018, 2.076, 2.068, and 1.017 for attitude, subjective norms, perceived privacy, and reliable information, which were all less than 5 and 3.3. It confirmed no collinearity issue exists in this research (Hair et al., 2010).

According to Table 7, the SmartPLS results reveal that the relative importance of the exogenous constructs of attitude, subjective norms, and perceived privacy does not support predicting the endogenous construct of residents' trust. The influence of attitude, subjective norms, and perceived privacy on residents' trust, this study shows that attitude ( $\beta = -0.013$ ,  $p$ -value  $< 0.804$ ), subjective norms ( $\beta = -0.007$ ,  $p$ -value  $<$

$0.906$ ), and perceived privacy ( $\beta = 0.068$ ,  $p$ -value  $< 0.335$ ) have negative significant effects on residents' trust. However, reliable information on residents' trust has found a significant positive impact ( $\beta = 0.745$ ,  $p$ -value  $< 0.000$ ); similarly, residents' trust in social media towards e-administration facilities shows a significant impact ( $\beta = 0.421$ ,  $p$ -value  $< 0.000$ ). It confirmed that reliable information is the most influential predictor of residents' trust. The amount of variance in the endogenous element justified by all the exogenous elements connected to it is indicated by the coefficient of tenacity  $R^2$ , which indicates the model's ability to forecast. The  $R^2$  of 0.56 indicates that attitude, subjective norms, perceived privacy, and reliable information can explain 56% of the total variation in residents' trust. Similarly, the  $R^2$  of 0.17 indicated that 17% of the total variation in behavioral intention to use social media for e-administration services could be explained by residents' trust.

The  $f^2$  values were calculated to determine the effect size of each variable

Table 7  
Path coefficients

No	Hypotheses	Coefficients	Std Error	t-value	p-values	$R^2$	$f^2$	$Q^2$	Decision
1	AT > TR	-0.013	0.052	0.249	0.804		0.027		Not supported
2	SN > TR	0.007	0.062	0.119	0.906	0.560	0.031	0.397	Not supported
3	PR-> TR	0.068	0.071	0.964	0.335		0.112		Not supported
4	RI > TR	0.745	0.039	19.018	0.000		0.261		Supported
5	TR > BITU	0.421	0.060	7.033	0.000	0.170	0.215	0.110	Supported

Note. AT = attitude; SN = subjective norms, PR = perceived privacy; RI = reliable information; TR = residents' trust; and BITU = behavioral intention to use social media for e-administration services

concerning the  $R^2$ . The f-square value of 0.35 reflects a high effect size, while 0.15 and 0.02 are considered for medium and small effect sizes (Cohen, 1988). Attitude  $f^2$  (0.027) implies a very weak effect of  $R^2$  on residents' trust (Table 7). The  $f^2$  of 0.031 for subjective norms has a small impact on the  $R^2$  for residents' trust. The  $f^2$  of 0.112 for perceived privacy nonetheless suggested that it had a moderate influence on residents' trust in the  $R^2$ , and the  $f^2$  of 0.261 for reliable information implies that it has a medium effect on residents' trust in the  $R^2$ . The  $f^2$  of 0.215 residents' trust indicated a medium effect on the  $R^2$  for social media utilization for e-administration facilities. At last, to assess the structural model, the PLS path model has been examined for prediction accuracy. Q-square is predictive relevance; it assesses whether or not a model is predictive (>0 is good). Q-square above zero values shows that the model is adequately rebuilt, and the model is predictive of usefulness (Fornell & Cha, 1993). As a general rule, values above zero imply that the predictive accuracy of the path model is fair (Sarstedt et al., 2017). Table 7 finally shows that  $Q^2$  values of 0.39 and 0.11 were higher than zero. Hence the model showed its predictive importance (Fornell & Cha, 1993).

## DISCUSSION

The current research aims to understand profoundly the effect of residents' trust in social media technology and residents' intention to use e-administration services. The study used empirical analysis to see how e-administration services influence

Malaysian residents via social networking technology. Based on their credibility perceptions, this study significantly assesses residents' behavioral intention to utilize online social networking for e-administrations facilities. Thus, the study has used one of the prominent technological acceptances TAM model and human behavior theory, to accept or use the technology called the Theory of Planned Behavior (TPB). Partial least square (PLS-SEM) has been applied to test the hypothetical relationships and to determine factors influencing residents' trust in social networking sites toward e-administration facilities. The value of path coefficients emphasized the power of these relationships. From the perspective of Malaysian residents, the relationships between residents' trust and e-administration services are addressed. The results show that reliable information has significantly influenced residents' trust in social media towards e-administration facilities according to path testing (Table 7). This study also showed that reliable information has a greater impact on residents' trust in behavioral intention to use e-administration facilities. Social media users may share their information, photos, news, and site locations. When users perceive the negative sense of their information that is not appropriately managed, they might not believe in using social networking applications.

The results also suggest that users' trust can be achieved by offering assurance as well as protection to the residents about the

veracity and authenticity of social networking sites to utilize e-administration services. As indicated by Xin et al. (2012), providing harmless behavior to the trustee parties can grow the trust level in technology, and ultimately this can increase the trust level that government administrations have to follow the legislation and regulatory framework. The findings also suggest that reliable information can improve the residents' trust in social media platforms for e-administration services. The finding is coherent with the previous results of Ponte et al. (2015), and they showed significant positive effects on trust in the use of travel networking sites. In terms of developing residents' trust, social media technology requires providing exact information, and deliver timely responses to their inquiries, and providing relevant, accurate, proper communication and search history, and more freely accessible information to achieve residents' trust in using e-administration facilities.

Users impact trust factors, the most significant concept in human interaction. In social media platforms, the rationale behind why trust is an important issue is because it is connected to the users' control, or they can realize the social media atmosphere and how they cooperate. This study also found that trust has been hypothesized as a significant factor in residents' behavioral intention to engage on social media to use e-administration services. The present research recommends that the more trust of residents, the more willing they are to utilize social media for e-administration facilities to

support the relationships between residents' trust and online social networking sites e-administration facilities. This finding is consistent with previous findings, such as Ramos et al. (2018), on the impact of residents' trust in m-banking services in Brazil. In the same vein, there is a positive significant influence on residents' trust in to use of e-administration services (Abu-Shanab, 2014). In another study, Farivar et al. (2017) identified that trust has been broadly investigated in the e-business atmosphere. Trust toward online social trade minimizes the possible hazard and expands willingness to buy (Farivar et al., 2017). Government organizations should develop online services based on information privacy protection and make more trustworthy services to improve residents' trust and influence their behavior to use different governmental services. In this regard, Khan et al. (2019) disputed that government services need to improve to make more users of their services. As a consequence, government associations should go to solid lengths to foster residents' trust in utilizing information technology, particularly online social networking platforms, for e-administration. As a result, it will empower them to collaborate with residents over interest and commitment.

The results also have found that attitude, subjective norms, and perceived privacy significantly negatively impact residents' trust in social media towards e-administration facilities. However, several studies previously found that users' trust positively affects attitudes toward

technology usage. For instance, Akinwale and Kyari (2020) showed positive significant effects on users' attitudes toward using Fintech services. Similarly, trust directly affects attitude to determine customer behavior in online services (Lien & Cao, 2014). The more positive a user's attitude, the more likely they will sustainably use a social media platform.

The current study has found that attitude has an insignificant effect on residents' trust in e-administration services. Very few studies found that attitude has an insignificant impact on technology, as Vasiljeva et al. (2021) found that while the majority of society has overcome the unfavorable mindset evident a few years ago, they still have a limited understanding of how to utilize technology. Kitsios and Kamariotou (2021), Cubric (2020), and Borges et al. (2020) have identified that there is still negative uncertainty and vagueness concerning the behavior of humans toward new technological breakthroughs that are disruptive. Underestimating residents' attitudes toward artificial intelligence, blockchain technology, and e-services could negatively affect any organization.

The study also identified the insignificant impact of subjective norms on residents' trust in social media toward e-administration facilities. This outcome is consistent with past investigations where researchers have shown subjective norms to have a very low effect on behavioral intention in their TPB models (Hsiao & Yang, 2010; Letirand & Delhomme, 2005). In the social media technology context, a few

researchers argued that subjective norms are not strong anticipation, which has a negative relationship with behavioral intention (Moan & Rise, 2011).

Thus, in the same vein, the study found an insignificant effect of subjective norms in online media technology for e-administration facilities. This study has found insignificant relationships between perceived privacy and residents' trust to use of social media for e-administration. Unlike earlier research, such as Maqableh et al. (2021) had shown that perceived privacy may not be a significant issue as used earlier to utilize the technology. Moreover, Kim et al. (2008) indicated that when users realized to use online banking facilities, they initially deemed privacy issues highly, and their trust levels did not grow equally to use online banking facilities. Therefore, increased perceived privacy does not impact residents' trust in social media for e-administration services.

## CONCLUSION

Social media technology can play a substantial role in building residents' trust in government organizations. The current study has provided some important implications for this research. Firstly, this study recommends a conceptual framework to assess the significant issues that affect residents' trust in using social media for e-administration facilities as the fundamental theoretical contribution of this research. The proposed conceptual framework has improved and adapted from the TPB model. The model has been successfully developed

to investigate the issues influencing residents' trust in social networking sites for e-administration facilities. After analyzing the data using SmartPLS software, the results of the structural model assessment indicate four important factors affecting residents' trust in e-administration, whereas reliable information has a positive influence on residents' trust in e-administration; however, attitude, subjective norms, and perceived privacy have a negative influence. In reporting the affirmative consequence of the issue in the recent review, the study also assists the negative influence based on previous studies' findings in Malaysia. In this research, the proposed model has notably reached a well-illustrative competency with a difference of 56% in trust to use social media for e-administration facilities, measured by the study dimensions. It might be clarified the considerable extent of a dependent variable's variance clarified by its predictor variables.

The research significantly contributes to the current insight into the association of trust in residents' willingness to use e-administration facilities. However, earlier research has identified the value of residents' trust in accepting the government's online services, but still, there are insufficient past studies on the issue of trust in forming residents' behavior to use e-administration facilities via online social technology. Digital technology can play a crucial role in e-administration services because digital technologies are user-friendly and reduce admin work from wasting plenty of time. The e-administrative service sector and

other business organizations can benefit greatly from using digital technology to handle the administrative workload more efficiently. Properly using digital technology can help the e-administrative sector work smarter instead of harder. With digital technology, administrative tasks can be under control; time is saved by office employees, managers, and other professionals involved. Digital technologies significantly impact e-administrative services as they reduce time spent processing and submitting tasks, free workers to focus on more important tasks, and minimize human error. In addition, digital technology can create consistency in delivering tasks and projects, as well as automate workflows to ensure deadlines for tasks.

The findings of this research have significant contributions to developing residents' trust and building their involvement in online networking-based e-administration services in Malaysia. According to World Bank (2021), as an upper-middle-income country, Malaysia is striving to issue a small degree of residents' trust and acknowledgment of e-administration facilities. The results of this research can help public associations and strategy authors in the nation to adequately situate their systems in raising residents' trust, driving towards their engagement through social networking platforms for e-administration facilities. Findings emphasize the requirement for public corporations to realize the significance of residents' trust as a fundamental perspective of their behavior on social

media technology in e-administration. It can empower policymakers to survey their strategies and develop the administration system by enhancing residents' trust in e-administration services. Additionally, the government needs to effectively prepare viable and helpful e-administration services for residents at all levels to encourage them to participate in the given applications.

Residents will not accept e-administration websites that are exceptionally complex with some unacceptable features and functionalities. Moreover, e-administration projects have to be accessible to advance a preliminary of the given applications. In the meantime, diverse free workshops and projects have to be coordinated to build the level of knowledge and capacity of under-special residents to utilize e-administration applications. More users' trust in the government will also build resident loyalty with e-government applications. Most of the time, it is essential for a government to inspire and motivate its users to use the applications. It is required to have active and cheerful support staff to remove anxiety about using the applications. With the technological development of Malaysian society, the government should focus on their e-administration systems appropriately and monitor the applications sincerely, particularly reliable information and privacy settings. Thus, residents might be more willing to adopt e-administration services daily.

The study has investigated factors that impact trust from the perspective of social media technology in e-administration

services. The proposed model in this study was developed based on the fundamental constructs of TPB as well as some exogenous factors based on a literature review to offer insight regarding the dimensions affecting residents' trust in social media in e-administration facilities. The model has been evaluated by applying SmartPLS software, and the results have been empirically validated in Malaysia. However, there are some limitations to this research. First, the present study has applied the quantitative method to justify the connection among variables in the model. Moreover, findings might be enhanced in the upcoming research via a qualitative method such as interviews, case studies, group discussions, and mixed-mode (both qualitative and quantitative) methods. The students, instructors, public employees, private employees, and information technology specialists must be integrated as respondents in future research. In the meantime, this study can be carried out in other developing nations to affirm the study model and its generalizability. It will give a good comprehension of determining residents' trust viewpoints to utilize social media in e-administration services.

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## **Pentafsiran Sosial Reka Bentuk Ruang Domestik di Lembah Kelang, Malaysia**

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### **ABSTRAK**

Artikel ini mengkaji corak ruang tempat tinggal golongan B40 di Lembah Klang bagi memahami makna sosial daripada reka bentuk ruang domestik. Kajian ini tertumpu kepada tafsiran hubungan ruang dari segi logik sosial untuk mengobjektifkan corak ruang yang subjektif dalam pembangunan ruang domestik. Berdasarkan kaedah matematik dalam teknik *space syntax*, makalah ini menganalisis struktur sosial ruang di dalam rumah tertentu yang disepadukan atau dipisahkan sebagai petunjuk kesibukan ataupun ketenangan ruangan yang bersambung dalam sistem ruang. Nilai integrasi ialah kunci dalam kajian ini bagi mentafsir ruang domestik dan untuk menunjukkan fungsi ruang domestik secara sosial di peringkat kolektif.

*Kata kunci:* Graf justifikasi akses, konfigurasi ruangan, ruang domestik, rumah B40, seni bina ruang, sintaks ruang

## ***Social Interpretation of Domestic Space Design in Klang Valley***

### **ABSTRACT**

*This article examines the pattern of space in which the B40 community lives in the Klang Valley to understand the social meaning of domestic space design. This study focuses on interpreting spatial relationships in terms of social logic to objectify the subjective spatial*

*patterns in the development of domestic space. Based on mathematical methods using the technique of spatial syntax, this paper analyzes the social structure of how the space in a particular house is integrated or separated, which is a strong predictor of how busy or quiet the connected spaces are in the spatial system. The value of*

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*integration is key in this study to interpret domestic space and to show how domestic space functions socially at the collective level.*

*Keywords: B40 housing, domestic space, justified permeability graph, space architecture, space syntax, spatial configuration*

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## PENDAHULUAN

Menempatkan perumahan kumpulan B40 di negara membangun merupakan cabaran yang dihadapi oleh pereka bentuk di seluruh dunia (Park, 2017; Trigueiro, 2015) sejak berakhirnya Perang Dunia Ke-2 (Petković, 2017; Susanto, 2020; Tosics, 1998). Cabaran ini khususnya berlaku di kawasan bandar yang mempunyai saiz populasi tidak kurang daripada 1 bilion pada tahun 1950 kepada hampir 5 bilion pada penghujung tahun 2030 (United Nation, 2019). Menjelang tahun 2030, sekitar 40% daripada populasi dunia memerlukan rumah (Kostourou, 2015). Di negara membangun, hampir 40% kumpulan isi rumah yang hidup di bandar merupakan masyarakat yang memperoleh pendapatan yang rendah (Hassan, 2022b; World Bank, 2016; Zainal et. al, 2012). Di Malaysia, Rancangan Fizikal Negara ke-3 (RFN-3) menasarkankan jumlah penduduk Malaysia berjumlah 46.1 juta pada tahun 2040, 85% dijangka tinggal di kawasan bandar berbanding 31.4 juta penduduk pada tahun 2015 (Rahman & Manaf, 2020).

Isu penyediaan perumahan bukan hanya terkait dengan isu-isu besar seperti hartanah, ekonomi, dan industri pembinaan. Ia juga melibatkan kepentingan

terhadap kesejahteraan penghuni yang bakal menduduki rumah yang akan disediakan (Oyebanji et al., 2017; Rasdi, 2007). Rancangan Malaysia Pertama 1950 dan Dasar Ekonomi Negara 1970–1990 menekankan kehidupan yang standard kepada rakyat yang tidak berkemampuan (Hassan & Mohd, 2007). Rumah yang baik mampu memberi kestabilan isi rumah, keadaan sosial, tahap kesihatan pengurangan kadar jenayah dan mengembangkan ciri-ciri masyarakat yang beradab (Shamsudin & Vale, 2017). Malah lebih membimbangkan kegagalan mencapai kualiti perumahan yang baik berupaya mempengaruhi masalah sosial seperti rasa terpinggir (Besar et al., 2018; Rashid & Samat 2018) dan masalah tingkah laku (Nilson et al 2017). Isu ini secara langsung terkait dengan isu reka bentuk ruang domestik yang memerlukan pereka bentuk menggunakan kebijaksanaanya dalam menggunakan pengetahuan mereka bagi menangani permasalahan tersebut (Seo, 2014).

Proses memahami reka bentuk berasaskan maksud sosial adalah dinamik (Luck, 2019; Yahya et al., 2022), jadi permasalahannya adalah untuk mengenal pasti corak sosial yang dipamerkan menerusi susun atur ruang yang membentuk sebuah bangunan. Hampir setiap tafsiran reka bentuk perlu melalui pendekatan-pendekatan tertentu seperti menggunakan pendekatan sejarah ataupun amalan berasaskan kajian reka bentuk (*practice-based design research*) bagi mendapatkan maklumat tersebut dan penyelidikan seni bina adalah sangat unik (Archer, 1979; Fraser, 2013). Oleh sebab



itu, kajian ini dijalankan bagi memahami simbolik corak ruang yang diamalkan oleh pereka bentuk dalam menyediakan perumahan golongan B40 (RB40). Kaedah *space syntax* (Hillier & Hanson, 1984) digunakan untuk tujuan ini.

Kaedah *space syntax* berupaya mengekstrak makna sosial yang terkandung dalam susun atur ruang yang terbina (Yahya et al., 2022). Kaedah ini berupaya meneroka gambaran kerumitan unit kediaman manusia dan menjelaskannya dalam bentuk rajah (Maina, 2014). Bentuk rajah tersebut membawa maklumat dalam bentuk grafik yang boleh diukur untuk kegunaan proses analisis statistik (Bellal, 2004). Kaedah ini mencadangkan bahawa berdasarkan susunan ruang dalam bangunan bagi mencipta rangkaian medan pertemuan, mempunyai kaitan secara logik tentang jenis rangkaian sosial; secara teorinya, dengan mengambil kira corak penstrukturan yang berbeza seperti perbezaan ruang untuk lelaki dan wanita atau tetamu dan tuan rumah (Hillier & Hanson, 1984). Apabila sejumlah rumah secara morfologinya mempamerkan kesamaan, maka rumah-rumah itu akan menggambarkan amalan kebudayaan yang telah dibentuk di dalam unit kediaman (Hanson, 1994).

Menurut Oswalt (2011, dipetik daripada Dovey, 1999), kaedah yang dikemukakan oleh teori *space syntax* memerlukan kefahaman yang tinggi kerana teori yang mendasari pembinaan Graf Justifikasi Akses (GJA) bukanlah sebuah graf yang mudah untuk difahami. Lebih-lebih lagi bukti yang dikemukakan dalam teori ini diterjemahkan ke dalam

bentuk jadual matematik yang kompleks yang terdedah dengan kritikan terhadap kepayahan teknikal. Walau bagaimanapun, menurut Nourian et al. (2022), menerusi teknik '*bubble diagram*' yang sering digunakan oleh pereka bentuk secara tradisinya dalam proses mereka bentuk, maklumat berajah *bubble diagram* yang telah dijustifikasikan menerusi GJA boleh membantu pereka bentuk untuk membuat keputusan pengubahsuaian idea semasa proses mereka bentuk. Secara literalnya, GJA ialah maklumat penting yang mencatat idea-idea baharu yang terbit adalah berkembang dari rujukan terdahulu. Menerusi GJA, pereka bentuk berupaya memilih ruang yang perlu diutamakan sewaktu mengatur semula fungsi ruang dalam organisasi ruang domestik, dan menganalisis percubaan reka bentuk berdasarkan terma pengukuran sintaktik.

Sebanyak 30 reka bentuk unit kediaman bagi perumahan golongan B40 di Lembah Klang digunakan bagi menyiasat corak ruang yang dipamerkan oleh reka bentuk tersebut. Penyiasatan corak ruang yang terkandung dalam setiap sampel akan diperhatikan bukan sahaja secara makro (reka bentuk ruang keseluruhan unit kediaman) tetapi secara mikro juga (setiap ruang seperti bilik tidur, dapur, ruang tamu, bilik air/jemuran dan ruang luaran). Dapatan kajian adalah deskriptif supaya hasil kajian ini dapat digunakan oleh penyelidik seterusnya bagi memilih pemboleh ubah yang akan ditentukan oleh mereka. Sehubungan itu, kajian ini cuba menyumbangkan pengetahuan baharu dalam mencadangkan

reka bentuk ruangan yang berasaskan takrif sosial yang dipamerkan menerusi corak ruang. Dapatan kajian ini dijangkakan akan memberi pengetahuan baharu kepada pereka bentuk dan pembuat dasar bahawa tipologi ruang domestik dapat berkembang seiring dengan kemajuan tipologi bentuk bangunan. Kajian ini juga cuba menggerakkan kajian lanjutan yang lebih komprehensif dan terperinci mengenai budaya huni di negara ini. Maklumat yang didapati daripada hasil kajian ini akan membantu pereka bentuk melakukan inovasi reka bentuk rumah B40 yang berkemajuan.

## **KAJIAN LITERATUR**

### **Kumpulan B40**

B40, M40 dan T20 merupakan kaedah yang mengukur agihan pendapatan penduduk (Hassan, 2022). Menurut Hamid (2020) pengelasan ini ialah kaedah ukuran relatif bagi memantau jurang pendapatan antara golongan miskin (B40), pertengahan (M40) dengan kaya (T20). Menurut Hassan (2022b), B40 merujuk kepada 40% isi rumah yang menerima pendapatan terendah, daripada 100% isi rumah. Oleh sebab itu, akan sentiasa ada 40% isi rumah berpendapatan rendah, 40% pertengahan dan 20% tertinggi. Oleh sebab Kumpulan B40 terdedah dengan kemiskinan, kumpulan tersebut diangkat untuk menerima bantuan daripada kerajaan seperti subsidi petrol dan kewangan. Antara ciri-ciri kumpulan ini ialah kemampuan berbelanja bagi memperoleh keperluan asas sahaja. Mereka hanya berbelanja bagi memperoleh sumber makanan, pakaian dan keperluan tempat tinggal (Son & Ismail,

2020). Malah menurut *United Nations International Children's Emergency Fund* (UNICEF) Malaysia, di kawasan Program Perumahan Rakyat (PPR) di Kuala Lumpur, walaupun dengan pelbagai program bantuan kerajaan, sekitar 42% golongan rentan berada dalam kemiskinan dan sekitar 61% ketua isi rumah wanita juga berada dalam kemiskinan (Hassan, 2022). Laporan Survei Pendapatan Isi Rumah dan Kemudahan Asas (Jabatan Perangkaan Malaysia, 2020) melaporkan, 40% isi rumah dalam kumpulan B40 adalah berkongsi pendapatan (16%) dengan kumpulan M40 dan kumpulan T20 pada tahun 2019 berbanding 16.4% pada tahun 2016 daripada jumlah pendapatan isi rumah di Malaysia. Pendapatan kumpulan B40 ini adalah kurang daripada RM4,850. Mereka secara umumnya tinggal di rumah yang dimiliki iaitu sebanyak 75.1%. Hanya 23.2% sahaja mendiami rumah yang disewa. Menariknya, apabila melihat secara terperinci, kumpulan B40 yang tinggal di Selangor dan Kuala Lumpur, peratusan yang tinggal di rumah jenis dimiliki dan disewa adalah seimbang.

### **Reka Bentuk Ruang Perumahan B40 dan Implikasi Sosial**

Keadaan perumahan merupakan salah satu komponen penting untuk mencapai kualiti rumah yang baik (Sani & Ghani, 2021). Walaupun perumahan untuk golongan B40 dikaitkan dengan perumahan kos rendah, mereka juga berhak mendapatkan kualiti perumahan (Yusof, 2012). Kualiti perumahan yang memenuhi keperluan penghuni dapat memberikan kesejahteraan kepada isi rumah (Besar et al., 2018). Menurut Sukimin (2008),

kualiti perumahan adalah penting terutama dalam memangkinkan persekitaran sosial kerana ia merupakan komponen kritikal yang menyumbang kepada kesejahteraan hidup. Menurut Ismail (2019), walaupun terdapat pelbagai rujukan untuk menyediakan perumahan yang baik dan berkualiti, namun tiada satu pentakrifan yang selaras daripada kaedah itu untuk dirujuk (Yahya et al., 2021). Di Malaysia, peraturan penyediaan perumahan hanya mengawal selia pembinaan perumahan baharu (Ismail, 2019). Oleh sebab itu, suatu piawaian yang berbeza perlu dibangunkan sebagai panduan kepada pemegang taruh dalam menyediakan stok perumahan yang sesuai untuk penghuninya. Kumpulan B40 juga berhak mendapatkan rumah yang berkualiti walaupun mereka tidak mempunyai sumber kewangan yang kukuh menurut Dasar Perumahan Negara, 2018–2025.

Reka bentuk ruang mampu memberi implikasi kepada corak sosial (Glaeser & Sacerdote, 2000). Sebagaimana kajian Goh dan Yahya (2011), walaupun keadaan rupa bentuk dapat diterima oleh penghuni tetapi dalam aspek keberkesanan ruang masih lagi tidak mencapai kepuasan penghuni. Penghuni dilihat gagal memahami fungsi ruang yang terbina yang disediakan untuk mereka huni (Yahya et al., 2021). Penghuni mentafsirkan fungsi ruang jemuran sebagai tempat memasak, koridor laluan awam sebagai tempat jemuran pakaian (Goh & Yahya, 2011). Begitu juga kajian daripada Jusan (2010) dan Mahdzar dan Yahya (2016) yang melaporkan terdapat penghuni mengubah suai reka bentuk ruang bagi memenuhi tuntutan kehidupan mereka.

Atas kekangan keluasan ruang yang diperuntukkan, reka bentuk ruang yang lemah akan meningkatkan kepadatan (Tang & You, 2010) seterusnya mengakibatkan kesesakan (Evans et al., 2003; Lester, 1995; Rustemli, 1992) kerana reka bentuk ruang yang tidak stabil berupaya menjanakan banyak permasalahan sosial, psikologi dan patologi. Dapatan kajian tersebut membuka keraguan baharu terhadap kualiti perumahan terutama penyediaan ruang domestik kepada kumpulan B40 khususnya. Ruang perumahan merupakan subjek yang dikenal pasti menyumbang kepada pelbagai masalah kemanusiaan; saiz ruang kecil tetapi bilangan penghuni ramai; reka bentuk ruang tidak mengikut keperluan penghuni; seterusnya dapat dikatakan reka bentuk ruangan tersebut tidak mendatangkan kesejahteraan kepada penghuni (Nurizan, 2004). Walau bagaimanapun, masalah perumahan ini merupakan masalah kemanusiaan yang dihadapi di seluruh dunia (Besar et al., 2018).

### **Ruang dan Bentuk Dalam Seni Bina**

Hubungan antara ruang dengan bentuk merupakan perpaduan yang bertentangan (Ching, 2015; Ostwald, 2011). Ching (2015) mencadangkan bentuk ialah rujukan kepada kerangka dalaman dan kawasan luar dan suatu prinsip yang memberikan perpaduan kepada keseluruhan seni bina. Bentuk sering termasuk dalam hakikat jisim atau ketampakan tiga dimensi. Manakala rupa bentuk pula merujuk secara khususnya kepada aspek penting daripada bentuk yang mengawal penampilan bangunan di

mana pelupusan hubungan garisan yang menghadkan bentuk. Sebaliknya, ruang ialah medium sama ada dipagari atau didindingi oleh bentuk yang menjadi asas kepada mana-mana bangunan yang dibina (Corbusier, 1960). Oleh sebab itu, bangunan telah melukiskan ruang yang terkandung di dalamnya dan lebih mendalam lagi ke ruang yang mana ia dikandungkan sama ada di tapak atau di dalam konteks (Hillier & Hanson, 1984; Saatchi & Onder, 2015). Ruang merupakan medium penting dalam disiplin reka bentuk untuk manusia hidup di dunia ini (Mendoza & Matyok, 2013; Psarra, 2012). Ching (2015) menjelaskan:

*Space constantly encompasses our being. Through the volume of space, we move, see forms, hear sounds, feel breezes, smell the fragrances of a flower garden in bloom. It is a material substance like wood or stone. Yet it is an inherently formless vapor. Its visual form, its dimensions and scale, the quality of its light—all of these qualities depend on our perception of the spatial boundaries defined by elements of form. As space begins to be captured, enclosed, molded, and organized by the elements of mass, architecture comes into being. (p. 100)* [Ruang sentiasa merangkumi manusia. Melalui ruang, kita bergerak, melihat bentuk, mendengar bunyi, merasai angin, menghidu haruman di taman bunga yang sedang mekar. Ia adalah bahan sama seperti kayu atau batu. Namun ia adalah bahan yang tidak berbentuk.

Bentuk visualnya, dimensi dan skalanya, kualiti cahayanya—semua kualiti ini bergantung pada persepsi kita terhadap sempadan ruang yang ditakrifkan oleh unsur bentuk. Apabila ruang mula dipagari, ditutup, dibentuk, dan disusun oleh unsur-unsur jisim, maka seni bina wujud. (m/s 100)]

Ching telah mengenal pasti pemboleh ubah-pemboleh ubah yang secara hakikatnya mempunyai hubungan perpaduan tetapi bertentangan. Walau bagaimanapun, teori seni bina secara amnya akan tertumpu kepada perbincangan tentang bentuk. Menurut Pevner (1949), keseimbangan dalam menyatukan ruang dan bentuk akan memperoleh kesan ruangan. Beliau memberi contoh kepada reka bentuk rumah flat kediaman di St Jean de Montmarte (1902-1903), pada bahagian bumbung telah diperuntukkan sebagai ruang terbuka untuk dihiasi dengan beberapa tumbuh-tumbuhan bagi mempamerkan bumbung sebagai taman. Manakala fakad bangunan pula mempamerkan struktur yang belum pernah berlaku di negara tersebut iaitu panel pengisian menggunakan peralatan seramik dengan hiasan dedaunan yang memberi kesan kepada nikmat visual bagi menghiasi kerangka bangunan secara menegak dan melintang. Walau bagaimanapun, Venturi et al. (1972) mengkritik ekspresi seni bina yang meraikan kecantikan bentuk semata-mata. Dengan memberi contoh daripada arkitek Frank Lloyd Wright, ruang merupakan bahan penting yang memisahkan seni bina dengan seni-seni yang lain.

Takrif seni bina berasaskan kecantikan bentuk pada perkhidmatan program dan kerangka tidak mencukupi. Medium ruang sepatutnya membangkitkan pergaulan untuk menyampaikan simbolisme sosial, nasional atau programatik. Oleh sebab itu keseimbangan antara medium ruang dengan bentuk akan mengukuhkan definisi seni bina dalam memperkayakan makna sosial (Venturi et al., 1972).

### **Kaedah *Space Syntax* sebagai Alat Mengekstrak Maksud Sosial Menerusi Corak Ruang yang Terkandung Dalam Ruang Domestik**

Dalam memperkayakan makna dalam seni bina, Hillier dan Hanson (1984) telah membangunkan teori *space syntax* pada awal tahun 1980 di London sebagai alat atau teknik untuk mengekstrak makna daripada hubungan ruang dalam konfigurasi dan kesan sosial. Walaupun pada asalnya teori ini dibangunkan untuk kajian dalam bidang seni bina, sejak itu, teori ini berkembang untuk diguna pakai bagi menganalisis ruang yang terkandung di bandar dan seterusnya menjadi kaedah analisis yang utama bagi mengkaji artifak ruang bersejarah (Ostwald, 2011). Walaupun terdapat kritikan terhadap falsafah dan kaedah matematikanya dan perdebatan yang berterusan mengenai hasil yang bersifat jangkaan-jangkaan, teori ini tetap menjadi satu-satunya alat pada masa ini menjadi alat konseptual yang kuat bago menganalisis ruang dalam alam bina. Ini mungkin disebabkan teknik *space syntax* (Hanson, 1998; Hillier, 2007; Hillier & Hanson, 1984) yang menggalakkan peralihan konseptual dalam seni bina

berdasarkan pemahaman daripada pemikiran ‘dimensi’ atau ‘geografi’ kepada pemikiran ‘hubungan’ dan ‘topologi’. Pentafsiran ini bergantung kepada proses menterjemahkan ruang yang ditakrifkan secara seni bina ke dalam satu siri graf topologi yang boleh dianalisis secara matematik dan ditafsirkan secara berajah dari segi ciri-ciri ruang sosial yang terkandung dalam seni bina.

Dalam mengembangkan teknik ini, Hanson telah menyumbang secara spesifik kepada subjek perumahan dalam karya beliau yang bertajuk *Decoding Home and House* (1998). Berasaskan perbahasan terhadap pemahaman kepentingan ruang sebagai bahan penting dalam proses mereka bentuk penstrukturan hubungan sosial secara penyelidikan empirikal dalam penyelidikan yang panjang, beliau telah menegaskan bahawa pengukuran ruang yang bersepadu atau terasing di dalam rumah tertentu merupakan petunjuk kesibukan atau ketenangan yang kuat ruang-ruang yang berhubung di dalam sistem ruangan dalam sebuah rumah. Nilai integrasi ialah kunci dalam memahami kandungan seni bina dan ia dapat menunjukkan fungsi bangunan secara sosial pada tahap kolektif (Suryadi et al., 2021). Beliau juga menegaskan bahawa teori ini bukanlah satu penentuan naif alam seni bina yang menyatakan bahawa rumah memaksa manusia untuk berkelakuan dengan cara tertentu. Hanson (1998) seterusnya menerangkan betapa corak ruang merupakan petunjuk utama dalam falsafah ini.

*Houses everywhere serve the same basic needs of living, cooking*

*and eating, entertaining, bathing, sleeping, storage and the like, but a glance at the architectural record reveals an astonishing variety in the ways in which these activities are accommodated in the houses of different historical periods and cultures. The important thing about a house is not that it is a list of activities or rooms but that it is a pattern of space, governed by intricate conventions about what spaces there are, how they are connected together, and sequenced, which activities go together, and which are separated out, how the interior is decorated, and even what kinds of household objects should be displayed in the different parts of the home. If there are principles to be learned from studying the design of dwellings, they do not yield easily to a superficial analysis of 'basic human needs'. (p. 2) [Rumah dimana-mana jua pun menyediakan keperluan asas yang sama untuk hidup, memasak dan makan, berhibur, mandi, tidur, membuat penyimpanan dan seumpamanya, tetapi pada rekod seni bina secara sepintas lalu mendedahkan kepelbagaian yang menakjubkan dalam cara aktiviti ini ditampung didalam rumah yang berbeza zaman dan rumah yang berlainan budaya sejarah. Perkara penting tentang rumah bukanlah kepada senarai aktiviti atau jenis bilik tetapi ia adalah pola ruang,*

yang dikawal oleh konvensyen tentang ada apa dengan ruang, bagaimana ia disambungkan dan disusun bersama, aktiviti apa yang berjalan bersama dan yang mana satu diasingkan dan disepadukan, bagaimana bahagian dalam ruang domestik dihias, dan juga apa jenis kebendaan kepunyaan isi rumah yang perlu dipaparkan di bahagian ruang yang berlainan. Sekiranya terdapat prinsip yang perlu dipelajari daripada mengkaji reka bentuk kediaman, mereka tidak mudah menyerah kepada analisis yang cetek hanya kepada 'keperluan asas manusia'. (m/s 2)]

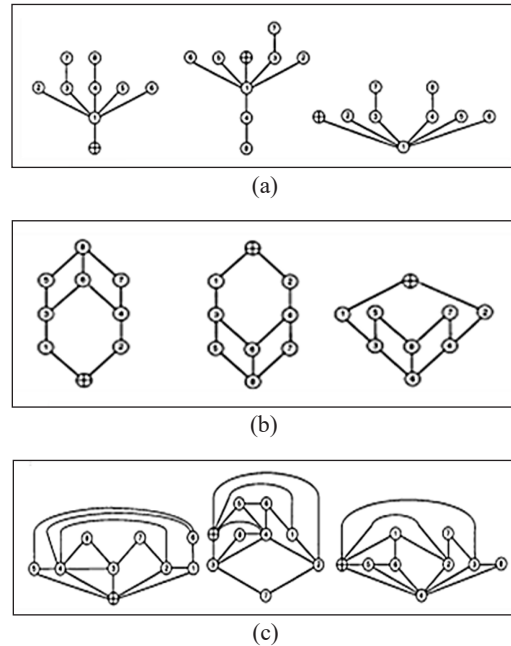
Dalam mentafsir elemen dan hubungan yang membina corak ruang, Hillier dan Hanson (1984) telah mencadangkan konsep konfigurasi iaitu pentakrifan corak ruang yang mempunyai nilai ketepatan secara empirikal iaitu pengetahuan yang membandingkan corak ruang dan cara untuk memberitahu sebuah ruang kepada yang lain. Hubungan ruang wujud melalui beberapa pautan (*link*) di antara dua ruang yang berhubung dan cara ia berhubung dengan ruang ketiga atau kepada ruang seterusnya (Hanson 1998). Oleh sebab itu, konfigurasi ruang digambarkan sebagai satu sistem yang mempunyai pelbagai ruang yang saling bersambung dalam membentuk sebuah corak yang mengandungi simbolik sosial secara logik.

Dalam membuat justifikasi corak ruang domestik yang kompleks, Hanson menjelaskan dengan memberi contoh

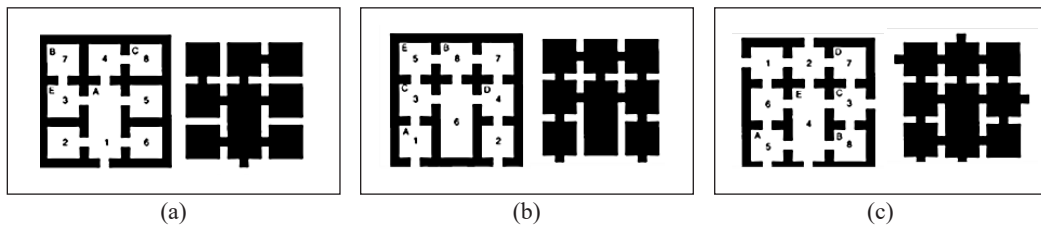
konfigurasi ruang yang sengaja direka bagi menunjukkan kebebasan hubungan dalam membina bentuk konsep pelan rumah Alpha, Beta dan Gamma (Rajah 1). Ketiga-tiga pelan rumah mengandungi tujuh unit ruang dan satu unit ruang laman dalam yang sama.

Menurut Hanson, kekuatan Graf Justifikasi Akses (GJA) ditunjukkan dengan mengkaji beberapa contoh pada Rajah 1 yang telah direka untuk menunjukkan prinsip konfigurasi. Ketiga-tiga contoh tersebut mempamerkan susunan bilik yang sama dan saling bersebelahan. Walau bagaimanapun, dari sudut pandangan corak lolos (*permeable*), kesemua contoh yang diberikan adalah berbeza antara satu sama lain. Ruang bersebelahan merupakan prasyarat untuk lolos, tetapi dalam kekangan ini, ruang laman dalam ditatabentuk pada semua contoh untuk membentuk corak belukar (*bush*), corak pokok (*tree a-like*) dan lingkaran (*ringy*) pada ruang-ruang dalam domestik (Rajah 2). Walau bagaimanapun, GJA adalah lebih daripada alat untuk menjelaskan konfigurasi ruang dalam bangunan. Teori *space syntax* mencadangkan pemboleh ubah kedalaman (*depth*) dan lingkaran (*ringy*)' sebagai asas kepada corak ruang dalam seni bina

dan ia juga membawa maksud yang seni bina juga dapat membawa budaya. Tidak akan ada yang lebih mendalam daripada titik dalam konfigurasi yang berturutan atau kurang daripada corak belukar. Corak pokok mempunyai bilangan sambungan untuk membentuk konfigurasi ke dalam



Rajah 2. Graf Justifikasi Akses (GJA) daripada kawasan luar, ruang yang paling dalam dan laman dalam: (a) Rumah Alpha - Corak pokok (*tree a-like*); (b) Rumah Beta - Corak lingkaran (*ringy*); dan (c) Rumah Gamma - Corak belukar (*bush*)  
Sumber: Hanson, 1998 (m/s 26)



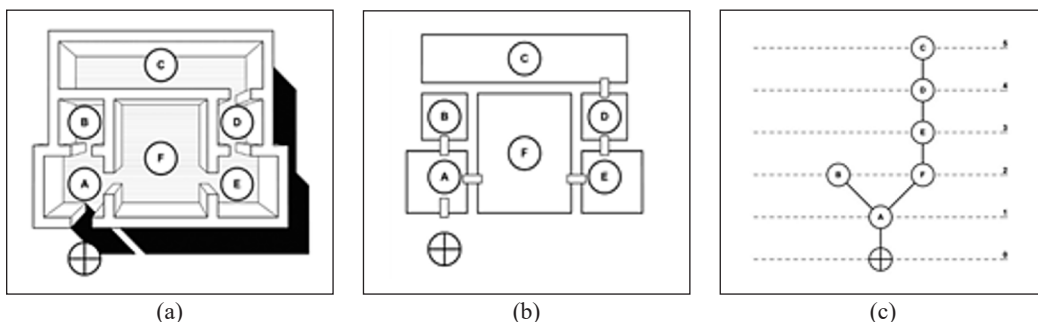
Rajah 1. Pelan dan ruang terbuka daripada tiga buah konsep pelan rumah: (a) Rumah Alpha; (b) Rumah Beta; dan (c) Rumah Gamma  
Sumber: Hanson, 1998 (m/s 25)

corak yang berterusan. Corak lingkaran pula mempunyai kelolosaan tambahan hingga maksimum ruang yang terkandung dalam konfigurasi. Oleh sebab itu, pengukuran kepada tingkat kedalaman dan hubungan kompleks relatif kelengkapan boleh dibuat untuk mencerap nilai numerik yang boleh didapati daripada GJA.

GJA merupakan alat yang berupaya menjadi asas analisis kuantitatif kerana graf tersebut dilukis semula daripada titik-titik yang berbeza daripada ruang domestik. Oleh sebab itu, corak konfigurasi bukan hanya boleh dilihat daripada perbezaan ruang yang terkandung di dalamnya, tetapi perbezaan nilai numerik juga dapat dikenal pasti pada setiap ruang dalam konfigurasi. Selalunya perkara ini bergantung kepada kedudukan ruang tertentu sebagaimana dalam Rajah 1. Secara matematik, ia dipanggil sebagai nilai integrasi daripada kesemua ruang yang terkandung dalam konfigurasi. Menurut Hanson (1998) lagi, ini disebabkan ruang yang berintegrasi tersebut seolah-olah mencerap setiap ruang tidak kira sejauh mana setiap ruang itu berada di dalam sistem ruangan.

## METODOLOGI

Data sekunder dalam kajian ini ialah pelan lantai jenis rumah pangsapuri untuk kumpulan B40 di Malaysia yang dikenal pasti menerusi keluasan rumah tidak lebih 750kps (Bahagian Perumahan Kerajaan Johor 2012; Majlis Bandaraya Seremban, 2015; Lembaga Perumahan dan Hartanah Selangor, 2018; Yahya et al., 2021), mempunyai tiga buah bilik tidur, dua buah tandas yang berasingan. Ciri-ciri ini berdasarkan garis panduan Undang-undang Kecil Bangunan Seragam (Pindaan 2021). Dalam kajian ini, kesemua pelan lantai dipilih mengikut ciri-ciri tersebut, dan tiada sampel yang dipilih mempunyai tandas di dalam bilik tidur. Data yang diperolehi daripada proses pengumpulan data akan dilukis semula menggunakan perisian AutoCad. Lukisan tersebut akan melalui prosedur pemetaan bentuk cembung yang terkandung dalam lukisan pelan tersebut. Menerusi pemetaan tersebut, GJA dibuat untuk mengkategorikan corak ruang yang telah dikenalpasti. Rajah 3 ialah ringkasan prosidur mengkategorikan jenis rumah berdasarkan GJA.



Rajah 3. Prosedur mengekstrak data daripada pelan rumah kepada GJA: (a) Unit pelan; (b) Pelan cembung (*convex*); dan (c) GJA

Sumber: Ostwald, 2011 (m/s 450 - 451)



Corak ruang yang diperoleh daripada kesemua pelan dianalisis dalam tiga peringkat iaitu (1) penetapan corak ruang dalam bentuk GJA, (2) mengekstrak nilai numerik yang terkandung dalam corak ruang dan (3) analisis statistik terhadap keputusan analisis corak ruang. Bagi memperoleh purata nilai integrasi, beberapa langkah perlu dilakukan. Jadual 1 menunjukkan langkah pengiraan jumlah ruang yang terkandung dalam GJA, menilai jumlah kedalaman GJA seterusnya beberapa langkah bagi untuk memperoleh nilai purata integrasi (IV).

Dalam menilai corak ruang unit pelan, ruang paling berintegrasi dan terasing dalam unit pelan boleh diletakkan dengan menggunakan setiap nilai IV. Tahap berlawanan dalam nilai integrasi dianggap sebagai petunjuk sama ada kuat ataupun lemahnya hubungan sosial antara aturan ruangan ataupun sama ada ruang yang terkandung di dalam unit pelan itu boleh berubah antara satu sama lain. Perbezaan faktor ( $H^*$ ) digunakan untuk menyatakan kuantiti ketidaksamaan sebagai pernyataan

daripada jumlah nilai integrasi dalam pertimbangan. Jika nilai integrasi ruang adalah konsisten dalam aturan sampel, maka a dapat menyatakan dengan sendirinya ekspresi corak kebudayaan perumahan (Kim & Kwak, 2021). Pengiraan  $H^*$ , teknik *space syntax* adalah seperti formula berikut:

Langkah pertama:

$$H = - \sum \left[ \frac{a}{t} \ln \left( \frac{a}{t} \right) \right] + \left[ \frac{b}{t} \ln \left( \frac{b}{t} \right) \right] + \left[ \frac{c}{t} \ln \left( \frac{c}{t} \right) \right]$$

Langkah kedua:

$$H^* = \frac{(H - \ln 2)}{\ln 3 - \ln 2}$$

Di mana,  $a$  = maksimum RA,  $b$  = mean RA,  $c$  = minimum RA. Jumlah daripada  $a + b + c = t$ .  $\ln$  ialah logaritma asas e. Nilai  $H^*$  ialah petunjuk kepada betapa kuatnya ‘genotip’ corak ruang apabila nilai  $H^*$  menghampiri nilai 0 dan betapa lemahnya genotip corak ruang apabila nilai  $H^*$  menghampiri nilai satu (Hillier et al., 1986; Kim & Kwak, 2021; Maina, 2014 & Oswald, 2011). Kekuatan genotip adalah perbezaan dan kekuatan dalam

Jadual 1  
Langkah pengiraan bagi memperoleh nilai integrasi bagi ruang pembawa

Langkah	Kod	Maksud	Penerangan
1	$k$	Jumlah ruang	Ruang yang terkandung di dalam GJA. Kawasan luar perlu diambil kira jika pengukuran melibatkan hubungan Kawasan luar hendak dianalisis.
2	$TD$	Jumlah kedalaman	Jumlah nilai yang menghubungkan ruang, dan setiap ruang di dalam GJA $TD = (0 \times n_x) + (1 \times n_x) + (2 \times n_x) \dots$ dan seterusnya.
3	$MD$	Purata kedalaman	Purata kedalaman ruang dalam GJA di mana $MD$ dikira dengan membahagikan $TD$ dengan $k$ tolak 1. $MD = TD / (k-1)$
4	$RA$	Asimetri Relatif	Pengukuran betapa dalamnya corak ruang berhubung kepada keseimbangan model. RA dikira menggunakan formula berikut $RA = 2 (MD-1) / k-2$
5	$IV$	Nilai Integrasi	Pengukuran untuk mengukur tahap integrasi di dalam corak ruang. $IV = 1/RA$

keberkesanan fungsi ruang dan sebaliknya. Hanson (1998) menyatakan:

*Function thus acquired a spatial expression which could also be assigned a numerical value. Where these numerical differences were in a consistent order across a sample of plans from a region, society or ethnic grouping, then we could say that a cultural pattern existed, one which could be detected in the configuration itself rather than in the way in which it was interpreted by minds. We called this particular type of numerical consistency in spatial patterning a housing 'genotype'. (p. 31)* [Oleh itu, fungsi juga boleh diberikan ungkapan ruangan dalam bentuk nilai berangka. Apabila perbezaan angka ini berada dalam susunan yang konsisten merentas sampel pelan dari wilayah, masyarakat atau kumpulan etnik, maka kita boleh mengatakan bahawa corak budaya itu wujud, yang mana boleh dikesan dalam konfigurasi itu sendiri dan bukannya dalam cara ia ditafsirkan oleh fikiran. Kami memanggil jenis ketekalan berangka dalam pola ruangan tertentu ini sebagai 'genotip' perumahan. (m/s 31)]

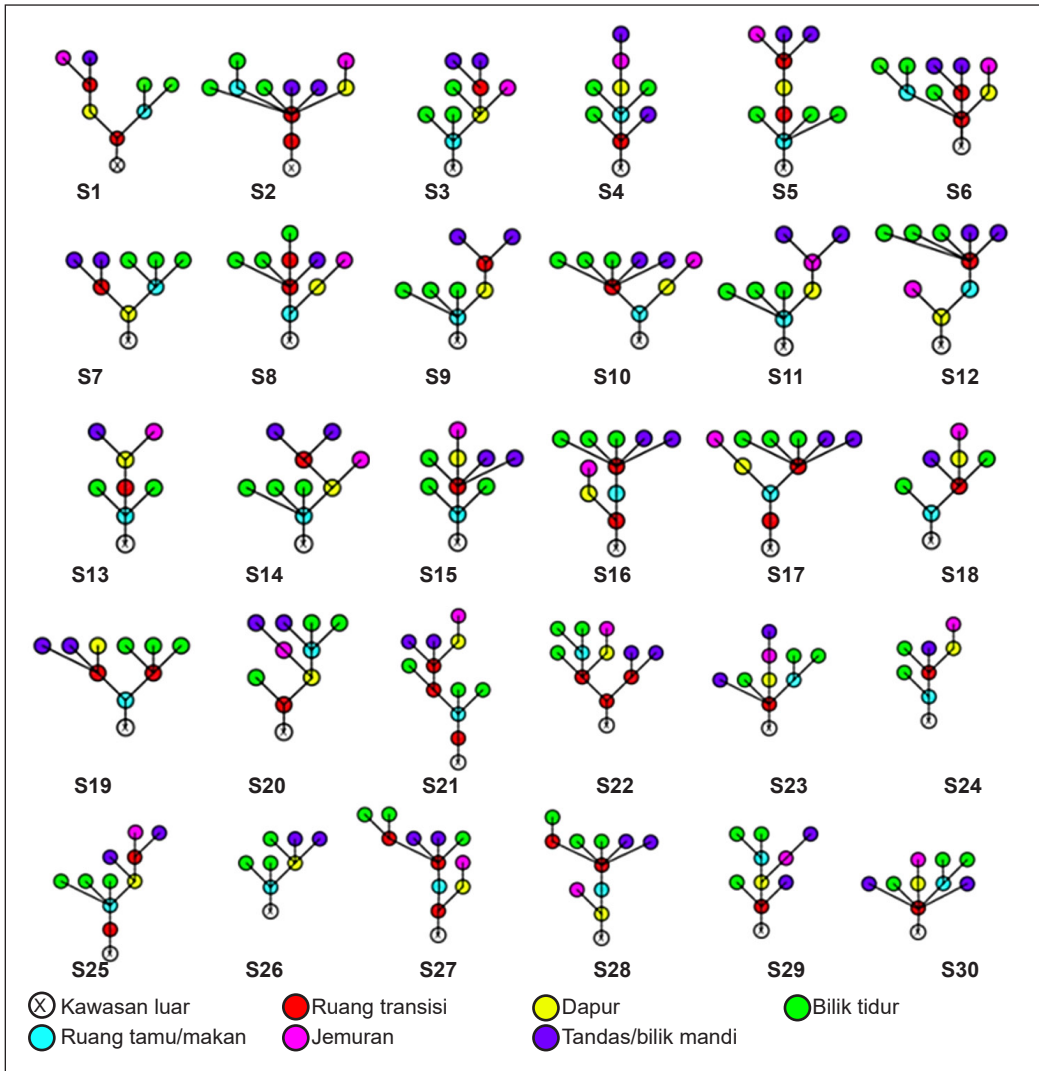
Oleh sebab itu, asas strategi analisis dalam kajian ini adalah untuk mencari persamaan dalam corak ruang dan kemudian untuk dipertimbangkan berhubung kepada label ruang. Setakat mana corak ruang itu

terbina secara sistematik dan konsisten, corak ruang yang dimanifestasikan itu ialah paparan niat sosial daripada pereka bentuk atau pembuat ruang domestik perumahan yang dikaji. Apabila nilai perbezaan adalah sangat konsisten sama ada rendah ataupun tinggi nilai H\* itu, kajian ini menyimpulkan bahawa corak ruang tersebut memaparkan kepentingan dari segi budaya yang membawa implikasi kepada fungsi ruang yang terbina yang menampung corak sosial yang menghuni dalam unit pelan yang dikaji.

#### DAPATAN KAJIAN

Jumlah sampel ialah 30 buah unit kediaman bagi golongan B40 (RB40T) di Lembah Klang. Kesemua sampel mempunyai persamaan iaitu kedudukan tandas. Tiada tandas yang terletak di dalam bilik tidur sebagaimana yang diamalkan bagi mereka bentuk rumah golongan B40 di Malaysia. Sampel diambil daripada perumahan jenis pangsapuri dan diterjemahkan ke dalam bentuk graf justifikasi akses (Rajah 4).

Secara puratanya genotip RB40T mempunyai 9.03 sel dalam membentuk konfigurasi rumah kediaman. Dalam 30 sampel kes, terdapat rumah yang hanya mengandungi tujuh sel minimum dan 11 sel maksimum. Kesemua kes juga mempunyai jumlah pautan yang sama dengan nilai ruang cembung. Manakala purata maksimum kedalaman bagi genotip ini ialah 4.03 dengan nilai minimum ialah 3.00 dan nilai maksimum kedalaman ialah 6.00. Kesemua sampel menunjukkan hanya terdapat satu akses sahaja yang



Rajah 4. Sampel ruang domestik RB40T yang diterjemahkan dalam bentuk genotip (GJA)

digunakan oleh pereka bentuk untuk masuk ke dalam ruang domestik. Apabila masuk ke dalam ruang domestik, secara purata pereka bentuk menggunakan 1.47 unit sel transisi bagi menghubungkan keseluruhan sel dalam konfigurasi. Terdapat juga tiada penggunaan ruang transisi iaitu nilai minimum dan nilai maksimum yang digunakan oleh pereka bentuk ialah

sebanyak 3.00 ruang sel transisi. Jadual 2 menunjukkan ringkasan purata nilai elemen yang membentuk corak ruang domestik RB40T.

Kesemua sampel menunjukkan pereka bentuk telah memperkukuhkan corak pokok sebagai asas untuk mereka bentuk rumah B40 (Rajah 2 dan 4). Menerusi corak ini, laluan ke setiap sel yang terkandung dalam

konfigurasi adalah terhad iaitu secara teori (Hanson, 1998) iaitu setiap sel yang dihubungkan adalah minimum. Keadaan ini dapat dilihat di beberapa sel dalam sampel yang terpaksa menanggung fungsi akses bagi membuka laluan untuk menuju ke sel-sel yang lain. Dalam mengurangkan beban ini, terdapat kes genotip menggunakan sel yang berfungsi sebagai ruang transisi untuk mengalih laluan ke sel-sel yang lain. Sebagaimana yang ditunjukkan dalam Jadual 2, terdapat kes menggunakan maksimum tiga unit ruang transisi untuk mengatasi bebanan tersebut.

Dapatan kajian menunjukkan corak signifikan untuk masuk ke dalam ruang domestik bagi keseluruhan sampel yang

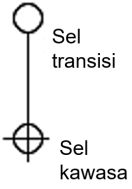
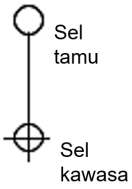
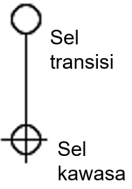

hanya menggunakan akses tunggal. Walau bagaimanapun, terdapat tiga kes menunjukkan kawasan luar berhubung dengan sel transisi, sel dapur dan sel tamu untuk masuk ke ruang domestik. Bagi kes kawasan luar berhubung dengan sel transisi, terdapat 46.67% daripada keseluruhan sampel menggunakan corak ini. Diikuti 43.33% kawasan luar berhubung dengan sel tamu dan hanya 10% menggunakan sel dapur untuk menghubungkan kawasan luar dan ruang domestik RB40T (Jadual 3).

Corak signifikan bagi sel tamu ialah mempunyai lima akses maksimum untuk berkembang sebagai penghubung kepada sel-sel yang terkandung dalam konfigurasi. Walau bagaimanapun, dalam menanggung

Jadual 2  
Purata nilai elemen yang membentuk corak ruang domestik RB40T

Jumlah Sampel	Elemen Ruang					
	Ruang cembung	Pautan (Link)	Maksimum kedalaman dari kawasan luar	Akses laluan masuk ke ruang domestik	Ruang transisi	
30	Min	7.00	7.00	3.00	1.00	0.00
	Mean	9.03	9.03	4.03	1.00	1.47
	Maks	11.00	11.00	6.00	1.00	3.00

Jadual 3  
Tafsiran hubungan di antara kawasan luar dan sel-sel yang terkandung di dalam ruang domestik RB40T

Corak ruang				Corak signifikan
Kes			Ruang domestik	
Kawasan luar ke sel transisi	Kawasan luar ke sel tamu	Kawasan luar ke dapur		
				
46.67% (14/30)	43.33% (13/30)	10.00% (3/30)	100.00% (30/30)	

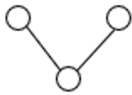




bebanan fungsi akses untuk membuka tiga hingga lima laluan ke sel-sel yang lain, terdapat empat kes berhubung perkara tersebut. Kes pertama, terdapat 40.00% pereka bentuk menggunakan corak sel tamu ke tiga unit sel. Dalam kes kedua, 26.66% Sel tamu menanggung empat fungsi akses untuk membuka laluan, dan akhir sekali kes ketiga sebanyak 16.67% pereka bentuk menggunakan sel tamu untuk menanggung lima akses untuk berhubung dengan 5 unit sel yang terkandung dalam konfigurasi. Menariknya terdapat satu kes iaitu 16.67% pereka bentuk berjaya meringkaskan fungsi sel tamu untuk menanggung fungsi akses ke sel-sel yang terdapat di dalam ruang domestik RB40T (Jadual 4).

Corak signifikan bagi sel dapur ialah mempunyai empat akses maksimum untuk berkembang sebagai penghubung kepada sel-sel yang terkandung dalam konfigurasi. Walau bagaimanapun, terdapat tiga kes yang menanggung bebanan fungsi akses untuk membuka dua hingga empat laluan ke sel-sel lain., Kes pertama, terdapat 63.33% pereka bentuk menggunakan corak sel dapur untuk ke dua unit sel. Diikuti kes kedua, 23.33%


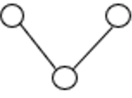
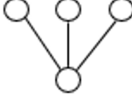


sel dapur menanggung tiga fungsi akses untuk membuka laluan, dan akhir sekali kes ketiga sebanyak 10% pereka bentuk menggunakan sel dapur untuk menanggung empat akses yang berhubung dengan empat unit sel yang terkandung dalam konfigurasi. Unikinya, terdapat 3.33% pereka bentuk menggunakan akses tunggal sel dapur untuk ke sel-sel yang terdapat di dalam ruang domestik RB40T (Jadual 5).

Dapatan kajian menunjukkan corak signifikan bagi sel bilik tidur yang dapat berkembang sehingga mempunyai tiga unit sel penghubung untuk ke sel-sel yang terkandung dalam konfigurasi. Walau bagaimanapun, terdapat tiga kes yang menghubungkan keseluruhan sel bilik tidur dalam konfigurasi. Kes pertama, terdapat 20.00% pereka bentuk menggunakan satu unit sel penghubung untuk menghubungkan kesemua sel bilik tidur. Diikuti kes kedua, sebanyak 36.66% daripada keseluruhan sampel menggunakan dua unit sel penghubung dan kes ketiga sebanyak 43.34% menggunakan tiga unit sel penghubung bagi tujuan tersebut (Jadual 6).

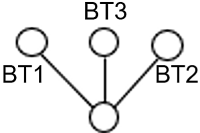
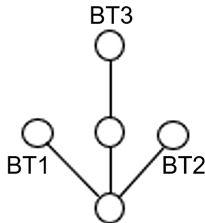
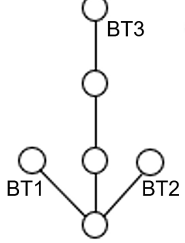
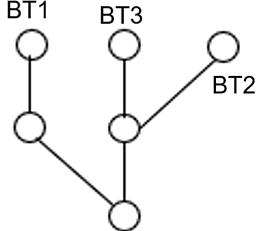
Jadual 4  
Tafsiran hubungan di antara sel tamu dengan sel-sel domestik yang terkandung di dalam ruang domestik RB40T

Corak ruang				
Kes				Corak signifikan
Sel tamu ke 2 unit sel	Sel tamu ke 3 unit sel	Sel tamu ke 4 unit sel	Sel tamu ke 5 unit sel	
				
Sel tamu	Sel tamu	Sel tamu	Sel tamu	Sel tamu
16.67% (5/3)	40.00% (12/30)	26.67% (8/30)	16.67% (5/30)	

Jadual 5  
Tafsiran hubungan di antara sel dapur dengan sel-sel domestik yang terkandung di dalam ruang domestik RB40T

Corak ruang				
Kes				Corak signifikan
Sel dapur ke 1 unit sel	Sel dapur ke 2 unit sel	Sel dapur ke 3 unit sel	Sel dapur ke 4 unit sel	
				
Sel dapur	Sel dapur	Sel dapur	Sel dapur	Sel dapur
3.33% (1/30)	63.33%	23.33% (7/30)	10.00% (3/30)	

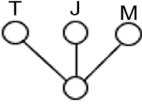
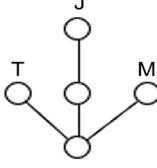
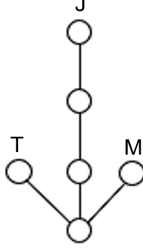

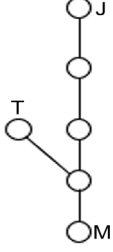
Jadual 6  
Tafsiran hubungan di antara sel bilik tidur dengan sel-sel domestik yang terkandung di dalam ruang domestik RB40T

Corak ruang			
Kes			Corak signifikan
Maks 1 unit sel penghubung ke sel bilik tidur	Maks 2 unit sel penghubung ke sel bilik tidur	Maks 3 unit sel penghubung ke sel bilik tidur	
			
20.00% (6/30)	36.66% (11/30)	43.34% (13/30)	

Dapatan kajian menunjukkan corak signifikan bagi sel tandas/bilik mandi dan jemuran yang mempunyai tiga unit sel penghubung maksimum untuk berkembang sebagai penghubung kepada sel-sel yang terkandung dalam konfigurasi. Walau bagaimanapun, terdapat empat kes yang menghubungkan keseluruhan sel tandas/bilik mandi dan sel jemuran dalam konfigurasi. Kes pertama, terdapat 26.66%

pereka bentuk menggunakan satu unit sel penghubung untuk menghubungkan kesemua sel tandas/bilik mandi dan jemuran. Diikuti kes kedua, sebanyak 20.00% daripada keseluruhan sampel menggunakan dua unit sel penghubung. Kes ketiga pula sebanyak 36.67% menggunakan tiga unit sel penghubung bagi tujuan tersebut dan kes keempat menggunakan empat sel penghubung (Jadual 7).

Jadual 7  
Tafsiran hubungan di antara sel tandas/ mandi dan jemuran/cucian dengan sel-sel domestik yang terkandung di dalam ruang domestik RB40T

Corak ruang				Corak signifikan
Kes				
Makas 1 unit sel penghubung ke tandas/bilik mandi dan jemuran/cucian	Maks 2 unit sel penghubung ke tandas/bilik mandi dan jemuran/cucian	Maks 3 unit sel penghubung ke tandas/bilik mandi dan jemuran/cucian	Maks 4 unit sel penghubung ke tandas/bilik mandi dan jemuran/cucian	
				
26.66% (8/30)	20.00% (6/30)	36.67% (11/30)	16.67% (5/30)	

Dalam konfigurasi RB40T, sel tamu (*mean* 1.52) ialah sel yang paling bersepadu diikuti oleh yang sel dapur (*mean* 1.22). Kedua-dua sel ini beroperasi sebagai medium bagi peralihan kepada sel-sel yang lain (nilai *iv* = *mean* 0.57-078) yang terkandung dalam ruang domestik. Keadaan ini sama berlaku dalam kelompok min IV tetapi pada nilai maksimum IV, sel tamu dan sel dapur mempunyai nilai integrasi yang seragam. Keputusan menunjukkan corak sosial yang terkandung dalam RB40T, iaitu sel tamu dan sel dapur merupakan ruang yang paling digalakkan untuk menjana aktiviti kekeluargaan. Menariknya, sel bilik tidur yang direka menggunakan satu akses berada antara sel yang paling berintegrasi iaitu sel tamu ataupun sel dapur (1.22–1.52), dan sel yang paling terpencil iaitu sel tandas/bilik mandi dan jemuran/cucian (0.57–0.69). Sedangkan

tandas/bilik mandi dan jemuran/cucian serta kawasan luar merupakan ruang yang kerap dikongsi tetapi direka dan diletakkan dalam posisi yang terpencil. Struktur konfigurasi mencerminkan keperluan untuk privasi bagi kawasan luar, tandas/bilik mandi dan jemuran, semi privasi untuk bilik tidur dan tiada privasi bagi dapur dan ruang tamu (Jadual 8).

Faktor perbezaan relatif, atau nilai  $H^*$  bagi RB40T adalah melebihi 0.5. Keputusan ini menunjukkan 66.7% adalah di lingkungan 0.51–0.75 iaitu berat kepada nilai 1.00 yang menunjukkan sampel tersebut cenderung untuk diseragamkan. Manakala hanya 33.3% sampel di lingkungan 0.76–1.00 yang menunjukkan sampel tersebut hampir diseragamkan iaitu kesemua sel yang terkandung dalam konfigurasi mempunyai nilai integrasi yang sama yang seterusnya tiada perbezaan

antara mereka. Memandangkan 66.6% tidak mencapai persamaan dalam struktur, ia bermaksud terdapat sampel RB40T yang masih mempunyai potensi untuk dinaik taraf supaya mencapai tahap keseragaman.

Merujuk kepada nilai H\* yang rendah yang ditunjukkan daripada RB40T, keputusan tersebut mencadangkan GJA untuk RB40T perlu ditambah baik supaya nilai integrasi tidaklah berbeza dengan ketara dan menjadi lebih berstruktur. Sebagai struktur corak pokok yang digunakan dalam GJA untuk RB40T dengan konfigurasi

melebihi empat kedalaman tanpa membuka ruang untuk meninggikan nilai integrasi seperti bilik tidur ataupun tandas/bilik mandi yang bersifat sel tertutup, adalah sukar untuk mencapai keragaman dalam corak ruang. Walau bagaimanapun hanya sel ruang tamu mempunyai nilai integrasi (mean 1.52) yang seganda lebih tinggi daripada baki bilik (0.57–0.78) lain kecuali sel dapur (1.22), menyokong satu tafsiran idea tertentu daripada pereka bentuk tentang ruang yang berbeza atau berstruktur sebagaimana yang pereka bentuk kehendaki (Jadual 9).

Jadual 8  
Aturan ranking daripada fungsi integrasi daripada corak ruang berdasarkan purata nilai integrasi (IV) RB40T

Aturan Integrasi (nilai purata IV)									
Maks	Tamu	Dapur	BT1	BT2	TM1	TM2	KL	BT3	J
	2.07 =	2.07 <	1.79 =	1.79 <	1.11 =	1.11 <	1.00 =	1.00 <	0.99
Mean	Tamu	Dapur	BT2	BT1	KL	BT3	TM 1	TM 2	J
	1.52 <	1.22 <	0.78 <	0.76 <	0.70 <	0.69 =	0.69 <	0.64 <	0.57
Min	Tamu	Dapur	BT2	BT1	TM 1	BT3	KL	TM 2	J
	0.89 <	0.65 <	0.61 <	0.58 <	0.55 <	0.52 =	0.52 <	0.46 =	0.46

Jadual 9  
Sela tahap perbezaan (H\*) corak ruang domestik daripada pereka bentuk

Sela H*			
0.00–0.25	0.26–0.50	0.51–0.75	0.76–1.00
0%	0%	66.7%	33.3%

## PERBINCANGAN

Kajian ini telah mentafsir 30 unit sampel rumah B40 tersedia (RB40T) menggunakan teknik *space syntax*. Daripada 30 sampel yang dikutip, kesemua sampel ialah jenis perumahan pangsapuri. Kesemua sampel telah melalui dua proses analisis iaitu analisis ruang cembung dan analisis GJA. Secara purata, ruang cembung yang

terkandung dalam konfigurasi RB40T adalah sebanyak sembilan buah iaitu jumlah yang sama digunakan oleh RB40T untuk membina sembilan pautan bagi menghubungkan keseluruhan dalam ruang domestik. Menerusi penelitian daripada GJA, RB40T menggunakan purata empat tahap kedalaman yang diukur dari kawasan luar, yang mana akses untuk masuk ke

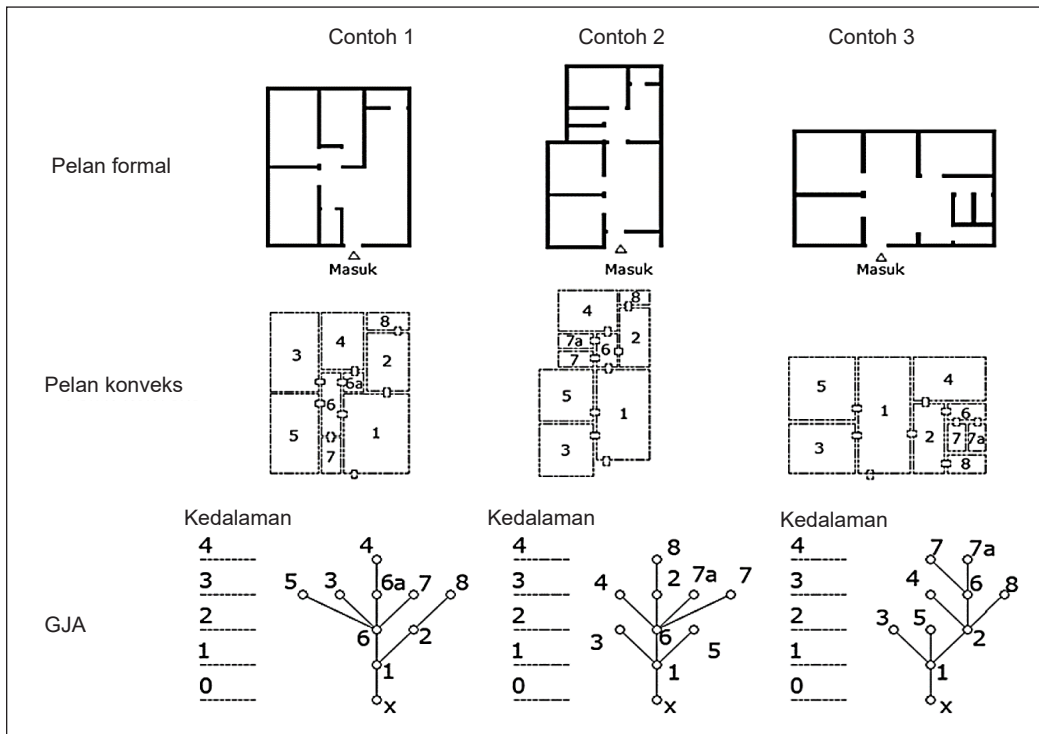


dalam ruang domestik hanya menggunakan satu akses sahaja. Dalam membentuk satu corak ruangan bagi ruang domestik, secara purata RB40T menggunakan 1.47 ruang transisi (lihat contoh pada Rajah 5).

Dalam mengatur fungsi ruang mengikut kesepaduan ruang, RB40T mengangkat fungsi ruang tamu sebagai ruang yang paling berintegrasi. Diikuti dengan fungsi dapur. Kesemua fungsi bilik tidur pula diatur antara fungsi ruang yang paling bersepadu iaitu ruang tamu dengan fungsi ruang yang paling terasing seperti tandas/bilik mandi dan jemuran/cucian. Terdapat dua kategori tahap perbezaan corak ruang RB40T. Kategori pertama ialah  $H^*=0.51-0.75$  dan kategori  $H^*=0.76-1.00$ . Kategori

pertama merupakan tahap perbezaan corak ruang yang signifikan dalam sampel ini iaitu sebanyak 66.7%. Nilai kategori pertama itu menunjukkan RB40T mempunyai ciri-ciri yang cenderung untuk sukar diseragamkan kerana nilai integrasi bagi kesemua ruang adalah cenderung untuk tidak berbeza. Oleh sebab itu, terdapat jurang yang perlu diisi atau terdapat sesuatu perkara yang perlu dibuat bagi menambah baik model RB40T supaya model baharu rumah B40 dapat memperoleh keseragaman, seterusnya meningkatkan fungsi ruang yang terkandung dalam konfigurasi.

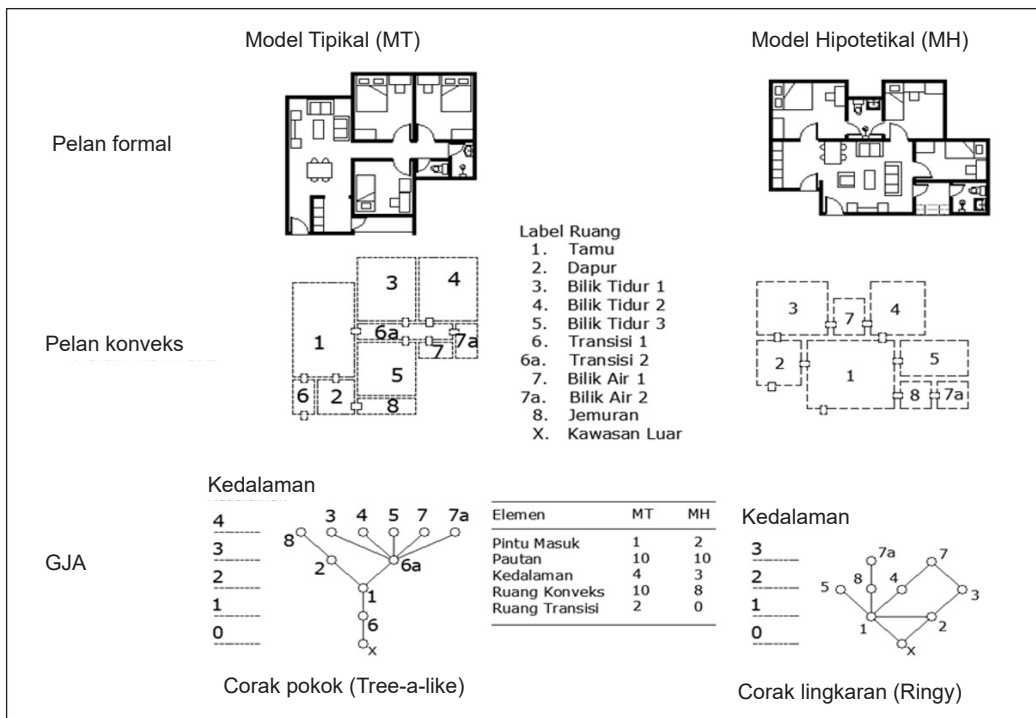
Sebagaimana dapatan kajian, perkara utama yang menjadi ancaman kepada RB40T ialah kerumitan membina corak



Rajah 5. Tiga contoh sampel pelan lantai yang menggunakan sembilan ruang cembung, sembilan pautan, empat tahap kedalaman dan satu ataupun dua ruang transisi yang diperoleh daripada koleksi data  
Nota. Label 6 dan 6a ialah ruang transisi dan label X ialah kawasan luar.

*ringy* di ruang domestik. Corak *ringy* (Hanson, 1998) mempunyai kelolisan tambahan hingga ke maksimum ruang yang terkandung dalam konfigurasi. Walau bagaimanapun, terdapat prasyarat untuk membentuk corak ini iaitu ruang bersebelahan. Dalam reka bentuk RB40T, pereka bentuk tidak menggunakan fungsi ruang berkongsi seperti tandas ataupun jemuran bagi memenuhi prasyarat tersebut. Sedangkan, dalam takrif sosial oleh konvensyen antarabangsa, takrif sosial sentiasa berubah-ubah tertakluk kepada definisi kerajaan yang memerintah. Tiada satu pun dalam garis panduan yang dinyatakan dalam *Uniform Building by Law* (1984) yang berkehendakkan tandas/ruang jemuran ataupun balkoni tidak boleh

mempunyai lebih daripada satu akses untuk berhubung dengan ruang yang terkandung dalam konfigurasi unit kediaman. Oleh sebab itu, kerumitan untuk membina corak *ringiness* di ruang domestik berkemungkinan akan menghadkan potensi ruang domestik rumah B40 untuk dipelbagaikan. Dapatan kajian daripada RB40T menunjukkan, 66.7% tahap perbezaan RB40T adalah di lingkungan  $H^* = 0.51-0.75$  yang membawa maksud, masih belum dapat di homogenikan iaitu, terdapat beberapa perkara yang perlu difikirkan untuk memiawaiakan reka bentuk RB40T tersebut. Rajah 6 menunjukkan contoh model hipotetikal untuk perbincangan ini di mana corak *ringiness* cuba diterapkan dalam cadangan konfigurasi rumah B40 sebagai asas untuk kajian lanjutan.



Rajah 6. Contoh rumah B40 tipikal yang menggunakan genotip corak pokok (*tree-a-like*) dan model hipotetikal rumah B40 yang menggunakan genotip corak lingkaran (*ringy*)

## KESIMPULAN

Permasalahan reka bentuk rumah B40 merupakan isu nasional. Walaupun kerajaan telah mengenal pasti bahawa rumah untuk B40 terutama di kawasan berkepadatan tinggi adalah sempit dan sesak, menurut Seo dan Mahdzar (2016), pereka bentuk dalam negara masih lagi mengamalkan reka bentuk ruang yang sama sejak tahun 1970 hingga 2015. Dan kajian ini mempercayai belum ada lagi reka bentuk yang keluar daripada amalan reka bentuk tersebut. Walaupun kerajaan telah menekankan penyediaan perumahan yang selesa berasaskan peruntukan keluasan ruang, walau bagaimanapun, penekanan tersebut dinilai sebagai longgar dan kemungkinan besar amalan reka bentuk yang dinyatakan oleh Seo dan Mahdzar (2016) akan terus diamalkan kerana garis panduan terutama dalam UBBL (1984) tidak menekankan garis panduan yang lebih bertetapan.

Negara luar juga menghadapi permasalahan yang hampir sama dalam menempatkan kumpulan berpendapatan rendah. Sebagaimana Arkitek Elemental (*Elemental Architect*), 2003, yang mengesyorkan paradigma Kerangka dan Isian (*Structure and Infill*), Kendall and Teicher (2000) dengan paradigma Bangunan Terbuka Kediaman (*Residential Open Building*), Seo dan Salwa (2016) dengan paradigma Perumahan Tokokan (*Incremental Housing*), kajian ini mempunyai pandangan yang berbeza. Isu perumahan B40 ialah isu dalam negara. Pereka bentuk dalam negara telah berusaha membangunkan sistem unit kediaman yang kompak, tetapi

yang perlu dilakukan seterusnya ialah menaik taraf usaha sedia ada. Kajian ini tidak berpendapat bahawa reka bentuk yang telah pereka bentuk dalam negara ini usahakan adalah gagal dalam menghasilkan reka bentuk yang sempurna sehingga perlu membawa masuk paradigma baharu dari luar negara bagi membentuk reka bentuk bagi menempatkan golongan B40 di negara ini. Oleh sebab itu, kajian yang lebih terperinci mengenai budaya huni di negara ini perlu dikembangkan lagi bagi memberi banyak maklumat kepada pereka bentuk dalam untuk melakukan inovasi reka bentuk rumah B40 yang berkemajuan.

Setelah mengenal pasti simbolik corak ruang RB40T, maka reka bentuk rumah B40 mampu terus berkembang menerusi pengubahsuaian genotip rumah tersedia adalah wajar diyakini. Oleh itu, adalah wajar bagi pihak kerajaan mengambil berat dan membangunkan genotip unggul perumahan B40 bagi memberi perkhidmatan yang terbaik. Walau bagaimanapun, usaha ini memerlukan data yang lebih besar supaya genotip yang dibangunkan dapat digeneralisasikan bagi memantapkan dasar perumahan negara. Seterusnya mampu untuk dipiawaikan bagi meneruskan kajian penambahbaikan dari sudut alam sekitar dan teknologi pembinaan.

## PENGHARGAAN

Kajian ini merupakan sebahagian daripada kajian PhD di bawah program Geran Penyelidikan LRGS; *New Housing Development Concept for B40 Group in Malaysia Based on Social-Spatial and*

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## **Does the Urban Park Provision Fit the Social Needs of the Community? Evidence for Semarang City, Indonesia**

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### **ABSTRACT**

Urban Park is a green open space in the form of social facilities that play an essential role in improving the quality of life of urban communities. This study aims to determine the categories of urban park services that can fit the community needs in Semarang City, Indonesia, covering locations of observation: Simpang Lima Park, Indonesia Kaya Park, Pandanaran Park, Banjir Kanal Barat Park, and Sri Gunting Park. Data were obtained by using a semi-open questionnaire from 100 park users. The analysis process used a scoring technique and hypothetical score category. The results showed that urban park services were in the “medium” category. It can be seen from the assessment of 17 ideal urban park variables, dominated by the “medium” category ( $335 \leq X < 397$ ). They are completeness of the facilities, quality of facilities, types and the number of trees, suitability of the distance between spaces, park cleanliness conditions, clean air quality, wind, and sun direction orientation, parks’ use for social interaction, and users’ interest to promote the parks. These results indicated that urban park services were not yet maximum in fitting the community needs. This study is expected to be used for evaluation and input for future urban park planning.

*Keywords:* Urban community, urban park, urban planning, social interactions

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### **INTRODUCTION**

Currently, urban parks as public social facilities encourage social cohesion and increase the quality of urban life, urban residents, and urban landscapes since they provide natural or artificial areas and supply freshness to the community (Bahriny & Bell, 2020; Chen et al., 2020; Lee & Hong,

2013; Olapiriyakul & Nguyen, 2019; Peters et al., 2010). The fulfillment of community influences sustainable cities embodiment needs to appropriate public facilities, equal distribution, and involvement of community participation, and the urban park is not an exception (Bakar et al., 2016; Tahmasbi et al., 2019; Tsou et al., 2005).

In many cities, there are still inconsistencies in the implementation of the plans; for instance, parks use a pattern that does not fit the community needs, and there is a dissonance between spatial indicators and the perceptions of park visitors, whereas parks are spaces for the common good and aim to bring equality to urban parks (Bogle et al., 2016; Boulton et al., 2018; Kothencz & Blaschke, 2017; Marquet et al., 2019).

Indonesia is one of the Asian countries with a friendly, sociable culture and community. Urban parks can also function as public facilities for social interaction (Harjanti, 2020). Semarang is one of the cities in Central Java, which serves as the capital of Central Java Province. Currently, Semarang is working to increase the availability of urban parks' quantity and quality. They do not yet have a proper and comfortable urban park. Besides, the physical quality of urban parks in Semarang is not optimal (Diseptyanto et al., 2014; Hariyadi et al., 2015). These facts led the researcher to select Semarang as the research location.

Research related to fulfilling the community needs of urban parks was conducted by Wu and Song (2017),

emphasizing the differences in urban park needs between the general community and community with special requirements concerning the level of inclusive needs, i.e., safety, accessibility, and routine maintenance. In similar research, Qin et al. (2013) focus on users' satisfaction with green space from a vegetation environment's perspective. Discussions related to the components of the urban park landscape by Deng et al. (2020) discuss the relationship between spatial characteristics and health factors. Furthermore, research on park services for users done by Kurniawan et al. (2019) assesses park quality based on park performance, service scale, and visit frequency. A similar study related to increasing urban park uses by Abdelhamid and Elfakharany (2020) focuses more on assessing factors required to improve the advantage of parks for the community. Based on this description, it can be stated that there are not many discussions regarding the assessment of park services on user needs and the exploration of users' preferences as an effort to increase the benefits of urban parks.

This study needs to be carried out to determine the category of urban park services in Semarang to fit the community's needs and determine the community's desires for urban park availability, referring to the lack of previous studies. Therefore, the assessment of the urban park is based on its users. Thus, it can describe the condition of the urban park based on the community's needs.

## MATERIALS AND METHODS

### Case Study

Urban parks in Semarang, as the samples of this research, focused on downtown parks that the government manages, are well known among the community and have different characters. This choice leads to research discussion based on users' perceptions. Thus, the selected samples emphasized urban parks that the community can use, specifically active urban parks. Downtown parks were chosen as they are located in the city center, which more people will visit. Besides having relatively easy access, they are also well-known by the community.

Urban parks selected in this study were Simpang Lima Park, Indonesia Kaya Park, Pandanaran Park, Banjir Kanal Barat Park, and Srigunting Park. According to Semarang Regional Regulation Number 14 of 2011 and Semarang City Spatial Planning, 2010–2030, these parks are active urban parks in Semarang city center. Based on direct observation in 2020, these parks have different characteristics. Simpang Lima Park is a field form park located in the city center of Semarang, Indonesia. Kaya Park is a modern park intended for relaxation and entertainment, Pandanaran Park carries the icon of Semarang City and is decorated with a statue of Warak Ngendog, Banjir Kanal Barat Park is a riverside park, and Srigunting Park is a historical park in historical areas, namely, the old city of Semarang. The location of this study observation is described in Figure 1.

### Sample and Data Collections

Sample determination was carried out by purposive sampling technique, calculated using the Slovin formula (Tejada & Punzalan, 2012). The total population of Semarang City, 1,815,729 people, became the total population (N) (Dinas Kependudukan dan Catatan Sipil, 2018). Based on the service level of urban parks observed at the city level, it was assumed that all Semarang communities are allowed to visit these urban parks. Then, the margin of error used was 10% or 0.1, so the number of research samples obtained was 100 respondents. Sampling was conducted on Semarang citizens who have visited the selected urban parks (Simpang Lima Park, Indonesia Kaya Park, Pandanaran Park, Banjir Kanal Barat Park, and Srigunting Park) in the last one-year period (from August 2019 to August 2020), and on productive age (15–64 years). It is assumed that people in that age range tend to be interested in visiting urban parks. The distribution of the sampling was done evenly in the five urban parks. So, there are 20 respondents in each park.

Data collection was carried out by field observations and questionnaires distributed to park users within one month (August 2020), on weekends (Saturday and Sunday), at 6.00–8.00 AM and 4.00–6.00 PM. Many park users are assumed to visit the urban park on that day and time. The questionnaire's framing was determined by examining various theoretical references related to the ideal urban park, which were reduced to 17 variables. These variables were taken from studies conducted by Arifin

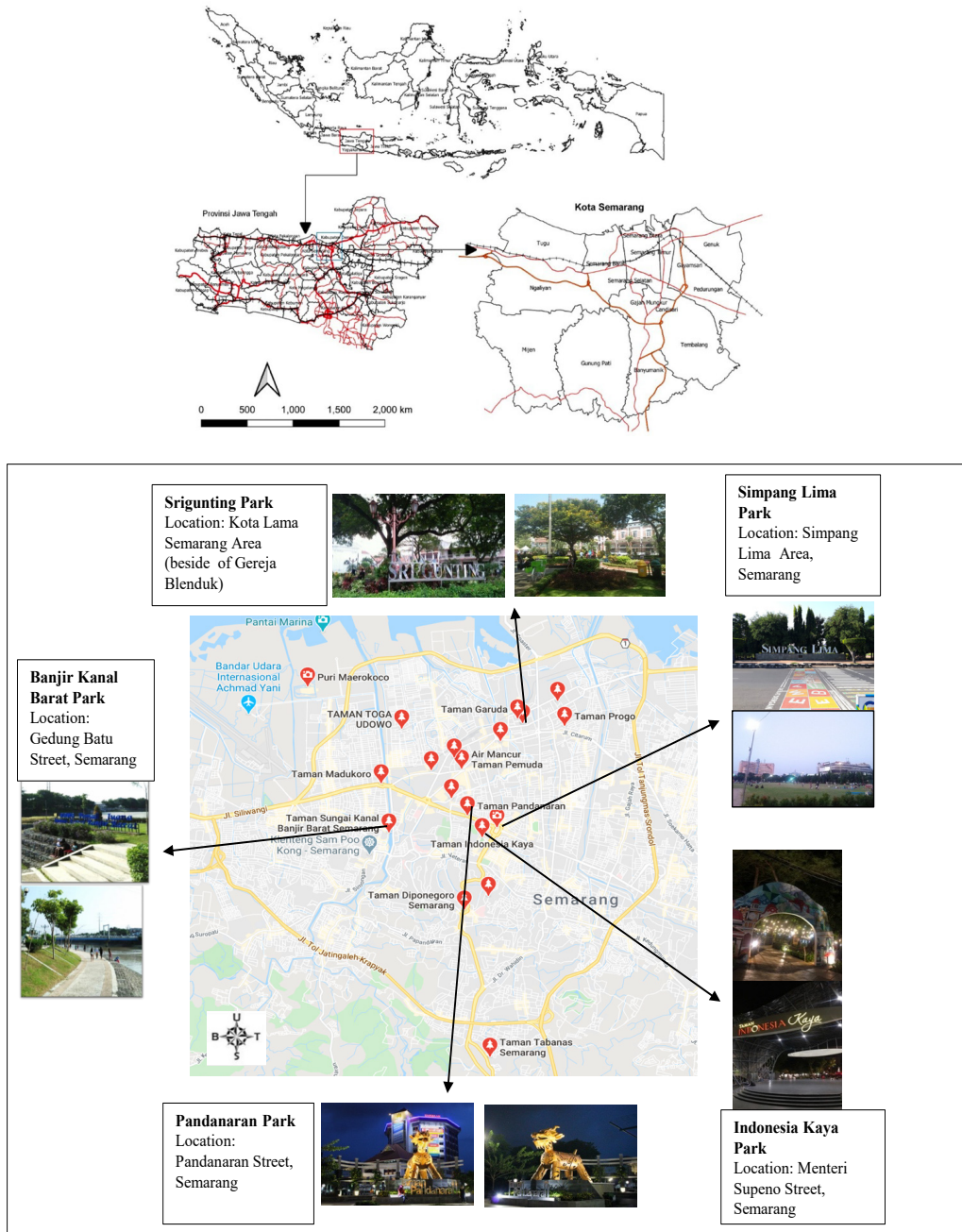


Figure 1. Locations of Urban Park study observation in Semarang  
 Source: Based on direct observation in 2019 by author

(2006), Ayala-Azcárraga et al. (2019), Carr et al. (1992), Ellicott (2016), Lynch (1981); Maslow (1954); Kementerian Pekerjaan Umum dan Perumahan Rakyat (2008); Seymour (1980). They are completeness of facilities, quality of facilities, types, and the number of trees, suitability of distances between spaces in the park, park safety (crime and accidents), pollution levels, noise levels, and wind and sun orientation.

Then, park cleanliness, users' freedom to do activities in the park, utilization of urban parks as recreational facilities by users, use of urban parks as a place to gather and to hold social interaction, whether urban parks can inspire others to visit and get users to promote them to others, the role of the users in park management and the existence of the parks according to users. See Table 1 for more detail.

Table 1  
*Variables of an ideal urban park in previous studies*

Variable	Carr et al. (1992)	Seymour (1980)	Lynch (1981)	Maslow (1954)	Arifin (2006)	The Green Flag Award (2017)	"Dinas Pekerjaan Umum" (2008)	Ayala-Azcárraga, et al. (2019)
Completeness of Facilities	v		v	v	v	v	v	
Quality of Facilities	v			v				v
Types and Number of Trees	v	v			v		v	v
The Suitability of the Distance Between Spaces			v					v
Park Cleanliness (Condition)	v		v			v		v
Park Cleanliness (Air)	v		v			v		v
Park Safety (Accident Aspects)	v		v	v				v
Park Safety (Crime Aspects)	v		v	v				v

Table 1 (Continue)

Variable	Carr et al. (1992)	Seymour (1980)	Lynch (1981)	Maslow (1954)	Arifin (2006)	The Green Flag Award (2017)	“Dinas Pekerjaan Umum” (2008)	Ayala-Azcárraga, et al. (2019)
Pollution Level	v	v		v		v		
Noise Level	v			v				
Wind Direction Orientation	v				v			
Sun Direction Orientation	v				v			
Freedom of Activity in the Park	v		v			v	v	v
Recreation Facilities and Gathering Places	v						v	
Promoting the Park by Users	v		v			v		
Users Roles in Park Management						v		
Park Existence		v						

Note. Based on the author’s analysis in 2020

**Data Analysis**

The assessment variable was derived from the questionnaire questions. Previously, seventeen questions were validated for reliability and validity based on values close to 1. Assessment of urban park services will be obtained based on the rating of park users, as well as the conditions of the urban park that the community needs since urban green open space design is one of the main criteria to create a good park that eventually

can meet the community’s preference (Hofmann et al., 2012).

To validate the results of the variable, we conducted a semi-open questionnaire given to users consisting of questions related to assessing park services and user preferences regarding the existence of urban parks. A 5-point Likert scale was used for the questionnaire: 1 (very bad), 2 (bad), 3 (medium), 4 (good), and 5 (very good). The questionnaire results were analyzed using a scoring technique and categorized using

the hypothetical score category by Azwar (2013) formula. The scoring category was determined by finding the mean (M) and standard deviation (SD).

Based on the analysis, the mean value was 366, and the standard deviation was 31. A “low” category is obtained if the total score is less than 335 ( $X < 335$ ), the

“medium” category is applied when the total score is between 335 and 397 ( $335 \leq X < 397$ ), and the “high” category is applied if the total score is more significant than 397 ( $X \geq 397$ ). See Table 2 for more detail. By reviewing the questionnaire, the urban park users’ preferences were obtained.

Table 2  
*Urban park services category*

No	Category	Formula	Score Scale
1	High	$M + 1SD \leq X$	$X < 335$
2	Medium	$M - 1SD \leq X < M + 1SD$	$335 \leq X < 397$
3	Low	$X < M - 1SD$	$X \geq 397$

*Note.* The source is from Azwar (2013) and the author’s analysis in 2021

Assessment of the availability of urban parks in meeting user needs can be seen from the categorization of scores from each variable. The results will show a comparison between the low, medium, and high categories so that it will be known from 17 variables which category dominates the most.

## RESULTS

### Completeness of Facilities

Complete facilities in the park affect users’ comfort; with complete facilities, users will be increasingly interested in using the parks to meet their daily needs. The questionnaire results showed that the urban park services in Semarang, in terms of completeness of the facilities, were in the “medium” category with a total score of 376. It is

indicated that existing facilities in the park have not fully met community needs, as the availability of existing facilities tends not to be based on the needs and desires of the community as users. It can be seen from the five observed parks, none of which completely meets the completeness of urban park facilities (Wibowo & Ritonga, 2018), including the availability of park benches, trash bins, lighting, pedestrian ways, parking areas, plazas, toilets, gazebos, information boards, electrical installations, and drainage networks. Pandanaran Park does not have a drainage network or car parking area. Simpang Lima Park does not have a gazebo, information board, and parking area. Srigunting Park does not have a parking area, gazebo, or plaza. Indonesia Kaya Park has no gazebo or parking area,

and Banjir Kanal Barat Park does not have toilets or a car parking area. An overview of the urban park in Semarang is shown in Figure 2.



Figure 2. Completeness of facilities in urban parks, Semarang  
Source: Based on direct observation in 2020 by author

User preferences arose regarding the completeness of facilities in urban parks, such as the desire for additional security facilities (including road-crossing facilities, CCTV, lighting, pedestrian paths, and security guards), park attractions (including music, children's playgrounds, bicycle rents, jogging paths, and decorative lights), improved hygiene (including the addition of trash bins and presence of cleaners),

and additional public facilities (including parking area, hand washing area, drinking area, food stall, trade kiosk, additional toilet, non-smoking area, clear directions, extra seats, prayer room, WIFI access, lounge area, and electricity area).

The diversity of facilities desired by park users can be used as input for the efforts to improve urban park services; however, to achieve this comprehensive spatial



arrangement of public service facilities in urban parks also must be dynamically optimized according to the users' needs and local conditions (Yin et al., 2020). Therefore, urban parks can optimally meet the needs of the community.

### Quality of Facilities

The results found that urban park services in quality facilities terms were in the "medium" category with 371 total scores. Several park facilities are currently unusable because of

their poor conditions, preventing park users from fully enjoying the benefits, such as the unsanitary toilets in Pandanaran Park and Srigunting Park. The parking situation is also inadequate and disorganized, with cars parked on the street instead of in proper parking areas. Trash bins in Simpang Lima Park are damaged and not regularly cleaned, as evidenced by the full volume of trash in the morning. In addition, the garden lights in Banjir Kanal Barat Park are currently not functional. An overview of the urban park facilities in Semarang is shown in Figure 3.



Full Trash Bin



Park Light Not Working



On Street Parking



Small Toilet

Figure 3. Condition of facilities in urban parks, Semarang  
Source: Based on direct observation in 2020 by author

Users' preferences for the quality of urban park facilities desire good park maintenance (including good waste management, routine garden cleaning, repainting old-looking facilities, and checking the function of facilities regularly), artistic toilets, and promenades decorated with flowers. Increasing the community's desire to visit the urban park can be realized by fulfilling these various user preferences since complete facilities in the park are not enough without being accompanied by good quality facilities. Moreover, the quality of facilities in urban green spaces impacts users' use (Lindberg & Schipperijn, 2015).

### Types and Number of Trees

The type of tree planted in the park is intended to provide shade and produce oxygen that will make the users feel fresh and cozy. Results showed that the urban park services for this service were in the „medium“ category with a 383 total score. It is caused by the fact that there were no shade trees in some parks that could provide coolness to users in the park. The types of existing trees also tended to be monotonous, as shown in Figure 4, which caused the park users to feel uncomfortable and reluctant to visit and return to the parks.

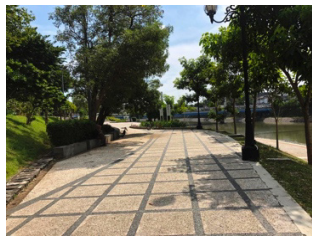


Figure 4. The presence of trees in urban parks, Semarang  
Source: Based on direct observation in 2020 by author

User preferences for the number and types of trees in urban parks included shady trees, additional pollution-absorbing trees, ornamental plants, grasses, and the addition of types and amounts of vegetation. This preference can be used as input to make urban park users feel more comfortable because plant types have a positive and

significant effect on the freshness of humans and certainly affect park users' satisfaction (Deng et al., 2020; Qin et al., 2013).

### The Suitability of the Distance between Spaces

Distance between spaces at the park impacts users' comfort because space density

is significantly related to microclimatic conditions and users' usage behavior (Xue et al., 2017). Consequently, the appropriate distance between spaces at the park will affect users' comfort. It was shown that the suitability of distance between spaces at urban parks was in the "medium" category with a total score of 388. It caused the distance between spaces in the parks to be subjective depending on each user, so the

distance between spaces will differ for each user. However, according to the standard, the individual space requirement is as wide as the span of the two hands. Therefore, user preferences want distance widening, but some want the distance between spaces in the park to be closed and the need for dividers between spaces—an overview of the urban park distance space in Semarang, as shown in Figure 5.



*Figure 5.* Distance inter-spaces in urban parks, Semarang  
*Source:* Based on direct observation in 2020 by author

### **Park Safety (Crime and Accident Aspects)**

Park security is essential for users' comfort as users mostly require a feeling of freedom from anxiety and worry, both from crime and accident aspects at the park. Crime in parks is influenced by the social cohesion of communities and park features (Taylor et

al., 2019), while security in parks is a high priority in fitting the needs of an inclusive park (Chang et al., 2012). In this indicator, park security can be divided into security from the criminal and accident aspects. Results showed that the safety indicators on the crime aspect were in the "low" category with a total score of 325 and the accident

aspect in the “low” category with a 330 total score. It means that users’ safety in urban parks was not well guaranteed because both park security variables are in the “low” category because not all urban parks are equipped with guard posts, security patrols, and adequate lighting at night (Figure 6), which worried users when visiting the

park. Meanwhile, if an accident occurs in the park, it may be caused by inadequate safety facilities and security standards. Among them are the steep height of the garden sidewalk curb, the distance of the park sidewalk from the highway that is too close, and the lack of traffic signs in the parking area.

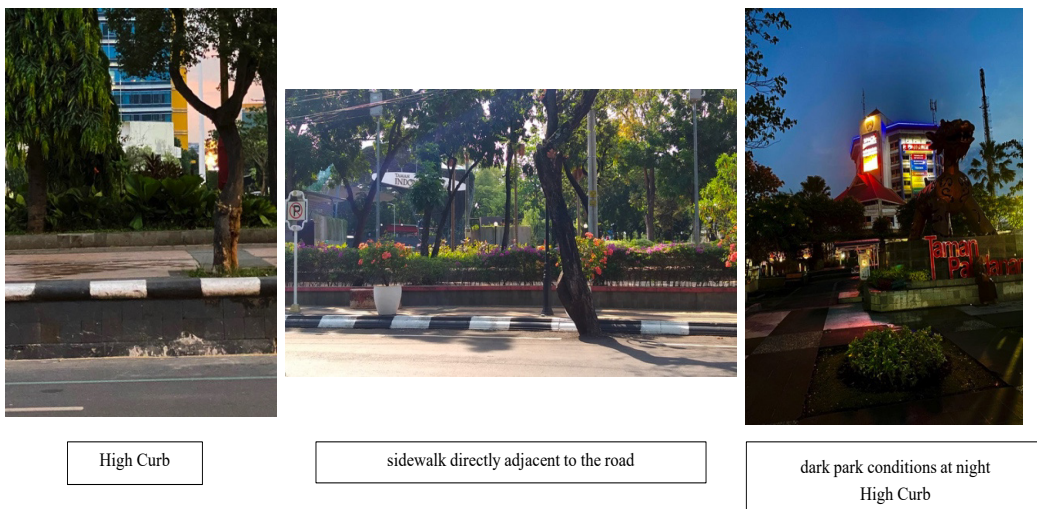


Figure 6. Park safety conditions in urban park, Semarang  
Source: Based on direct observation in 2020 by author

Users’ preferences of security factors in the criminal aspect were the existence of lighting, alarms, CCTV, guard posts, security guards, row seats, security service signage, patrol procurement, legal parking, and policies related to the prohibition of visiting parks at night. At the same time, the accident aspect was almost not highly different from the crime factor, i.e., the existence of clear traffic signs, parking, a crossing area, a guardrail between the road and the park, the presence of CCTV, the addition of posts and security guards,

traffic regulation, lighting, adding bicycle and pedestrian paths, use of soft sidewalks for play areas, safe access to parks and enforcement of sanctions.

### Pollution Level

Air quality in the park affects the user’s comfort as they need fresh air to carry out activities while being in the park. Results showed that users’ comfort related to pollution in Semarang urban parks was in the “low” category, scoring 324. It means that the pollution level in the parking area

still tended to be high, making the users uncomfortable because urban parks are in the activity center and on the side of a road with high accessibility (Figure 7). Thus, this causes the air quality in the park to decline

and is contaminated by vehicle fumes. Various types of vegetation that can absorb pollution and produce oxygen can be added to reduce pollution in the parks.



Figure 7. Pollution conditions around the urban park, Semarang  
Source: Based on direct observation in 2020 by author

Users' preference fits that additional vegetation is required (tree species, flower plants, pollution-reducing vegetation, and general vegetation types). Furthermore, users' preference fits the existence of vehicle restrictions, and park cleanliness is always maintained, with the addition of air quality indicator tools and smoking prohibition regulations. Moreover, adding pollution reduction attributes (including fountains, water blowers, designated smoking areas, bicycle/pedestrian paths, fishponds, and activity separation nets).

### Noise Level

Noise level is an aspect that affects comfort level because users need a convenient atmosphere for social interaction. The results

conclude that users' comfort regarding noise was included in the "low" category with a 309 total score. This score was the lowest score of other park indicators. This fact means that most users feel noisy when doing activities in the park. Perhaps it was due to the parks' location in some areas with high activity and on protocol roads so that many vehicles pass and cause noise, especially during rush hour (Figure 8). User preferences regarding noise in parks show that users want the addition of vegetation (species: trees, shrubs, and vegetation in general) because urban green spaces are an important factor in reducing the impact of noise in cities (Dzhambov & Dimitrova, 2015). Activity restrictions and adding noise-canceling attributes (such

as restricting vehicles on certain days and hours as well as adding a prohibition on making noise) and adding noise-canceling attributes (such as water, bicycle lanes, and music/songs) are also the users' desire to feel comfortable with noise.

### Wind and Sun Direction Orientation

These aspects help provide comfort to users regarding wind and sun directions. The aim is to make users feel comfortable in the park in the morning, afternoon, evening, or night. The questionnaire showed that the users' comfort in the aspect of sun and wind direction orientation was in the "medium" category. The total score for the sun direction orientation was 368, and the wind direction orientation was 393. It caused building orientation in several parks that are not yet adjusted to the design standards, especially in the sun and wind direction orientation, causing the users to feel uncomfortable in the park at certain times, such as in the morning and afternoon (as shown in Figure 9). After all, they feel dazzled and do not get a cool breeze. Park users wanted regarding the orientation of the wind direction additional vegetation (trees that are placed according to the direction of the wind, flowers, and soft grass) and additional facilities (such as weathervanes, fountains, and seats, which are located according to the direction of the wind). Meanwhile, user preferences for sun direction orientation included adding vegetation (shady tree cover and vines), canopy/shade, and sunshine emitters.



Figure 8. Traffic conditions around the urban park, Semarang

Source: Based on direct observation in 2020 by author



Figure 9. Temperature conditions of urban parks, Semarang

Source: Based on direct observation in 2020 by author

### Park Cleanliness

The park's cleanliness will significantly impact the comfort of those who use it.

The users will stay longer in the park with a clean park condition. On the other hand, users will not linger and do not want to visit again if the cleanliness of the park is not realized. There are two indicators of park cleanliness: cleanliness in terms of physical conditions and clean air quality. Based on the questionnaire, the cleanliness in the urban park of Semarang in terms of physical conditions and cleanliness of air quality was in the “medium” category. The

score for the physical condition aspect was 365, and the air quality cleanliness aspect was 357. It might be due to the lack of park management to maintain cleanliness and also caused by the lack of public awareness in maintaining cleanliness in the park, such as littering. Thus, air quality in the park becomes dirty—an overview of the urban park cleanliness in Semarang, as shown in Figure 10.



Figure 10. Cleanliness conditions of urban parks, Semarang  
Source: Based on direct observation in 2020 by author

User preferences related to the park’s cleanliness in terms of conditions were emphasized on park management, the presence of standby cleaning officers, routine cleaning, sorting types of waste, giving strict sanctions for violators, routine painting, adding trash bins, providing trash bags, and sorting plants/plants that are not easily falling. Meanwhile, in terms of air cleanliness, users needed additions of shade and oxygen-producing trees, fountains, activity barrier nets, air quality indicator

machines, flower plants, smoking bans, traffic regulations and restrictions, good waste management, and expansion of green areas.

### Freedom of Activity in the Park

Users’ freedom in activities in the park is immensely necessary because one of the functions of urban parks is to provide justice for the community to take advantage of (Carr et al., 1992). The results showed that the users’ freedom in using the urban park

was in the “high” category, with a total score of 401. It means the user felt free to do activities at the park (as shown in Figure 11). However, users still wanted additional supporting activity facilities (including a drink shop, WIFI, electricity/charging area, a place to relax, a play area, fine grass, a wide field, performing arts, sports facilities, handwashing place, toilet, and a special trading room). Moreover, they also wanted existing vehicle restrictions, cleaning of street vendors, restrictions on vehicles on certain days and hours, enhanced security

protocol, and no restrictions on visitors’ activity. Because the freedom to do activities in the park depends on the users’ objectives in utilizing the parks, this was also caused by the fact that each purpose of visiting the parks required certain facilities and conditions to take advantage of the urban park. The more complete the facilities available in the park will fit the needs of various user objectives, which eventually will have implications for the convenience of park users.



Figure 11. Activities in urban parks, Semarang  
Source: Based on direct observation in 2020 by author

### Utilization of Urban Parks as a Means for Social Interaction (Including Recreation Facilities and Gathering Places)

Based on the questionnaire, the use of urban parks for recreation and gathering was in the “medium” category, with a score of 396. Users have not fully used the park as a recreation and social interaction place. It might be because the park facilities are not able to fit the community’s needs for recreation and the local community’s culture,

which was not yet fully oriented towards recreational activities in the park. Urban green spaces oriented toward recreation can improve community welfare (Zhang et al., 2013). However, the park is used for social gatherings/interaction, although the frequency was not high enough. It can be seen from the preferences of users who want complete facilities (including culinary room, group seating, floor seating, canopy, sports facilities, hand washing area, drinking



and playing area. To increase comfort, users prefer to make the parking area shadier and cooler, with low crowd levels, free of street vendors and street singers, free of beggars, smooth grass, clean conditions, neatly arranged, and there is a room divider for activities. Then, to create beautiful scenery includes attractive design, lots of ornamental flowers, and nicely decorated), and the addition of a large area. The desire of these users can certainly be used as user input to increase the benefits of urban parks in meeting community needs, especially public green open spaces that can provide health benefits for the community, one of which is by facilitating social interaction activities (Sugiyama et al., 2018).

### **Role of Urban Parks in Inspiring Users to Visit and Promote them to others**

One thing that influences users to get aspirations and promote urban parks to others is their sense of attachment to the park (sense of place). Furthermore, landscape features can also contribute to developing an attachment to a place (Ujang et al., 2015). Therefore, it is necessary to have park features that make users have a close relationship. The questionnaire results showed that users' interest in promoting urban parks to others was in the "medium" category, scoring 380. It showed that the community was not fully interested in promoting the parks to others because existing urban parks do not fully fit with the wishes and needs of the community. Accordingly, the park requires good management, additional facilities, and tourist attractions to make

users interested and promote it to others. The result aligns with the preferences of park users who wanted to create a comfortable park for activities (clean, cool, can be used for relaxation, well-maintained, and spacious). Moreover, they want easily accessible, complete facilities, and beautiful scenery (including attractive designs, highlighted garden landmarks, additional interesting photo spots, decorative lights, flower ornaments, and tourist attractions); additional storytellers about the park's developments and signs, including directions and park history info).

### **Role of Users in Park Management**

The realization of a good, active urban park must involve the role of the users as the subject to maximize the function to fit the community's needs. Due to the inclusive planning, design, and management of green spaces and parks, urban planners and park managers must pay serious attention to the sensitive attributes of various social groups (Ahn et al., 2020). The results showed that the involvement of park users in park management was in the "medium" category, with a total score of 343. It could be because there is still minimal community involvement as users in park management. So far, the role of park users is only as visitors and keeping it clean (as shown in Figure 12). Moreover, the community is less involved in the park's management, planning, and design. Park management that involves the role of the community will attract more people to visit the park. Moreover, if interested, the community wants to provide

advice and input, participate in promotions, maintain facilities without damaging them, and take part in maintaining security.

### Park Existence

The area of the park's size influences the existence or sustainability of the park in fitting the community's needs so that the users will not get bored visiting and taking advantage of the park. The results showed that the existence of urban parks in Semarang is in the "high" category, with a score of 418. It was the highest score of the other 17 indicators. It means that existing urban parks in Semarang can continue to exist because the urban park is in the city center area and has high accessibility, making it easy for people to visit. In addition, it is also observed that urban parks are well known not only for the people of Semarang but also for visitors from outside of Semarang City because these parks have a strong character, and some of the parks have become icons of Semarang City (Figure 13).

However, to create a sustainable urban park, users preference wants good park management, including increasing information/innovation, completeness of facilities, maintaining cleanliness, security, routine maintenance, integration between government and society, monitoring evaluation, structuring roads, traders, good maintenance and not being damaged, integration of tourist sites surrounding the parks, culinary space, and guaranteed security. They also want to add and maintain tourism icons and attractions (including adding storytellers of fairy tales, often



Figure 12. Role of users in keeping the park clean  
Source: Based on direct observation in 2020 by author



Figure 13. Urban park that became the icon of Semarang

Source: Based on direct observation in 2020 by author

holding interesting routine events), increase promotion, and make additional signs about historical information easily accessible to anyone.

Based on the whole analysis, there were 11 indicators (65%) included in the “medium” category with a total score between 335–397, specifically, completeness of facilities, quality of facilities, types, the number of trees, suitability of space distances, park cleanliness related to conditions, air cleanliness of the park, wind and sun direction orientation, utilization of the park as a means of social interaction, users’ interest in promoting the park, and role of users in park management. In the “low” category, there are four indicators (24%) with a total score of less than 335, specifically, the safety factor of the accident aspect, the safety factor of the crime aspect, the users’ comfort with pollution, and noise. Moreover, two indicators (11%) were in the “high” category with a total score of more than or equal to 397—specifically, the users’

freedom to do activities in parks and the existence of urban parks. An overview of the urban park service categories in Semarang is shown in Figures 14 and 15.

## DISCUSSION

The level of freedom of park users in carrying out activities was included in the “high” category. It is in line with Carr et al. (1992), which explains that one of the conditions for an excellent open space is an open space with an equal value where the community can freely use it for various activities. In addition, the presence of various activities in public areas should not interfere with the rights of every user (Rahayu et al., 2019). Some activities that users can do in open spaces, especially city parks, include recreation, friendship, and social interaction. Based on the analysis, the level of users utilizing the park as a means of interaction, including gathering and recreation activities, were included in the “medium” category, meaning that users have not fully utilized these functions. Parks are important city assets and allow users to do outdoor physical activities, social activities for residents, and recreation (Chen et al., 2020; Wei, 2017). In addition, park use is also influenced by the surrounding environment and the attributes of the park (Lyu & Zhang, 2019). Thus, if these two factors do not support one activity, using the park for some activities cannot be maximized.

Urban parks have proven beneficial for the community’s health and welfare (Deng et al., 2020). Thus, promotion and

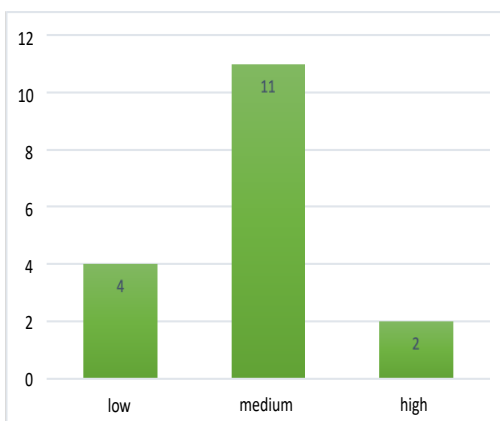


Figure 14. The distribution of service categories for urban parks in Semarang

Source: Author’s analysis in 2021

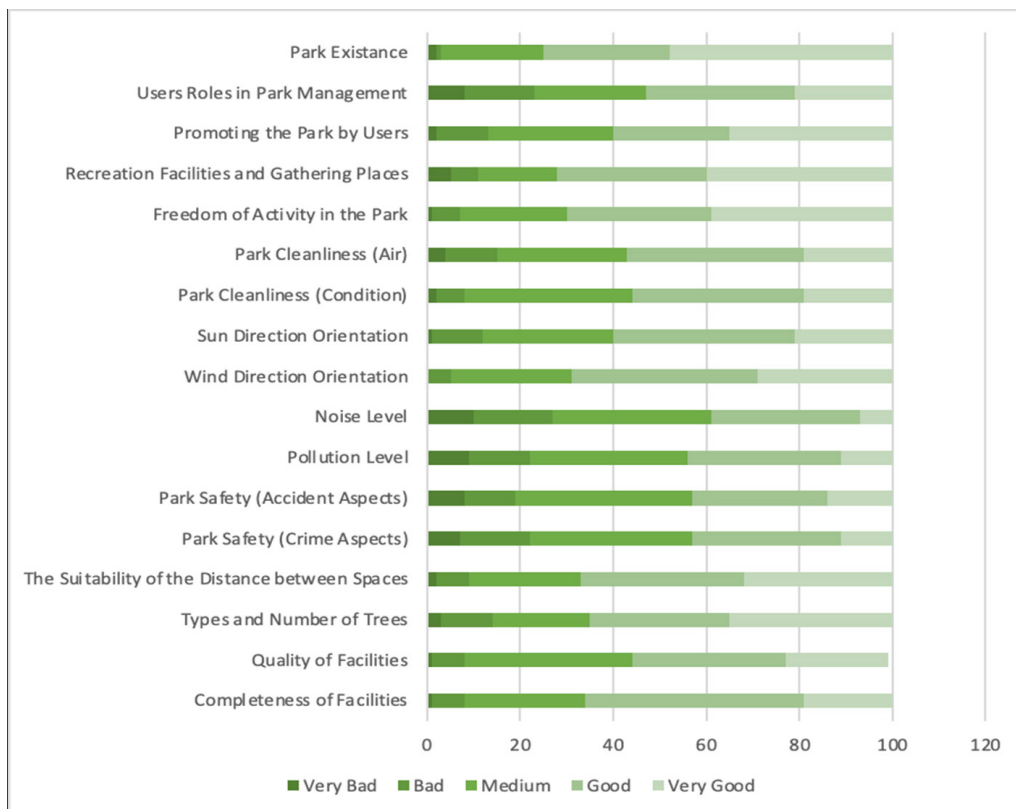


Figure 15. Category of urban park services on fulfilling the social needs in Semarang  
 Source: Author’s analysis in 2021

socialization are required regarding the existence of urban parks to maximize the function of urban parks as important public facilities in fitting the needs of urban communities. The results showed that users’ interest in promoting the park to others to visit the park was in the “medium” category. The desire of the community to promote the park is certainly accompanied by a sense of satisfaction from the users in fulfilling their needs, and the attributes in the park must be able to meet various community groups. However, the analysis showed that the completeness of the park facilities was

not optimal, specifically in the “medium” category, which aligns with Ahn et al. (2020), stating that planning, designing, and managing inclusive green park spaces must pay attention to important attributes that can include various social groups. In addition, users’ interests are also based on attractive garden designs and are tailored to the community’s wishes. The analysis showed that the users’ desire for garden design can be made with the concept of being close to nature. It aligns with research conducted by Rink and Arndt (2016), which explained that the community wants parks and natural

areas in urban areas with traditional designs. In addition, it is necessary to make an urban park design according to user preferences (Lee et al., 2014) so that its users can maximize the benefits of the park.

The sustainability of public facilities, especially urban parks, is influenced by the quality of the park, while the quality of the park can be seen from its management aspect (Chan et al., 2018). The results show that the completeness and quality of the facilities in the park were not optimal because they were included in the “medium” category. This condition was possibly due to the lack of community involvement in urban park management. Good urban park management involves the community as users since the quality of life is closely related to demographic and behavioral variables, which have implications for management and policies in urban parks that relate to the park users’ background (Li, 2020). Consequently, the existence of urban parks can be based on the community’s needs, and thus, they can be utilized optimally by the community. However, the analysis showed that in terms of park management in Semarang City, it was in the “medium” category, which means that park management has not fully involved the role of the community. Accordingly, it will impact the low desire of users to visit the parks in the future since it does not fit with the users’ wishes. This result is in line with Nasution and Zahrah (2014), who found that several factors in public open spaces strongly correlate with people’s perceptions of public open spaces. Consequently, the

planning process and procurement of urban parks require community participation to make the parks maximally utilized by the community.

The advantages of this research are that it can show the category of urban park services, particularly downtown parks, in Semarang. This research also found various people’s preferences regarding the existence of urban parks. Accordingly, the research results can be used as an evaluation basis for urban parks’ existence, provide input for planning and designing urban parks in the future, and emphasize that the role of the community is very important in influencing the sustainability of the parks. Nevertheless, this study only evaluated the urban park services by users and the users’ perceptions. For further research, some studies about factors influencing the identification of urban parks discussion can be conducted, which refer to these results.

## CONCLUSION

The findings indicate that the urban park services in Semarang are not maximal in fitting users’ social needs. The 17 ideal park indicators examined showed that the assessment was dominated by the “medium” category (11 indicators/65%). Various user preferences for the existence of parks show that the community has not fully fulfilled its needs through the benefits of urban parks. Consequently, to create an urban park that can fit the community’s needs, urban park planning is essential in the future to accommodate the needs of all people based on user preferences. It confirms the study

conducted by Asibey et al. (2019), stating that park management must involve the roles and aspirations of users. The urban park provided is intended to be utilized optimally by the community and fit their needs accordingly.

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## **Help-Seeking: A Qualitative Study of Help-Seeking Behaviours of Students in Public Secondary Schools in Northeast Nigeria**

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### **ABSTRACT**

Researchers from Western countries have studied how adolescents seek help, displaying that many young people are apathetic towards seeking professional counselling. However, using Western samples to highlight the common help-seeking behaviours (HSBs) of adolescents has significantly created a gap in the literature amongst members of indigenous communities in Northeast Nigeria. The literature is yet to understand the dynamics that help promote the HSBs of learners in public secondary schools in the community. Differently, previous studies have been delimited to learners as samples, thus discounting validations by school counsellors and managers. This study employed the Focus Group Discussion (FGD) technique for twenty-four student samples and in-depth interviews with four teacher-counsellors and four in-school administrators to explore the phenomenon of study in a real-world context. Using NVivo 10 software to analyse participants' data corpus, the study has generated five emergent themes, namely: (i) Responsibility; (ii) Communalism; (iii) Value and belief norms; (iv) Counselling management in schools, and (v) Multicultural biases. As recommendations, the study suggests the need for counsellors to be multiculturally versatile—be aware of cultural interfaces and implications on

counselling relationships as much as build linkages—advocacies, collaborations via the school Parents Teacher Association (PTA) and honour confidentiality in counselling.

*Keywords:* Collectivism, help-seeking behaviour, northeast Nigeria, public secondary schools, school counselling

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## INTRODUCTION

Although Western counselling continues to flourish in many communities (Duan et al., 2011), indigenous populations have continued to explore community counselling. To help members take direction or search for meanings and ultimate truths, traditional help providers, religious leaders, adults, family and members of kinship groups, all assist members in attending to their problems and mental well-being, following their established code of conduct (Alunga & Anovunga, 2017; Okocha, 2015; Rowe et al., 2014; Senyonyi et al., 2012). Despite their commitment to a plethora of indigenous support infrastructures, literature has continued to highlight the reliance by young people on family when it comes to help-seeking following subsisting cultural values about childrearing and the family notion of help-giving as a moral burden and duty. The concept of trajectory and conception by the cultural approach of networks about the evolution of paths for seeking support have encouraged the child to connect with family predominantly for help (Courcy & des Rivières-Pigeon, 2021; Lau & Takeuchi, 2001). Despite the stern authority over children and their choices, the supportive climate and emotional renaissance offered by family provide the environment that best meets the needs of children in terms of help-seeking (Bejanyan et al., 2015; Kotlaja, 2018; Reid et al., 2010).

Traditional African cultural perspectives define human personality from interpersonal relations because of the culture of interconnectedness, sharing, and

cooperation among Africans (Asiimwe et al., 2021; Bojuwoye & Moletsane-Kekae, 2018). In Bronfenbrenner's ecological systems theory, interactions occur on a fairly regular basis amongst individuals, leading to care and planning for others, including engagement in multipart tasks or activities for members to acquire new skills and knowledge—sacrificing for the common good as emblematic of group membership norm (Merçon-Vargas et al., 2020; Seo, 2010). This norm extends to non-biological relations—but individuals who are knitted by clanship or descendance blood or webbed by collectivist culture who help to communicate with members who are desirous for help—consistent with the 'village model' in Africa (AlHorany, 2019; Asiimwe et al., 2021; Emelifeonwu & Valk, 2018; Pryce et al., 2017).

The primacy of value and beliefs in help-seeking draws public concern as clients now bring their spiritual life into therapy and therapeutic conversations (Blair, 2015). The centrality of religious values and beliefs to African Americans and Arab Muslims, for instance, could be understood by how the communities explore help-seeking or construct their HSBs (Alhomaizi et al., 2018; Hays & Lincoln, 2017). Literature has emphasised the multidimensionality of spirituality to human flourishing and treatment, and thus, the link between spirituality and quality of life (QoL; Choudhry et al., 2016; Cornish & Wade, 2010; Deb & Strodl, 2018; Pandya, 2017; Parker & Hanson, 2019). However, this perspective on help-seeking by young

people is yet to be documented by studies in Northeast and Northern Nigeria, thus opening a new vista for studies on school counselling practice in Northeast and generally in Nigeria, considering that Northern Nigeria is predominantly a Muslim community (Balogun, 2012; Hallouch, 2018; Ohaja et al., 2019).

Recent, in-depth assessments of school counselling services have been carried out (Cooper, 2006; Mckenzie et al., 2011), including studies on factors that inhibit students from gaining access to such services (Cooper, 2006). Astonishingly, findings have shown that commitment to school counselling services is influenced chiefly by learners' experience in counselling relationships with counsellors (Knight et al., 2018). Although guidance counselling goals and objectives are highlighted in Nigeria's National Policy on Education (Federal Republic of Nigeria, 1987, 2004, 2014), one of the infractions to counselling administration in schools is the location of counselling offices, which often are non-protective of the identity of learners. Aside from the problem of confidentiality, in African culture, individuals should keep their needs and problems secret resilience-wise, consequently causing an impasse in the effective discharge of the work of the counsellor (Goss & Adebawale, 2014; Oluwatosin, 2014; Omoniyi, 2016).

The constellation of these findings has serious implications on diversity and ecological differences regarding professional counselling and clients from diverse and non-western communities working to tackle

issues in a holistic and non-reductionist manner both theoretically and practice-wise (Aga Mohd Jaladin, 2013; Lazarus et al., 2009; Sakız & Sarıçalı, 2019). Following findings by the literature of HSB, the current study was driven by the need to identify how learners in public secondary schools in Northeast Nigeria construct their HSBs given their lived experiences as young people who require repeated demands for help as no previous study has delved into this domain of the learner.

## **METHODOLOGY**

### **Study Design**

The study employed qualitative research methods to study participants' thoughts, feelings and experiences in real-world settings to make sense of their world (Novek & Wilkinson, 2019; Tharbe et al., 2020). With three sets of participants and counselling as a programme, using a multiple case study approach becomes apt to investigate the phenomenon of study from a wider perspective (Creswell, 2013). Further, this design allows data collection from various venues at multiple time points (Varpio et al., 2017) and data analysis within and across research participants for legitimization of findings (Gustafsson, 2017; Lam et al., 2016).

### **Sampling and Recruitment**

This study was approved by the Faculty of Education Universiti Malaya, Malaysia in 2020. Permission to engage students from public secondary schools was secured from two State Ministries of Education

in Northeast Nigeria. The sample had 24 student participants aged 18 and above, recruited purposively across single-sex and coeducational schools (Etikan & Bala, 2017; Taherdoost, 2016), thus making parental, proxy or third-party consent unimportant. Additionally, there were four nonprofessional (teacher-)counsellors with more than six years of counselling services selected via snowball sampling, including four in-school administrators who have served between 10–12 years recruited via convenience sampling (Etikan & Bala, 2017; Taherdoost, 2016). The study specifically selected Senior Secondary 3 (SS3) students in their final year who demonstrated a willingness to disclose personal information, were open-minded, and could engage in discussions (Robinson, 2014). The selection criteria included proficiency in English, gender, and religious affiliation.

Participants consented to audiovisual recordings of sessions and participation in member checks with informed consent and voluntary participation forms signed. In line with ethical obligation, participants were given pseudonyms and assured of confidentiality and safety of session contents, information, and disclosures against the knowledge of third-party including assurance of protection of their privacy and human dignity (Arifin, 2016; Farrugia, 2019; Lloyd-Hazlett et al., 2018; Zhang et al., 2019). Ethically, this study avoided internal and external suppositions from research conceptualisation up to report writing for purposes of trustworthiness (Sorsa et al., 2015; Tufford & Newman, 2010).

### Formulating the Instruments

Formulating instruments for the study was guided by a review of the literature (Doody & Noonan, 2013; McIntosh & Morse, 2015) respecting adolescents and HSB (Alhomaizi et al., 2018; AlHorany, 2019; Campbell & Wilson, 2017). Guided by four distinct phases, the study gained some insights into themes in HSB, first on the vitality of help-seeking to human functioning. This domain led to a few questions for the study one of which is ‘Tackling your (*their*) problems, what is your (*students*)’ opinion about getting help from people?’ There were also findings on networking and consulting—safety netting, thus leading to generating questions that covered this area of need, for instance, ‘Solving your (*their*) problems; may I know the first source you (*your students*) contact for help?’ and ‘What other sources are also important to you (*your students*) to approach for help?’ Creedal affiliation/values appear central to help-seeking, and thus one of the questions: ‘In your opinion, what important beliefs guide your (*students*)’ readiness to go for help?’ There are links across personal factors, help-seeking and school counselling. These findings have elicited drawing questions on these features: ‘Going for school counselling, tell me what issues affect your (*students*)’ interests in doing this.’ Finally, the instruments were subjected to expert assessments, including a preliminary test, using a different sample to help develop instruments for the study (Hamilton & Finley, 2019).

### **Data Collection Method and Procedure**

The study employed the use of in-depth face-to-face interview technique to generate data from nonprofessional/teacher-counsellors and in-school administrators to help researchers gain meanings and experiences often not easily observed by participants (Rossetto, 2014; Tavory, 2020) and focus group discussions-FGDs to allow interactive discussions amongst students (Balasubramaniam, 2019). With oral discussions held discretely in participants' schools for three days at times convenient for members, the data gathering commenced from November 2020 through May 2021, with sessions lasting between 70–95 minutes for FGD and 65–90 minutes for interview participants. As ground rules, FGD participants sought for respect of opinions and contributions by members with mobile phones put into vibration mode or silence.

### **Analysing the Data**

Data for the study were analysed starting with verbatim transcription (Aga Mohd Jaladin, 2013; Tharbe et al., 2020) by two researchers who listened independently to the 12 verbatim audiotaped manuscripts on a school basis. Using NVivo 10 software to develop stratified sets of codes arranged around nodes in different layers, the study adopted thematic data analysis (Braun & Clarke, 2006). This outline assisted researchers in identifying data/codes relevant to topics in the study, appraising the codes to see their levels of agreement or compliance (Elliot, 2018). Next, codes

were collapsed, reworded, ranked, and categorised, given their value and importance to generate emergent themes, which were organised into groups for analysis and interpretation (Parameswaran et al., 2019). The use of member-checks/roundtable discussions assisted the study in confirming or disconfirming primary and secondary themes in addition to helping the study confirm or note omissions or commissions in reporting the lived experiences/social nuances by participants (Moore & Llompart, 2015; Tharbe et al., 2020).

## **RESULTS**

Throughout the interviews, participants' data revealed the influence of ecological contexts and the impact of learners' proximal community of development on how they construct their HSBs with impacts on the use of school counselling. The themes and their categories are presented below.

### **Responsibility**

Largely, participants were unequivocal about the degree of bonding and natural attachments between learners and members of their immediate family, specifically parents. This factor explains the common belief that fulfilling learners' help-seeking needs is primarily a responsibility vested in the family. Members of extended families also play a role in advice-giving, as kinship connotes duty and burden-sharing. Dependence on members of their immediate family for economic and emotional sustenance coerces learners to tolerate notions by their families; thus,

habitually, help-seeking from home. An important emphasis by participants is the level of warmth and care that the family provides to create a sense of nostalgia in learners and thoughts about home in moments of advice-seeking.

For instance:

Parents are the first source of life to the child in terms of love and care. This is why students are home-sick when they have need for advice ... to discuss their problems closely, a kind of allegiance (Hajiya, an in-school administrator).

The belief that advice-giving is a social responsibility exclusive to family infringes on learners' worldviews and extends to their understanding of help-seeking. For example:

They feel it's their duty, a natural duty... they feel they're more obliged as parents or family to advise and guide the student. This perspective affects the sensitivity of the child; nearly in everything; including getting help (Lami, a teacher-counsellor).

Supportive roles are rendered by siblings toward advice-giving. According to participants, this development further builds attachments and confidence in learners regarding the family and why they resort insistently to members to manage their problems. By affirming the relevance of siblings, it was observed that:

Apart from my parents, I meet people in my family for help also; like my sisters and my brothers...

they're like counsellors, too (Patience, an FGD participant).

Mostly, siblings are preferred to parents on educational and gender-specific problems as learners are shy to lay gender-specific issues to parents in some cases:

Elder brothers and sisters help to counsel their younger ones as in choosing careers, higher institutions or in gender affairs... some are shy or careful to discuss femininity or masculinity with parents (Happiness, a teacher-counsellor).

On issues pertaining to mental health, learners prefer siblings:

I like to take the problem to my sister, like it's something on hygiene and health, women affairs, family health or like am not happy or feel confused (Alice, an FGD participant).

Learners also like to communicate their problems to kinsfolks, specifically, the extended relations who share the same ancestry and historical lineage, as they tend to have confidence in such individuals. For example:

Also, I have people who advise me from our other families—from the same grandfather and great-grandfather; sometime from my mother and sometime from my father side... many (Kadijah, an FGD participant).

In terms of service harmony, accessibility by kinsfolks further invigorates the mindset and readiness of learners to bare minds



to kinsfolks. This position was feasible from the participants' submissions. As an example:

The extended families help a lot in every family, they're always there; ready to advise... in utmost good faith, so students take advantage to discuss with these people (Musa, a teacher-counsellor).

Some participants commented that interrelations are a key factor among kinsfolks. This constituent attunes members with happenings to others, enabling often an atmosphere for help-giving or problem-resolution:

But how does the system work... the people discuss their problems together, by so doing they're in the picture of the goings in the family and the kind of help the victim demands (Abdullahi, an in-school administrator).

Theorising this custom could be located within the domain of Life-course theory, which defines the transition to adulthood within the larger systemic and historical context (Pryce, 2017).

Several participants commented on learners' dependence on family, which, according to them, crafts the path for how learners engage in help-seeking, given that they rely on family in terms of support and subsistence. It was observed that:

They students are on their parents' pay perk... they live on the family to eke out a living, even for their emotional support. If they turn defiant, they risk their

rights (Hashim, an in-school administrator).

Authenticating how parental notions can influence the use of formal help-seeking, one of the participants remarked:

Everything you need is from your parents, or your family. So, you don't raise your voice ... you're afraid to say no; yes, even for where to seek help (Esther, an FGD participant).

In summary, age has foisted reliance by learners on family, leading to docility and acceptance of family's positions, more importantly, that of parents. This development has implications for HSBs of learners as they are nostalgic about most of their affairs as young people.

### **Communalism as a Factor**

This theme expresses other aspects of the learner as learners' social community and sympathy for communitarian life impact their worldviews as members of collectives. For example, highlights on the duty-of-care, neighbourliness, and elderliness suggest these elements have an impact on how learners construct their HSBs. Owing to the duty-of-care, learners comport to sharing problems with non-familial individuals with the domain provoking advice-seeking from such members in the community:

It's natural that we feel belonged, family or no family; you counsel the child; like your own; you can go extra miles, to try to solve her problem... like she's your child (Hajiya, an in-school administrator).

One of the features of duty-of-care is its ability to engage learners proactively in the disclosure of problems. For example:

Right from the beginning, you like feel their interest in you, in your problem, so you don't hide your problem; you speak out, ready to say your problem as it is (Jamiluddeen, an FGD participant).

This culture infuses learners with the assurance of commitment to problem-solving by non-familial care- or help-givers and a repeat of sessions by learners:

They appreciate the commitment by local help providers, so they're comfortable to go back... freely without pressures (Happiness, a teacher-counsellor).

Another way learners obtain help is to engage enthusiastically, persons of non-biological affinities in the same compound or neighbourhood having enjoyed the benefits of mutual cohabitation for years for help or advice-seeking.

You try to understand the mood swings of the people here. Your next door neighbours have access to your child—yes; to counsel, scold the child for misconduct (Lami, a teacher-counsellor).

There are no restrictions to what learners discuss with neighbours owing to trust and skilfulness in advice-giving; themes often involve issues in personal—and social life:

The topic they discuss with people in the yard or their area varies; it

depends on why they're pressed for help; can be on anything (Talatu, an in-school administrator).

There is value attached to old age and elderliness. This constituent determines whom the learner consults for help-seeking, expressive of the belief that being a senior citizen is axiomatic of possession of wisdom and intellect, which are consequential in indigenous counselling to help direct how best to solve a problem as in the following:

'*Ai*' [a local idiosyncrasy], many people like to go to elders for advice because what the elder see, the child cannot, even if he climb an *Iroko* tree... they elders have knowledge; experience... so they advise base on these (Abdussalam, an FGD participant).

Recourse to experience, elders provide examples and illustrations that are vivid and rich to help young people resolve the quagmire of difficulties they encounter. This rare feature has a way of attracting learners to senior citizens for advice-seeking. This perception was illustrated thus:

Whenever I go to elders for advice, I learn more... they give clear examples, different stories, history... so you learn (Salvation, an FGD participant).

One of the participants also commented:

... they elders are philosophical, sometimes they go folklores to drive a point, teach morals (Hashim, an in-school administrator).

Some participants observed that, unlike school counsellors, elders have the power to enforce advice or sanction learners to heed advice as age is respected:

In counselling we give direction and learners may turn deaf ears, elders will sanction; enforce and they children must heed, and cooperate (Helen, a teacher-counsellor).

In summary, communalism influences commitments by individuals to the well-being of members, irrespective of divides. This concept has an impact on the way of life of members such that individuals consult others in the community for assistance.

### Value and Belief Norms

This theme refers to the theological life of learners and meddling in the domain of their HSBs. Given their faith lines, learners imbibe diverse values and beliefs that provoke their disposition to use spiritual therapies, engaging family practices and religious pedagogies, including meeting clergies for counselling or advice-giving. The following accounts exemplify these positions. For example, on the use of spiritual therapies for problem intervention, one of the testimonies reveals:

Students seek spiritual guidance if they sense the matter is between them and God; don't like to expose the problem to others; strictly spiritual (Talatu, an in-school administrator).

Learners resort to the use of spiritual therapy when personal efforts to tackle their difficulties become elusive, for example:

... they learners sometimes believe in mystical powers, so they like to invest their personal efforts (Happiness, a teacher-counsellor).

However, differences exist in how learners explore spirituality or religion as sources of therapies, subject to family practices and religious pedagogies to which learners are exposed. For example, waking to observe midnight prayers, giving charity, and offering prayers for uncertainties are common practices tried by families in help-seeking situations, and learners imbibe these virtues:

Like we do in the family, sometimes I do *tahajjud*, *istikhara*, or give *sadaqah* when there's problem, like they teach us in the *Madrasah*; also I fast Monday, Thursday or for three days like my father do, I also read Qur'an to beg Allah for solution (Maryam, an FGD participant).

A Christian participant revealed:

Like my parents, I am a prayer warrior... anointed. I pray many times, I believe in the Father, I talk to Him, I read the Bible, give tithe and fast when am in problem. Father has never fail me (Faith, an FGD participant).

Clergies also help provide counselling services. The perspectives of these figures are highly revered, given the appeasement and comfort that learners derive from guides by clergies, and reasons why the general public contacts these personages for help, including learners:

Most of us go to these religious leaders for help. First, you derive immediate comfort ... something appeals to you as if the problem is over, your spirit is lifted instantly, you have hope, depending on your religious group (Abdullahi, an in-school administrator).

There are changes in inner-self, with immediate gratification derived by learners from this medium of help-seeking:

Like students achieve some internal satisfactions and immediate relief—gratification when they go to Imams or Pastors for assistance (Happiness, a teacher-counsellor).

One of the participants recounted:

One of my Pastors use to help me with counselling; you can meet any of them to help you (Alice, an FGD participant).

Though spiritual therapy might be anomalous to mainstream counselling, this medium of help-seeking is becoming important to spiritually-inclined persons in informal counselling settings (Alhomaizi et al., 2019; Campbell & Wilson, 2017) and important to non-state actors (Ali, 2016; Al-Krenawi, 2016).

### **School Counselling Environment**

The nature of school counselling environments was causative to attitudes that characterise responses to counselling services by public secondary school learners in Northeast Nigeria. This theme portrays how the culmination of threat factors in

school counselling rooms, confidentiality factors and loss of poise visiting the school counselling rooms affect the penchant of learners to seek help in schools, as recalled by participants. In scenic terms, participants reported the following experiences. For example:

Our counselling office is too open. They used plywood to divide the library and the office; I feel people hear what I discuss. To me, the place is not ok; it's not worth it (Solomon, an FGD participant).

This development impacts the state of mind of a few learners who visit their teacher-counsellors for help.

Its like the whole world is watching me; I feel I was doing something wrong... worried since the room is not hiding (Raabi, an FGD participant).

Timing the appropriate moment to see the teacher-counsellor becomes an important factor in seeking counselling services in schools, as learners are aware of the implications of their actions. One of the comments highlighted:

I observe that students who like to come for counselling don't feel at ease... more like sneaking in, watching when to come... like it's a taboo (Musa, a teacher-counsellor).

Confidentiality or breach of privacy remains one of the mind-boggling issues that draw the attention of learners, threatening and cautioning the traffic to the school counselling room or appointment with the

counsellor. It is evident from one of the accounts:

I fear that the counsellor will expose what I say to her, even a delicate information... many don't trust her... we hardly go (Jamila, an FGD participant).

This development leads to droopiness, a reaction displayed by learners to register their displeasure and unwillingness to meet the counsellor when they find themselves in counselling rooms, for example:

Funny, you see them display nonchalant attitude, turn the other side, avoid eye contact... so their body language speaks volumes of you... no trust; they save their breath (Helen, a teacher-counsellor).

This display of lifelessness while in the counselling room results in a precarious demonstration of nondisclosure of difficulties by learners. The ensuing verbatim illustration consolidates this position:

Some counsellors release information recklessly, so students feel unsafe, but for their own good; to protect them, like life in danger, modify misconducts... but they don't like it (Hajiya, an in-school administrator).

Another problem often demonstrated when learners appear perchance in the school counselling room is feasible loss of poise if they avoid being lifeless, displaying discomposure by their countenances.

The first time I was in the office, like I have fever. During math

class, I have stomach problem... the teacher did not understand, and I don't know how to explain to him, so he send me to the counsellor. they think... am... am. I was shaking... can't explain myself (Faith, an FGD participant).

This encounter has a tendency to expose learners to dread and insecurity as well as loss of vibrancy:

I have listened to cases of students becoming dumbstruck, feeling virtually insecure when teachers refer them to counsellor's office (Hashim, an in-school administrator).

Participants complained that the lack of buoyancy and enthusiasm often leads to deplorable situations like crying and feigning ill dispositions:

Some of them end up crying, some take permission shortly on arrival to visit the restroom or cook things like headache, eye trouble (Helen, a teacher-counsellor).

From findings, counselling as a school programme in Northeast Nigeria has yet to come to terms with local and secular knowledge to enlist the complacency of learners in help-seeking mainstream counselling.

### **Multicultural Biases**

This theme reflects how multicultural issues, for instance, contravention of basic rules, panic about the counsellor's age, power relation, ethnicity, language and

communication barriers impinge learners' interests in school counselling. Obviously, differences in religious ideologies and abuse of these ideologies could serve as conflict drivers among religiously different individuals in the community and reason why learners fail to subscribe to attempts that seemingly contravene basic religious rules, regardless of urge and need for help. The verbatim explanation below is one of the perspectives in this direction:

I don't feel like going for counselling here. Our counsellor is a male counsellor; young. In Islam, a girl who can marry should not sit alone with a man not from her family because something bad may happen between them (Khadija, an FGD participant).

From an Islamic viewpoint, there is a tendency for a bi-directional display of emotional gratification or feeling the other by individuals of diverse genders who are secluded. This article projects a value conflict between the counselling norm of isolated sitting and the religious perspective alluded to by participants. For example:

There are complaints always on why we allow young girls sit in concealment with the male counsellor; they complain of human factor, religious and social consequences (Hajiya, an in-school administrator).

Another participant lamented:

There're insinuations and allegations if you're a young

unmarried chap as a counsellor. Because you sit with students, especially females, people suspect you, not that you are doing your counselling work (Musa, a teacher-counsellor).

Ostensibly, disparities exist between the learner and the counsellor in terms of age and power relations. Given these, it is perceived that the counsellor could overwhelm and manipulate the counselling session, especially in settings involving a religiously different learner and teacher-counsellor:

When your religion is different, they think you may exploit the learner as a counsellor... as someone elderly (Lami, a teacher-counsellor).

Fear of evangelism or Islamisation compounds the problem of distrust attached to the counsellor's age and power, given differences in religion between the teacher-counsellor and the learner as majors and minors. For example:

People who don't agree with Western counselling fear the school counsellor may preach evangelism, Islamise or abuse; the PTA has been helpful, trying to educate (Hashim, an in-school administrator).

This allusion has implications on counselling management in schools in terms of balanced staffing, sensitivity to gender and religion:

I believe time heals everything. Due to human differences, we pair a Muslim and a Christian in school counselling job gender

sensitivity in mind (Talatu, an in-school administrator).

To address misinformation that trails counselling services in schools, participants suggested mass education programmes to advocate positive understandings regarding the school programme. One of these opinions reads:

One catches more flies with honey than with vinegar; we can change people's attitude ... their behaviour by enlightening them; use the PTA to create awareness; to desensitise their views as per counselling in schools (Happiness, a teacher-counsellor).

Language and communication barriers also create a bifurcation due to linguistic differences, particularly a cultural split and gaps in communication between learners and teacher-counsellors. The following illustrates one of these concerns:

If I don't know how to describe the problem in English, I talk in *Hausa*, but the counsellor won't understand what you mean (Isaac, an FGD participant).

This barrier leads to the involvement of a third party by teacher-counsellors to translate comments by learners, which, in a sense, has continued to disparage the counsellor as well as dissuade learners from using school counselling services:

Sometimes, they try not to communicate in English but in local language. So, what do you do... I involve a native speaker to

listen to the student and explain to me... but they look depressed, hate the counsellor, and try not to come again (Happiness, a teacher-counsellor).

Phenomenologically, learners perceive the involvement of a third party as a breach of privacy and contempt for their human persons:

It's like the counsellor expose our secret. I also feel like they don't respect us because we're children (Abdussalam, an FGD participant).

Ethnicity and social background also impact counselling utilisation by learners in schools. One of the contentious cultural barriers here is ethnic meanings attached to the casting of glares at elders or strangers. Though eye contact is vital in psychotherapy, it is culturally disapproved by members of the public in Northeast Nigeria. For example:

The counsellor will shout, lift your head up; look at my face... don't be shy... but this is not how we're train if you sit with an elder or a visitor (Michael, an FGD participant).

Another participant observed:

You need to understand the cultural values here and meanings attached to them like students avoid your eyes when talking (Helen, a teacher-counsellor).

Accounts by participants are explicit, categorically showing that people carry their cultural beliefs into their day-to-day activities. Despite the need for counselling to tackle their burgeoning challenges, issues

in multiculturalism affect how learners make intentions and attitudes to help-seeking in the community.

## DISCUSSION

This study highlights new insights into factors that stiffen the proclivity of public secondary school learners to utilise counselling services in Northeast Nigeria by using a qualitative study method. One of the major findings that explain the less favourable attitudes by the learners to school counselling is their predilections for the community's therapeutic practices for advice and information-seeking. Until now, very little is known about the quantum of counselling learners in public secondary schools in Northeast Nigeria obtain and how they construct their HSBs. Thus, this study contributes to the literature by revealing that despite the provision of Nigeria's National Policy on Education for counselling practice in schools, there is a tremendous reliance by learners on community social support as the tendency for professional help-seeking was virtually non-apparent in learners. The finding is consistent with a recent study which found the family in Nigeria is prime to how children construct their behaviours (Ibrahim, 2015), while family assumes a dominant position generally in the literature of HSB (AlHorany, 2019; Chan & Quinn, 2012; Huey et al., 2013).

Different from findings by extant studies in Northeast and Northern Nigeria, the current study highlights the overwhelming cultural practice and role of others in advice-giving, owing to the community's

core value of camaraderie, antecedents and cognate experience in matters of problem-resolution. This domain of the community is consistent with social capital, which, when fragmented into bonding and bridging, has an ultimate mission of helping as networks consist of individuals who share similar social identities with emotional support provided through frequent contact by members (Schenk et al., 2018; Senyonyi et al., 2012). In effect, the dominant influence of relational and affective ties would explain reasons why community inclusion, collective identity and mutual support as contexts would provide impetus for learners as distinctive citizens in Northeast Nigeria to blend with members of the community for purposes of common ground solutions—keeping to rules of social interaction that 'grease the wheels' and ensure that 'others' wheels are greased' (Camara et al., 2014; Manderson, 2010).

Of course, a broad range of responses and positions emerged relating to how learners obtain help as well as construct their HSBs; there is uniformity and homogeneity in domains that influence the attitude to learners' HSBs as demographic factors try to influence the personality of the learners into decision leading to help-seeking. Hitherto, the issue of diversity, which defines personality and a fundamental value in help-seeking, was not considered eminent in how learners construct their HSBs. However, given findings by studies, Fietzer et al. (2018) reported the concept of personality as a hierarchy with broader traits—typical of those of the five-factor



personality model, which include elements such as conscientiousness, agreeableness, and openness. While the broad trait of openness does indicate a general orientation of being cognitively flexible, for instance, and open to new experiences, the narrow trait of culturally diverse friendships exerts influence when individuals encounter cultural groups distinct from theirs, as documented by Fietzer et al. (2018). Thus, it could be summarised that the proximal community of development of public secondary school learners in Northeast Nigeria explains the backlashes that school counselling has suffered over time, owing tremendously to value conflicts.

## CONCLUSION

This study has found a few bizarre reasons previously not discovered by literature as valuable to non-western communities in help-seeking situations. With the findings of this study, it is essential to consider the unique nature of Northeast Nigeria in terms of diversity and multiculturalism. In essence, school counsellors need to be attuned to local cultures, person-in-context and kind-of-person in the community of the study. This position becomes coherent, following the argument that counsellors in contemporary schools are not only expected to advise students about college but to police for drugs, reduce teenage pregnancies, maintain records of dropouts, and address tempers of irate parents while helping battered and neglected children (Dahir et al., 2019).

## Recommendations

Given the sociocultural context of Northeast Nigeria, certain stereotypical judgments are rife against Western counselling, for instance, fear of possible manipulations of learners by school counsellors. Other endemic factors, such as the dread of breaches pertaining to doctrinal/ideological positions and perceived proselytisation, pose serious challenges to school counselling in Northeast Nigeria. This challenge is a sensitisation for school counsellors to think locally but act globally, specifically dealing with learners from diverse sociocultural, religious and linguistic backgrounds to facilitate and aid the use of counselling services by learners from the community of this study.

Thus, given the participants' data, this study suggests that school counsellors need to be multiculturally versatile—be aware of cultural interfaces in the community and implications on counselling relationships by having knowledge of other cultures and skills to engage learners from differing cultures and backgrounds. Second, there is also a need to build linkages—advocacy cum collaboration within and outside the school to promote departure from current apathy to school/western counselling through an alliance with PTAs as suggested by participants. Third, simultaneously, learners are becoming crestfallen—highly dissatisfied when their human persons and dignity are abused by disclosing information to others. In effect, school counsellors would need to honour confidentiality and privacy

of information within the ethical boundary of the counselling profession.

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## **Effects of Social Networking Sites Usage on Chinese Students' Life Satisfaction in Malaysia: Cultural Identity as a Mediator**

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### **ABSTRACT**

Social networking sites (SNSs) serve as a powerful tool for international students to adapt to the host country and improve life satisfaction. However, the use of SNSs also brings negative influences on their life satisfaction. Additionally, the mechanisms by which this occurs are still unclear. This study employed an online cross-sectional survey of 267 Chinese students in Malaysia to explore the relationship between SNSs usage (usage engagement and acculturation usage) and life satisfaction by considering the mediating effect of host cultural identity and ethnic cultural identity. Data analysis relied on Statistical Package for the Social Sciences and AMOS software. The findings showed that SNSs usage engagement and two cultural identities helped to improve life satisfaction. Moreover, two cultural identities can explain how SNSs usage engagement influences life satisfaction. Contrary to expectations, acculturation usage had a non-significant influence on life satisfaction. However, under the mediating effect of host cultural identity, acculturation usage positively predicted life satisfaction. The research can provide references for the Malaysian government and educational institutions when introducing relevant policies to promote the life satisfaction of international students. The shortcomings and possibilities for future research are also discussed.

*Keywords:* acculturation usage, cultural identity, life satisfaction, social networking sites

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### **INTRODUCTION**

Pursuing education in foreign countries has become a prevalent trend in accelerated globalization. According to the Economic Co-operation and Development [OECD] (2022), international students studying abroad surpassed 6.4 million in 2020. For international students, life satisfaction

reflects their general life evaluation in the host country. Entering a new environment, international students may face increased stress and decreased happiness (Mikal et al., 2013), leading to negative consequences (Shafaei & Razak, 2015). Studying abroad is difficult and frustrating (Xie & Chao, 2022). Common problems international students encounter include stress, depression, and anxiety (Brunsting et al., 2018). Moreover, some students give up halfway because they cannot adapt to the new environment. The high dropout rate of international students has also become a major challenge for international education development in some countries (Pusztai et al., 2019). Thus, with the increasing number of overseas students, more research is necessary to improve international students' life satisfaction in the host country (Li & Ma, 2018).

Rehman and Wu (2020) emphasized that using SNSs plays a pivotal role for international students in their new environments. For instance, SNSs enable these students to communicate with their families and friends back in their home countries while also facilitating the establishment of new friendships within the host country (Rui & Wang, 2015), which is a benefit to life satisfaction. Numerous studies have demonstrated a positive association between the usage of SNSs and life satisfaction (Chen et al., 2020; Gaia et al., 2021; Liu et al., 2018). On the contrary, some scholars have proposed that social media usage is negatively related to life satisfaction (Abdellatif, 2022) since using social media may bring about negative

outcomes, such as loneliness (Raman & Harwood, 2016), influence physical and psychological health (Bae, 2020), and declining academic performance (Lau, 2017).

The inconsistent results on the relationship between social media usage and life satisfaction can be attributed to the diverse measurement approaches for social media usage. Most studies explore the relationship between SNSs usage and life satisfaction in terms of quantitative use behaviors, such as the time spent on SNSs (Pang, 2018). A handful of studies have examined the role of SNSs usage purposes, such as entertainment and socialization (Raza, Qazi, Shah, et al., 2020), self-disclosure (Lee et al., 2013), and information-seeking (Forbush & Foucault-Welles, 2016).

However, there is little research on acculturation usage, which involves gaining cultural knowledge and values about the host country. Acculturation motivations might be salient among international students when facing an unfamiliar environment (Wang & Sun, 2009) since they need to search for relevant cultural information on social media to solve their confusion about unfamiliar cultures (Li & Peng, 2019). Therefore, exploring the relationship between acculturation usage and life satisfaction in a cross-cultural setting is necessary.

Another reason for the inconsistent conclusions is that social media does not directly influence life satisfaction but relies on some intermediary mechanisms, such as



social support (Huang et al., 2022; Pang, 2018). An online survey of university students in Pakistan found that SNSs have no direct effect on life satisfaction but work through social overload and social benefits (Raza, Qazi, Umar et al., 2020). However, few studies focused on cultural identity. Existing studies have found that social media can influence the cultural identity of international students (Yang, 2018). Furthermore, culture can influence an individual's beliefs and values, consequently influencing their assessment of life quality (Kjell & Diener, 2021). Nonetheless, there are inconsistent conclusions on the influence of two cultural identities on the life satisfaction of international students. Thus, more research is needed to identify whether both cultural identities can explain how social media use influences life satisfaction.

Being an emerging education center in Asia, Malaysia has increasingly attracted Chinese students as one of their preferred study-abroad destinations (Shafaei et al., 2016). Official statistics from Education Malaysia Global Services (EMGS) revealed that the number of Chinese students studying in Malaysia exceeded 8,000 in 2020. Remarkably, despite the challenges posed by the COVID-19 pandemic, this figure surged to 19,000 in 2021, representing a remarkable increase of 46% (EMGS, 2021). Chinese students have emerged as the largest group of international students in Malaysia (Ministry of Higher Education Malaysia, 2021). However, most previous research in this area has been conducted mainly in Western societies (Pang, 2018).

There is a lack of empirical research on the relationship between SNSs usage and life satisfaction among Chinese students in Malaysia.

This study aims to examine the mediating role of cultural identity in the relationship between SNSs usage and life satisfaction among Chinese students in Malaysia to address the research gaps mentioned earlier. SNSs usage encompasses both SNSs usage engagement and acculturation usage, while cultural identity comprises ethnic cultural identity and host cultural identity. The results of this study contribute to the body of knowledge on SNSs usage and provide insights for Malaysian higher education practitioners and policymakers to introduce relevant policies to promote the life satisfaction of international students.

## LITERATURE REVIEW

### Social Networking Sites

According to Kuss and Griffiths (2011), SNSs are “virtual communities where users can create individual public profiles, interact with real-life friends, and meet other people based on shared interests.” (p. 3529). SNSs provide a convenient way for people to interact with each other (Singh et al., 2020). The importance of SNSs has become more prominent, especially during the pandemic (Cauberghe et al., 2021; Drouin et al., 2020). The earliest SNS was SixDegrees, launched in the late 1990s (Heidemann et al., 2012). Currently, Facebook, WhatsApp, WeChat, and Twitter are widely used.

### **Cultural Identity**

Cultural identity involves an individual's association with a particular culture, encompassing belonging to specific cultural groups and the emotions tied to their membership (Phinney et al., 2001). When one possesses a clear cultural identity, it signifies a profound subjective awareness and comprehension of the values, norms, and attributes of the cultural group (Taylor & Usborne, 2010).

### **Acculturation Theory**

Acculturation is commonly defined as the changes that occur when an individual is exposed to two or more different cultures (Sam & Berry, 2016). It involves acquiring, maintaining, and modifying cultural behaviors, values, and identities associated with ethnic and host cultures (Ward & Geeraert, 2016). Cultural identity becomes a key consideration when two cultures come into contact, particularly in how individuals perceive their ethnic and host cultures (Chao & Yen, 2018). Berry (2005) proposed a bi-dimensional model, suggesting that maintaining both host and ethnic cultural identities is possible during the acculturation process (Pastor et al., 2022). In this study, "host cultural identity" refers to Malaysian cultural identity, while "ethnic cultural identity" refers to Chinese cultural identity.

Furthermore, acculturation theory posits that cultural identity influences adaptation outcomes (Sam & Berry, 2016), such as life satisfaction. Based on the acculturation theory, Pekerti et al. (2020) found that some personal or social factors

would affect international students' cultural orientation. Furthermore, previous research has indicated that social media usage predicts cultural identity (Li & Tsai, 2015; Yu et al., 2019). Ward and Geeraert (2016) highlighted the importance of considering the role of media in future acculturation studies. Thus, this study suggests that SNSs usage influences cultural identity, which subsequently influences the life satisfaction of Chinese students in Malaysia. Therefore, cultural identity can be considered a mediating mechanism in the relationship between SNSs usage and psychological adaptation.

### **SNSs Usage and Life Satisfaction**

Scholars have reached different conclusions regarding the effects of SNSs usage. Many studies have demonstrated that SNSs usage can improve life satisfaction (Doğan, 2016; Gaia et al., 2021). Life satisfaction is an important indicator of an individual's quality of life (Chen et al., 2020). A study of 459 Turkish high school students indicated that SNSs usage positively predicted life satisfaction (Doğan, 2016). Similarly, Wheatley and Buglass (2019) found that SNSs usage positively influenced life satisfaction among people in the United Kingdom. More recently, Gaia et al. (2021) demonstrated a positive link between the utilization of SNSs and life satisfaction among older individuals in Europe. These studies demonstrated the relationship between SNSs usage engagement and life satisfaction, but they did not focus on international students in a cross-cultural environment.

A web-based survey of Chinese students in the United States found that WeChat usage engagement was positively associated with life satisfaction (Pang, 2018). Notably, most of the above research focuses on quantitative usage behavior, and few studies have explored the relationship between usage purpose and life satisfaction. However, some studies can provide meaningful insights into this topic. Angelini et al. (2015) proposed that higher identification with the host culture is associated with higher life satisfaction. By using SNSs, individuals can access information about the values and norms of the host community immediately, which allows them to have a good experience in the host country (Liu et al., 2018). In other words, using social media to learn more about the host culture, namely acculturation usage, is positively associated with life satisfaction. Thus, the current study proposes the following hypotheses:

H1: SNSs usage engagement is positively associated with life satisfaction.

H2: SNSs acculturation usage is positively associated with life satisfaction.

### **SNSs Usage and Cultural Identity**

The media dependence theory suggests that an individual's dependence on certain media determines how often they use it. Moreover, the frequency of media usage directly relates to the strength of its impact on an individual's cognition, emotion, and behavior (Baran & Davis, 2000). However,

there are limited studies on the influence of SNSs usage engagement on cultural identity. Based on cultural learning models, a study revealed that social media usage, particularly host social media platforms, influenced cultural cognition and enhanced language skills, thereby impacting identification with the host culture (Ellison et al., 2007). A comparative study of Facebook and RenRen (a Chinese SNS) found that high usage of Facebook enhanced host language proficiency and host culture comprehension, thus helping to form host cultural identity (Li, 2014). This conclusion was confirmed in an online study of Chinese students in the US, which suggests that the frequency of using Facebook and Twitter contributed to identification with American culture (Yang, 2018). Nonetheless, most current research has emphasized the relationship between social media use and host cultural identity, neglecting the comprehensive investigation of the influence of SNSs usage engagement on ethnic cultural identity.

Some scholars have focused on the influence of different SNSs usage purposes on cultural identity. For example, Du and Lin (2019) suggested that using SNSs to connect with local people can increase identification with the host culture. Wang and Sun (2009) claimed that acculturation usage predicts host cultural identity significantly. Liu et al. (2018) further explained that SNSs provide users with a convenient and extensive channel to increase their access to cultural knowledge about the host country to understand better the values, norms, practices, and other relevant cultural

information. However, the relationship between SNSs acculturation usage and ethnic cultural identity has not been sufficiently studied. An early study indicated an opportunity to compare the ethnic culture with other cultures when entering a new cultural environment so that individuals can realize their cultural uniqueness (Kashima & Loh, 2006). Likewise, based on in-depth interviews with 17 Chinese students in Germany, Maeder-Qian (2018) found that the participants may feel prouder about their Chinese identity after gaining a more comprehensive understanding of different cultures. Murdock (2017) also provided support for the idea that cultural contact can lead to reflection and increased salience of ethnic cultural identity. Thus, this study proposes the following hypotheses:

H3: SNSs usage engagement is positively associated with host cultural identity.

H4: SNSs usage engagement is positively associated with ethnic cultural identity.

H5: SNSs acculturation usage is positively associated with host cultural identity.

H6: SNSs acculturation usage is positively associated with ethnic cultural identity.

### **Cultural Identity and Life Satisfaction**

The correlation between cultural identity and life satisfaction remains inconclusive.

Some earlier studies have indicated a positive link between the two. For example, A longitudinal survey of German immigrants found that cultural identification with Germany predicted higher levels of life satisfaction (Angelini et al., 2015). Parker et al. (2005) reported that a strong identification with the host culture was associated with reduced levels of depression. Likewise, Asvat and Malcarne (2008) suggested that the stronger the identification with the ethnic culture, the lower the degree of depression. Since depression is an important factor that negatively affects life satisfaction (Gigantesco et al., 2019), these findings suggest a potential positive influence of cultural identity on life satisfaction.

Ngo and Li (2016) found that the host cultural identity of Chinese immigrants in Hong Kong helped to improve life satisfaction, but their ethnic cultural identity reduced life satisfaction. Similarly, based on an online survey of 319 international students in the Netherlands, Taušová et al. (2019) found that ethnic cultural identity may increase the stress of dealing with two cultures and reduce life satisfaction for international students. Differently, Du and Lin (2019) indicated that ethnic cultural identity helps to increase happiness. Reder (2014) also supported the positive influences of ethnic cultural identity on life satisfaction, as it can improve self-esteem. Schotte et al. (2018) reported that a high level of host and ethnic cultural identity both contributes to increased life satisfaction; the following hypotheses are thus proposed:

H7: Host cultural identity is positively associated with life satisfaction.

H8: Ethnic cultural identity is positively associated with life satisfaction.

**The Mediating Role of Cultural Identity**

Previous studies have demonstrated that the impact of SNSs usage on life satisfaction is indirect but plays a role through some intermediary mechanisms, such as social support (Huang et al., 2022). This study suggests that the usage of SNSs by Chinese students in Malaysia can enhance both ethnic and host cultural identities, thus improving their life satisfaction. By examining the mediating role of cultural identity, it is posited that ethnic and host cultural identities can explain how SNSs usage influences life satisfaction. The following hypotheses are thus proposed:

H9: Host cultural identity mediates the relationship between SNSs usage engagement and life satisfaction.

H10: Ethnic cultural identity mediates the relationship between SNSs usage engagement and life satisfaction.

H11: Host cultural identity mediates the relationship between SNSs acculturation usage and life satisfaction.

H12: Ethnic cultural identity mediates the relationship between SNSs acculturation usage and life satisfaction.

**METHODOLOGY**

**Research Framework**

The research framework is illustrated in Figure 1. The framework indicates that SNSs usage is significantly associated with the cultural identity of Chinese students studying in Malaysia, influencing their life satisfaction.

**Respondents**

All the respondents were Chinese international students pursuing undergraduate or postgraduate degrees at higher education institutions in Malaysia.

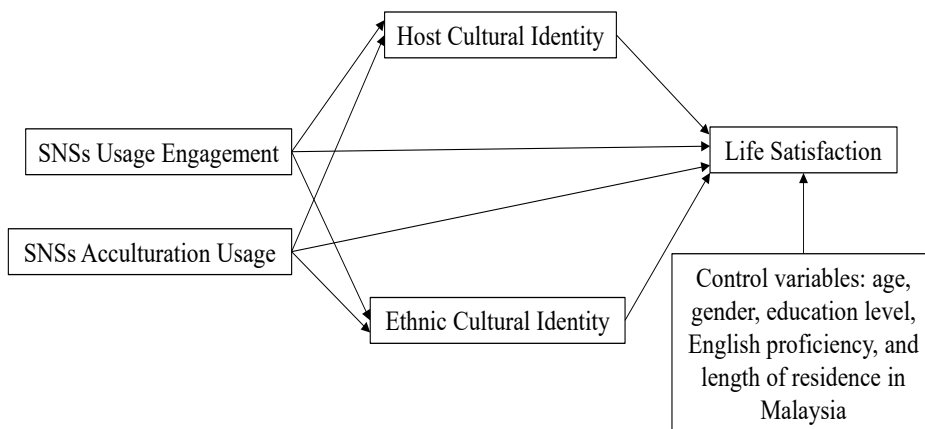


Figure 1. Research framework

Due to the COVID-19 pandemic, data were collected through an online questionnaire. Specifically, the questionnaire links were distributed on SNSs platforms, especially WeChat, a popular platform among Chinese students. This method ensured that all respondents were SNSs users. The sampling frame is unavailable since Chinese students are distributed in different higher institutions and involve a large geographical area in Malaysia. Thus, simple random sampling is not suitable for the study. Instead, purposive sampling was adopted. Besides, respondents had to have lived in Malaysia for at least six months when completing the survey (Chan et al., 2021). Invalid questionnaires (e.g., respondents in Malaysia for fewer than six months) were eliminated. In the end, 267 students participated in the study.

### Measures

**SNSs Usage.** SNSs usage includes two dimensions, namely, SNSs usage engagement and acculturation. The SNSs usage engagement scale, consisting of seven items, was primarily adapted from previous studies by Ellison et al. (2007) and Ni et al. (2020). Among these items, the first five were drawn from Ellison et al. (2007), and their reliability and validity were confirmed in various prior studies (Jiang & Bruijn, 2014; Wang et al., 2019). The remaining two items were adapted from Ni et al. (2020). This study replaced the term “Facebook” with “SNSs” to encompass a broader range of platforms. Respondents rated their level of connection to SNSs on a 5-point Likert scale, with 1 indicating “Strongly disagree”

and 5 indicating “Strongly agree.” The Cronbach’s alpha coefficient for this scale was 0.905. A higher score on this scale signifies a greater emotional attachment to SNSs. The acculturation usage scale with four items was adapted from Yang et al. (2004), who investigated the motivation to learn the host culture and language or to integrate into the host country through media. Respondents rated their responses on a 5-point Likert scale, with 1 indicating “Strongly disagree” and 5 indicating “Strongly agree.” The Cronbach’s alpha coefficient for this scale was 0.857.

### **Ethnic Cultural Identity and Host Cultural Identity.**

Two scales assessing ethnic cultural identity, and host cultural identity were adopted from previous studies conducted by Mezzich et al. (2009) and Ryder et al. (2000). These scales captured various aspects, including language use, holiday celebrations, and social interaction of the respondents. Considering the purpose of this study, minor adjustments were made to the scales. For example, some questions, such as “How important would it be to you for your children to have (ethnic minority) friends” and “How important is it you to raise your children with mainstream American values?” were dropped as they may not be relevant to university students who the respondents in this study were. Both scales included eight items. In this study, ethnic cultural identity refers to Chinese cultural identity, and host cultural identity refers to Malaysian cultural identity. Respondents were required to rate their responses using a

5-point Likert scale, ranging from “Strongly disagree” (1) to “Strongly agree” (5). The Cronbach’s alpha coefficients for ethnic and host cultural identities were 0.910 and 0.894, respectively.

**Life Satisfaction.** The life satisfaction scale was adapted from Diener et al. (1985). Participants were requested to rate five statements using a 5-point Likert scale, where 1 indicated “Strongly disagree” and 5 denoted “Strongly agree.” For example, “In most ways, my life is close to what I want it to be.” Cronbach’s alpha was 0.857.

**Demographic Information.** This study’s control variables are the respondent’s age, gender, education level, English proficiency, and length of residence in Malaysia. Previous research has indicated that these variables significantly predict life satisfaction (Chen et al., 2020; Huang et al., 2022; Park & Noh, 2018). English proficiency was assessed by self-reported abilities in writing, speaking, reading, listening, and conversation on a 5-point scale, with 1 indicating “very poor” and 5 denoting “very good.” The Cronbach’s alpha for this scale was 0.917. Length of residence in Malaysia was measured by the number of months respondents had spent there. Additionally, SNSs usage patterns were investigated, such as the time spent on SNSs and the frequency of usage.

### Statistical Analysis

This study utilized SPSS and Structural Equation Modeling (SEM) for data analysis, including descriptive and inferential analysis. Descriptive analysis was applied to

analyze demographic information about the respondents and their SNSs usage patterns. Besides, the correlation among variables was examined. A confirmatory factor analysis (CFA) was conducted to assess the validity and reliability of the instruments. Finally, the hypothesis was tested using SEM with AMOS 26 software.

## RESULTS

### Preliminary Analysis

The main aim of this study was to explore the association between SNSs usage, cultural identity, and life satisfaction. Table 1 displays the correlations of the variables. The findings revealed that SNSs usage engagement, ethnic cultural identity, and host cultural identity were significantly correlated with life satisfaction. However, no significant relationship was observed between acculturation usage and life satisfaction ( $r = .072, p = .243$ ). Among the control variables, length of residence in Malaysia and English proficiency were significantly related to life satisfaction ( $r = .151, p < .05$ ;  $r = .208, p < .01$ , respectively). Thus, the subsequent analysis incorporated length of residence in Malaysia and English proficiency as the control variables.

Before proceeding with further analysis, it is necessary to assess the skewness and kurtosis of the variables to determine if the assumption of normal distribution is satisfied (Hair et al., 2017). According to Kline (2011), data is considered to be normally distributed if the absolute value of skewness is lower than 3 and the absolute value of kurtosis does not exceed 10. In

this study, all the variables demonstrated skewness and kurtosis values below the cut-off values (Table 1); hence, normal distribution was not a concern.

Table 1  
Correlation matrix of the variables (n = 267)

Variables	SUE	SAU	ECI	HCI	LS	Skewness	Kurtosis
SUE	.762					-0.775	0.149
SAU	.206**	.776				-0.579	0.355
ECI	.295**	.147*	.747			-1.166	1.558
HCI	.289**	.363**	.192**	.723		-0.456	-0.437
LS	.269**	.072	.225**	.302**	.746	-0.114	-0.712
Gender	-.027	-.034	.078	-.010	.033	-0.488	-1.775
Marital status	-.029	.084	.008	.113	-.001	-0.194	-0.097
Education level	.050	-.202**	-.107	-.130*	-.069	0.124	-1.689
Age	.060	-.109	-.121*	-.064	-.060	0.525	0.744
Length of residence	.013	-.157*	-.082	-.006	.151*	2.275	5.461
English proficiency	.175**	.156*	.163**	.214**	.208**	-0.604	0.201

Note. (1) SUE = SNSs Usage Engagement, SAU = SNSs Acculturation Usage, ECI = Ethnic Cultural Identity, HCI = Host Cultural Identity, LS = Life Satisfaction. (2) The square roots of AVE for every construct are in bold in the table. (3) The off-diagonal numbers are the correlations among the variables. \*  $p < .05$ ; \*\*  $p < .01$

### Measurement Model Analysis

The results of CFA are shown in Figure 2. The five latent variables in the model were SNSs usage engagement, SNSs acculturation usage, ethnic cultural identity, host cultural identity, and life satisfaction. According to the threshold value suggested by Byrne (2010), the structural equation modeling results suggest a good model fit with the data. Specifically,  $\chi^2/df = 1.911$ , which is smaller than the accepted value of 3; CFI = .910 and TLI = .902, both of which are larger than the accepted value of .90;

RMSEA = .059, which is smaller than the cut-off points of .08.

As displayed in Table 2, all variables had an average variance extracted (AVE) exceeded 0.5, and their composite reliability (CR) and Cronbach’s alpha were greater than 0.8. Additionally, the square root of AVE exceeded the correlation coefficient among the variables, demonstrating that discriminant validity was achieved.

Moreover, Henseler et al. (2015) recommended employing the Heterotrait-Monotrait Ratio of Correlations (HTMT)



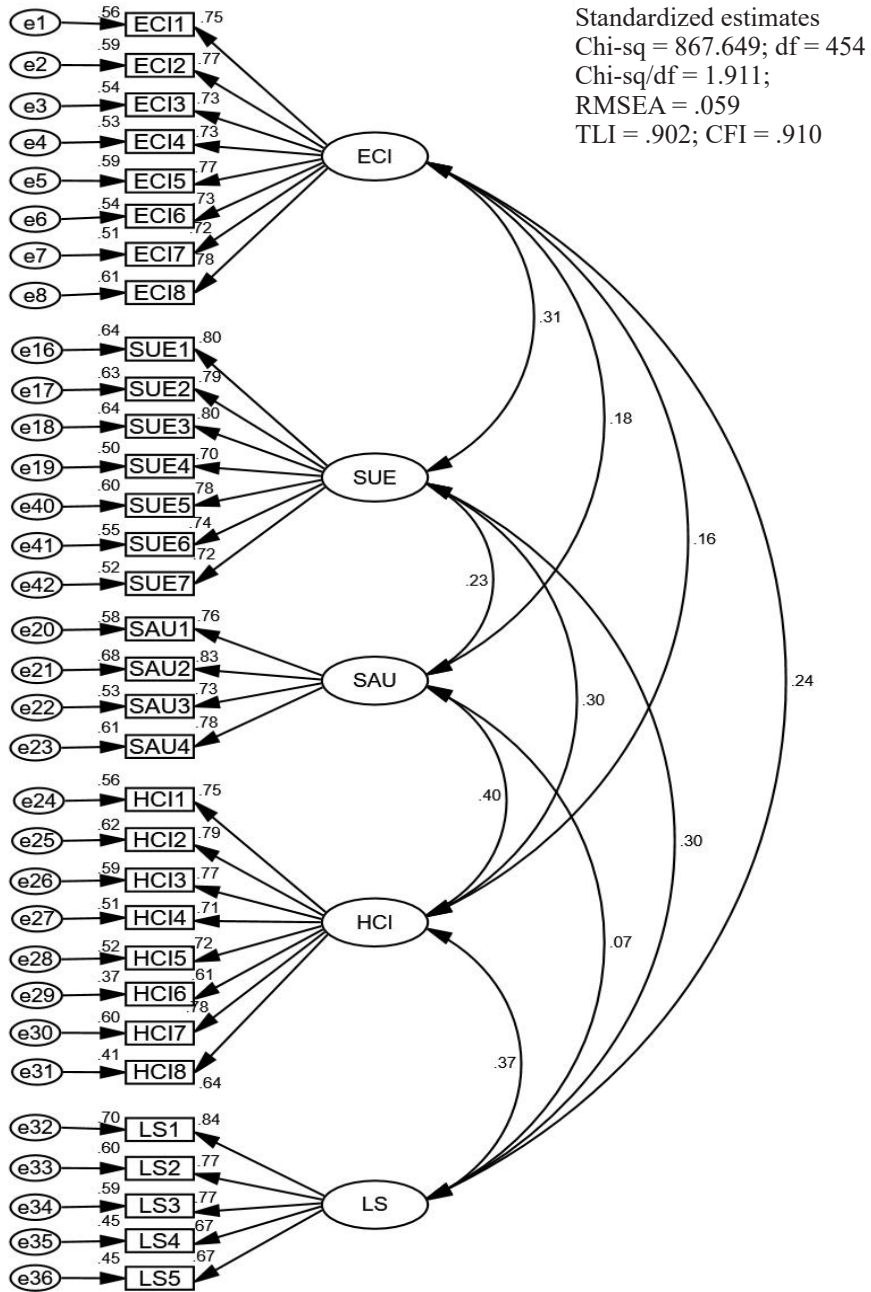


Figure 2. Measurement model with standardized estimates

Note. SUE = SNSs Usage Engagement, ECI = Ethnic Cultural Identity, HCI = Host Cultural Identity, LS = Life Satisfaction, SAU = SNSs Acculturation Usage.

Table 2  
Reliability and validity of variables (n = 267)

Constructs	Items	Loadings	CR	Cronbach's alpha	AVE
SNSs usage engagement	7	0.705-0.798	0.906	0.905	0.580
SNSs acculturation usage	4	0.727-0.827	0.858	0.857	0.602
Ethnic cultural identity	8	0.717-0.778	0.910	0.910	0.558
Host cultural identity	8	0.612-0.787	0.897	0.894	0.523
Life satisfaction	5	0.667-0.835	0.862	0.857	0.557

method to evaluate discriminant validity in SEM. Teo et al. (2008) indicated that the HTMT value should be lower than 0.90. As shown in Table 3, HTMT values are all less than 0.90, and discriminant validity is not an issue in this study.

The Harman single-factor test was employed to address potential common method bias resulting from self-reported items in cross-sectional studies. All 32 items from the five variables were subjected to an exploratory factor analysis with unrotated principal components factor analysis in this test. The results revealed that only 25.10% of the variance was extracted, indicating that a single factor did not account for the majority of the common variance (Conway & Lance, 2010).

**Descriptive Characteristics of the Demographic Information**

According to Table 4, among the 267 respondents, 38.2% were male and 61.8% were female. Most of the respondents were unmarried (67.8%, n = 181). 41.6% of the respondents were pursuing a bachelor's degree (n = 111), followed by students pursuing master's degrees (n = 94) and doctoral degrees (n = 62). The respondents'

Table 3  
Assessment of Discriminant Validity using Heterotrait Monotrait (HTMT) (n = 267)

	SUE	SAU	ECI	HCI	LS
SUE	-				
SAU	0.234	-			
ECI	0.314	0.178	-		
HCI	0.300	0.407	0.140	-	
LS	0.301	0.075	0.245	0.363	-

Note. SUE = SNSs Usage Engagement, SAU = SNSs Acculturation Usage, ECI = Ethnic Cultural Identity, HCI = Host Cultural Identity, LS = Life Satisfaction.

ages ranged from 18 to 43 years, with a mean age of 26.67. Length of residence in Malaysia ranged from 6 to 80 months, with an average length of 15.70 months.

**Patterns of Social Networking Sites Usage.**

As shown in Table 5, among 267 respondents, WeChat was the most frequently used SNSs (n = 110), followed by WhatsApp (n = 89) and Facebook (n = 24). It is consistent with Chen et al. (2018), who found that WeChat is the most popular SNS among Chinese migrants. As Facebook and WhatsApp are unavailable in China, the results indicate that some Chinese students are trying to use new SNSs in Malaysia.

Table 4  
*Descriptive statistics of respondents (n = 267)*

Variables	Categories	n	Percentage	
Gender	Male	102	38.2	
	Female	165	61.8	
Marital status	Married	72	27.0	
	Not married	181	67.8	
	Widowed	14	5.2	
Education level	Bachelor's degree	111	41.6	
	Master's degree	94	35.2	
	Doctoral degree	62	23.2	
Variables	Min	Max	Mean	SD
Age	18	43	26.67	5.91
Length of residence in Malaysian (months)	6	80	15.70	13.60

Accordingly, most respondents had three SNSs accounts ( $n = 188$ ) and used SNSs more than 6 times daily ( $n = 130$ ). In terms of spending time on such sites, 29.6% of Chinese students spent 1–2 hours on SNSs per day ( $n = 79$ ), and 26.6% spent 3–4 hours ( $n = 71$ ). In terms of the duration of SNSs usage, over half of the respondents had been using SNSs for more than 6 years ( $n = 138$ ). Lastly, the number of friends on SNSs varied among the respondents. 26.6% of the respondents had fewer than 100 friends on SNSs, and 20.6% had more than 400 friends.

Table 5  
*SNSs usage patterns of respondents (N = 267)*

Variables	Categories	n	Percentage
The most frequently used SNS	Facebook	24	9.0
	WeChat	110	41.2
	WhatsApp	89	33.3
	Twitter	11	4.1
	QQ	3	1.1
	Instagram	19	7.1
	LinkedIn	5	1.9

Table 5 (Continue)

Variables	Categories	n	Percentage
The most frequently used SNS	Sina Weibo	5	1.9
	Others	1	0.4
The number of SNSs used actively	One	8	3.0
	Two	15	5.6
	Three	188	70.4
	Four	36	13.5
	More than four	20	7.5
The frequency of using SNSs per day	not every day	16	6.0
	1-2times	42	15.7
	3-4times	49	18.4
	5-6times	30	11.2
	More than 6 times	130	48.7
Time spent on SNSs per day	Less than 1 hour	30	11.2
	1-2 hours	79	29.6
	3-4 hours	71	26.6
	5-6 hours	44	16.5
	More than 6 hours	43	16.1
Duration of SNSs usage	Less than 1 year	23	8.6
	1-2 years	38	14.2
	3-4 years	38	14.2
	5-6 years	30	11.2
	More than 6 years	138	51.7
The number of friends on SNSs	Less than 100 friends	71	26.6
	101-200 friends	53	19.9
	201-300 friends	51	19.1
	301-400 friends	37	13.9
	More than 400 friends	55	20.6

**Hypotheses Testing.** The results of the direct effects among the variables are shown in Table 6. The findings show that SNSs usage engagement positively and significantly influences life satisfaction ( $\beta = .146, p = .040$ ), host cultural identity ( $\beta = .224, p < .001$ ), and ethnic cultural identity ( $\beta = .285, p < .001$ ). H1, H3, and H4 are thus supported. However, acculturation usage is not significantly related to life satisfaction ( $\beta = -.137, p = .067$ ) and ethnic and cultural identity ( $\beta = .124, p = .070$ ); H2 and H6 are rejected. Differently, acculturation

usage significantly influences host cultural identity ( $\beta = .350, p < .001$ ), supporting H5. Similarly, host cultural identity is positively associated with life satisfaction ( $\beta = .343, p < .001$ ), and ethnic cultural identity also significantly predicts life satisfaction ( $\beta = .172, p = .011$ ). Moreover, the findings reveal that host cultural identity contributes more to life satisfaction. Hence, H7 and H8 are supported. Furthermore, the study confirms that the length of residence in Malaysia significantly influences life satisfaction ( $\beta = .167, p = .006$ ).

Table 6  
Results of direct effects

	Hypotheses path	Estimate	S.E.	C.R.	<i>p</i>	Results
H1	SNSs usage engagement→Life satisfaction	.146	.068	2.058	.040	Supported
H2	SNSs acculturation usage→Life satisfaction	-.137	.069	-1.832	.067	Rejected
H3	SNSs usage engagement→Host cultural identity	.224	.062	3.396	***	Supported
H4	SNSs usage engagement→Ethnic cultural identity	.285	.063	4.119	***	Supported
H5	SNSs acculturation usage→Host cultural identity	.350	.064	4.933	***	Supported
H6	SNSs acculturation usage→Ethnic cultural identity	.124	.061	1.810	.070	Rejected
H7	Host cultural identity→Life satisfaction	.343	.077	4.556	***	Supported
H8	Ethnic cultural identity→Life satisfaction	.172	.071	2.558	.011	Supported
Control Variable Test						
	English proficiency	.092	.064	1.497	.134	
	Length of residence in Malaysia	.167	.049	2.736	.006	

As for mediating effect analysis, bootstrap estimates of 5,000 samples were used, with 95% confidence intervals (CI) excluding zero, indicating significance (Cheung & Lau, 2007). As shown in Table 7, the indirect effect of SNSs usage engagement on life satisfaction is significant ( $\beta = .077$ , 95% CI [.024, .159],  $p = .001$ ). Thus, host

cultural identity mediates the relationship between SNSs usage engagement and life satisfaction. Similarly, the analysis shows that ethnic cultural identity also mediates the relationship between SNSs usage engagement and life satisfaction ( $\beta = .049$ , 95% CI [.008, .128],  $p = .020$ ). Thus, H9 and H10 are supported.

Table 7  
Results of indirect effects

Hypotheses path	Estimate	Std Error	T-Statistic	p-Value	95% Confidence Interval		Results
					Lower	Upper	
H9 SNSs usage engagement→Host cultural identity →Life satisfaction	.077	.027	2.806	.001	.024	.159	Supported
H10 SNSs usage engagement→Ethnic Cultural identity →Life satisfaction	.049	.023	2.136	.020	.008	.128	Supported
H11 SNSs acculturation usage→Host cultural identity →Life satisfaction	.120	.035	3.453	***	.049	.233	Supported
H12 SNSs acculturation usage→Ethnic cultural identity→Life satisfaction	.021	.014	1.557	.095	-.001	.083	Rejected

Similarly, the indirect effect of acculturation usage on life satisfaction is significant when controlling host cultural identity ( $\beta = .120$ , 95% CI [.049,

.233],  $p < .001$ ). Therefore, host cultural identity mediates the relationship between acculturation usage and life satisfaction, supporting H11. Differently, when

ethnic cultural identity is incorporated as a mediator, the indirect effect of SNSs acculturation usage on life satisfaction is insignificant ( $\beta = .021$ , 95% CI [-.001, .083],  $p = .095$ ). H12 is rejected. Figure 3 presents the results of the structural model analysis.

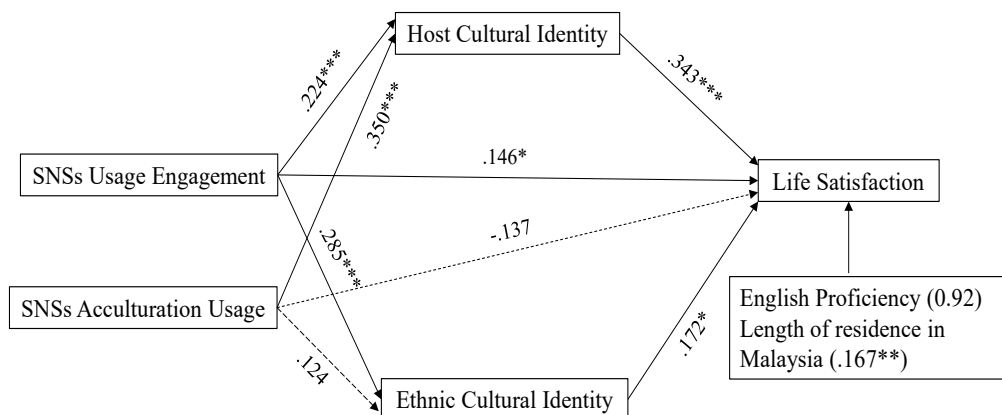


Figure 3. The structural model with standardized estimates (n = 267)

Note. \*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$ , Model Fit:  $\chi^2(df) = 1.87$ , CFI = .91, TLI = .90, RMSEA = .06

## DISCUSSION

This study explores the influence of SNSs usage on Chinese international students' life satisfaction in Malaysia through the host and ethnic cultural identity. The data results supported nine hypotheses and rejected three.

The study found that WeChat is the most frequently used SNS among Chinese students in Malaysia, which is consistent with the results of Chen et al. (2018), who found that WeChat is the most popular SNS among Chinese migrants. Lee and Padilla (2014) suggested that students, especially Chinese ones, mainly maintain relationships with peers from their country. However, other studies have shown that SNSs can help students maintain connections with their home countries (Chen & Yang, 2015) as well as their host countries (Forbush

& Foucault-Welles, 2016). Furthermore, there is considerable information about China on host countries' SNSs, such as Facebook and Twitter, which means that SNSs can transcend the boundaries of ethnic communication and host communication (Ju et al., 2021).

H1 and H2 demonstrate the influence of SNSs usage on life satisfaction. SNSs usage engagement contributes to a high level of life satisfaction. Diffidently, acculturation usage has a non-significant and negative influence on life satisfaction. Although the relationship did not reach statistical significance, it is worth noting that using social media to learn about the knowledge of the host culture may reduce the life satisfaction of overseas students, supporting Morrison and Mason's (2013) research, which found that learning about American

culture among respondents who were not born in the United States reduces their life satisfaction. One possible explanation for this evidence is that respondents feel isolated from ethnic culture and come under pressure to conform to the local culture, leading to unhappiness (Morrison & Mason, 2013).

H3, H4, H5, and H6 demonstrate the influence of SNSs usage on cultural identity. In contrast to previous studies that focus on the effect of host SNSs usage on host cultural identity (Dalisy, 2012; Yang, 2018), this study considers SNSs to enrich the literature on the impact of SNSs usage on ethnic cultural identity. Specifically, confirming previous studies, SNSs usage engagement contributes to a high level of host cultural identity and ethnic cultural identity. It is consistent with Li (2014), who indicated that the greater use of Facebook could improve the host cultural identity. Moreover, SNSs usage engagement had a greater influence on ethnic cultural identity than on host cultural identity because most respondents use Chinese social media (e.g., WeChat), so they often use the Chinese language and access information from China.

Differently, acculturation usage predicts host cultural identity but not ethnic cultural identity. Firstly, the use of social media for cultural learning helps enhance Malaysian cultural identity. It is consistent with Zaw (2018), who held that learning cultural knowledge can change international students' stereotypes and prejudices about the host country. On the

contrary, acculturation usage cannot help international students develop their ethnic cultural identity. The result is contrary to Murdock (2017), who indicated that offline cultural contact might lead to reflection and greater awareness of ethnic cultural identity because cultural learning on social media does not necessarily lead to offline cultural contact. Another possible explanation is that the difference between Chinese and Malaysian culture is small. There may not be many cultural comparisons when learning Malaysian culture. However, more research is needed to understand this relationship better.

H7 and H8 prove that both host cultural identity and ethnic cultural identity contribute to life satisfaction. Moreover, the host cultural identity had a greater influence on life satisfaction. This finding is consistent with Du and Lin (2019), who suggested that the host cultural identity is more conducive to happiness than ethnic cultural identity, which may be because international students with high host cultural identities would encounter less value conflict (Pekerti et al., 2020). While confirming the existing literature concerning the positive influence of host cultural identity on life satisfaction (Angelini et al., 2015), this study proposes that ethnic cultural identity also contributes to improving life satisfaction. Individuals with strong ethnic cultural identity tend to have a sense of belonging to a group tend to increase their well-being (Du & Lin, 2019) and self-esteem (Reder, 2014). Therefore, to have a positive overseas cultural experience, international students are encouraged



to enhance their recognition of the host country's culture and maintain connections with their ethnic culture.

Hypotheses 9 and 10 demonstrate that cultural identity can explain how SNS usage engagement influences life satisfaction, suggesting that the influence of SNSs usage engagement on life satisfaction is not always direct but happens through some intermediate mechanism. Thus, social media usage engagement increased Chinese students' host and ethnic cultural identity, thereby improving their life satisfaction. Hypotheses 11 and 12 identify the mediating role of cultural identity in the relationship between acculturation usage and life satisfaction. Interestingly, acculturation usage has a non-significant influence on life satisfaction. However, the more respondents use SNSs to learn the host culture, the more likely they are to identify with it, thus improving their life satisfaction in the host country. In other words, acculturation usage cannot predict life satisfaction directly but can influence life satisfaction indirectly through host cultural identity. Ethnic cultural identity cannot mediate the relationship between acculturation usage and life satisfaction.

## CONCLUSION

This study has several major limitations that must be addressed. First, the non-probability sampling method was adopted in this study. Respondents were recruited through SNSs platforms using an online questionnaire. Thus, the sample hardly represents all Chinese international students

in Malaysia. Furthermore, the sample tends to be demographically homogeneous. Nearly half of the respondents were undergraduates, and 64.4% had lived in Malaysia for a year or less. Therefore, the results of this study do not cover the whole research object. More representative samples need to be studied to obtain more generalizable findings.

Second, the study uses a cross-sectional design and only surveys the participants at a certain time. Cross-sectional designs make it difficult to determine causal relationships among variables (Setia, 2016). Because cross-sectional surveys collect data only once, risk factors and outcomes are assessed simultaneously, and there is no evidence to infer a causation relationship between influencing factors and outcomes. Therefore, only association, not causation, can be inferred from cross-sectional studies (Sedgwick, 2014). Thus, more effective conclusions can be drawn through longitudinal analysis.

Third, this study demonstrates the positive relationship between SNSs usage and life satisfaction. However, the measurement of SNSs usage is relatively simple, and the focus is on SNSs usage engagement and acculturation usage. It should not be ignored that international students use SNSs for various purposes, such as seeking information and social interaction. It is thus necessary to explore whether different SNSs usage purposes influence life satisfaction differently. Furthermore, the study found that Chinese students in Malaysia use both Chinese SNSs (e.g., WeChat) and other SNSs frequently used by Malaysians (e.g.,

WhatsApp and Facebook). Since SNSs have no geographical boundaries, this study treats SNSs in different countries. Future research could examine whether the host country's social media and the home country's social media have different influences.

This study also has three main implications. The results of this study carry significant implications for the advancement of acculturation theory. This research confirms a positive relationship between cultural identity and life satisfaction. Additionally, this study provides further support for previous acculturation research that social media is a key factor influencing cultural identity, thereby supporting the applicability of this theory within international student groups. Furthermore, by applying the theory to a new context, this study contributes to the existing knowledge.

Second, the study found that SNSs usage helps to improve cultural identity and thus enhances life satisfaction, which reminds Chinese international students that they can use SNSs to improve their identification with Malaysian culture and Chinese culture to have a good cross-cultural experience. With the substantial number of Chinese students in Malaysia, this research also makes a noteworthy contribution to the country's economic, cultural, and educational development.

Third, this study found that cultural identity plays an important role in the relationship between SNSs usage and life satisfaction, especially host cultural identity. Thus, relevant government departments and educators in Malaysia should pay

more attention to the importance of SNSs in disseminating cultural knowledge, strengthening communication with international students, and improving their understanding of Malaysian culture. Specifically, international student communities can be built on social media to provide diversified cultural learning, such as producing short videos on Malaysian culture and providing a quick and convenient channel for cultural exchange between international students and the locals. Online communication facilitates interaction and builds an understanding of different viewpoints and perspectives, and people can learn about other people's cultures (Alamri, 2018). Also, relevant departments and universities should set up their pages on social media and ensure that information related to cultural knowledge is updated daily (Raza, Qazi, Shah et al., 2020).

In summary, this study explores the relationship between SNSs usage and life satisfaction. The respondents were Chinese students studying in Malaysia. While scholars have extensively studied Chinese international students, this particular group has received relatively limited attention in Malaysia. The study's findings show that SNSs usage engagement contributes to life satisfaction, while acculturation usage has a negative and non-significant effect on life satisfaction. However, under the mediating effect of host cultural identity, acculturation usage positively predicts life satisfaction. Considering the increasing prevalence of SNSs usage and the growing number of international students worldwide, more

research should be conducted to explore the relationship between SNSs usage, cultural identity, and life satisfaction in a cross-cultural context.

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AUK – Al-Qalam University Katsina  
BNU – Beaconhouse National University  
BRIN – National Research and Innovation Agency  
BU – Al Baha University  
Cabrini – Cabrini University  
COMU – Çanakkale Onsekiz Mart University  
ECU – Edith Cowan University  
IIM-L – Indian Institute of Management Lucknow  
IITs – Indian Institute of Technology  
IIUM – International Islamic University Malaysia  
IPG – Institut Pendidikan Guru Malaysia  
KU – University of Kalyani  
KUIS – Kolej Universiti Islam Antarabangsa  
MMU – Multimedia University  
Sunway – Sunway University  
TIAS – Tecnia Institute of Advanced Studies  
TU – Tezpur University  
UAEU – United Arab Emirates University  
UBD – Universiti Brunei Darussalam

UEF – University of Eastern Finland  
UEH – University of Economics Ho Chi Minh City  
UINJKT – State Islamic University Syarif Hidayatullah Jakarta  
UIOWA – The University of Iowa  
UiTM – Universiti Teknologi MARA  
UKM – Universiti Kebangsaan Malaysia  
UM – University of Malaya  
UMS – Universiti Malaysia Sabah  
UniKL – Universiti Kuala Lumpur  
UNIMAS – Universiti Malaysia Sarawak  
UNY – Yogyakarta State University  
UPM – Universiti Putra Malaysia  
UPSI – Universiti Pendidikan Sultan Idris  
USCI – USCI University  
USIM – Universiti Sains Islam Malaysia  
USM – Universiti Sains Malaysia  
UTM – Universiti Teknologi Malaysia  
UUM – Universiti Utara Malaysia  
UWEC – University of Wisconsin-Eau Claire  
YU – Yarmouk University

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