INFORMATION MANAGEMENT AND BUSINESS REVIEW

Vol. 16 No. 4 ISSN 2220-3796

Editorial

Information Management and Business Review (IMBR) provides a digital forum for researchers to share their knowledge and publish research work in the fields of information management, business, management and related disciplines. The work submitted for publication consideration in IMBR should address empirical and theoretical developments in the subjects related to the scope of the journal in particular and allied theories and practices in general. Author(s) should declare that work submitted to the journal is original, not under consideration for publication by another journal and that all listed authors approve its submission to IMBR. It is IMBR policy to welcome submissions for consideration, which are original, and not under consideration for publication by another journal at the same time. Author (s) can submit: Research Paper, Conceptual Paper, Case Studies and Book Review. The current issue of IMBR is comprises papers of scholars from different universities of Malaysia, Indonesia and China. Online Scam Crimes, Awareness of Takaful Ownership, Hospitality Service Quality, Determinants of Financial Well-Being, Perceived Authenticity in Souvenir Buying Decisions, Prioritization of Sustainable Development Goals, Parenting Styles and Kindergarten Children's Social Skills, Innovative Work Behavior and Green Practices, Navigating Emotional Intelligence, Conceptual Framework for Age-Friendly Cities, Intersection of Civil Society and Democratization, Impact of Intrinsic and Extrinsic Job Satisfaction on Turnover Intentions, Religious Non-Profit Organisations' (RNPOs) Financial Management and Cues to Action and Self-Efficacy in the Health Belief Model are some of the major practices and concepts examined in these studies. All the submitted papers were first assessed by the journal committee and then the external editorial team for relevance and originality of the work and then blindly peer-reviewed by external reviewers depending on the subject matter of the paper. After the rigorous peer-review process, the submitted papers were selected based on originality, significance and clarity of the purpose. The special issue will therefore be a unique proposition, where scholars will be able to appreciate the latest results in their field of expertise and to acquire additional knowledge in other relevant fields.

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TABLE OF CONTENTS

Description	Pages
Title	I
Editorial	II
Editorial Board	III
Table of Contents	IV
Papers	V
A Correlation Analysis of the KAP Model against Online Scam Crimes in Malaysia Noor Fariza Mohd Hasini, Salbiah Nur Shahrul Azmi, Zurairah Jais, Shahrul Niza Samsudin, Nor Izzuani Izhar, Nor Ainee Idris, Azwan Amirulsyafiq Abu Hassan	1
Awareness of Takaful Ownership among the Kuala Klawang Community: Challenge or Opportunity? Nor Hazanah Miskan, Nurulhayah Muhamad, Maryam Mohd Esa, Farah Saniah Mohd Zabidi, Nurul Liyana Hussin, Siti Afifah Nasuha	12
Evaluating the Impact of Hospitality Service Quality on Legal Compliance and Customer Loyalty: A Case Study in Malacca Muhammad Ilhamuddin Arsad, Marina Abdul Manap, Nur Rabiatul Adawiyah Abdul Rahman	18
Exploring the Determinants of Financial Well-Being among Rural Households Suhailah Ibrahim, Suzana Ab Rahman, Hamidah Norman, Noor Azlin Abu Kasim, Intan Maizura Abdul Rashid	27
Role of Perceived Authenticity in Souvenir Buying Decisions among Tourists in Bandar Hilir Melaka Siti Mahera Ahmat Amin, Dziela Muhamad Parid, Hartini Adenan, Dina Syamilah Zaid	34
The Prioritization of Sustainable Development Goals by Major Malaysian Islamic Banks: A Comparative Analysis Nur Zafirah Muhammad Nor, Rahisam Ramli, Rozita Baba, Roslina Hashim, Norizan Samri, Zulkefly Abdul Karim	42
The Relationship Between Parenting Styles and Kindergarten Children's Social Skills Zaleha Damanhuri, Aziyati Zahirah Asnil Aimi, Rabi'atul Adawiyah Salleh, Nur Faradilla Jumati, Nurhaffyithah Othman, Siti Nur Fatihah Azri, Zuraidah Hassan	51
Bridging Innovation and Sustainability: A Systematic Review of Innovative Work Behavior and Green Practices Mukhiffun Bin Mukapit, Siti Rohana Daud, Mohd Nasir Selamat	60
Navigating Emotional Intelligence: A Comprehensive Review of Theories, Models and Applications Heamalatha Krishnan, Siti Rahmah Awang	74
Rationale for Selecting Taiping, Perak as a Study Location for Ageing: A Conceptual Framework for Age-Friendly Cities Noorlailahusna Mohd Yusof, Suziana Mat Yasin	86
Examining the Intersection of Civil Society and Democratization: A Bibliometric Analysis Irwana Nooridayu Muhamad Hakimi, Azmil Mohd Tayeb, Hafizah Hammad Ahmad Khan, Mohamad Ili Afiq Ibrahim	94
The Impact of Intrinsic and Extrinsic Job Satisfaction on Turnover Intentions: A Moderating Effect of Public and Private Sector Employees Chanyi Hou, Zulkefli Muhamad Hanapiyah	106
Religious Non-Profit Organisations' (RNPOs) Financial Management in Malaysia: Key Drivers and Insights from the Literature Rozaidy Mahadi, Noor Kaziemah Sariman, Ag Kaifah Riyard Kiflee	118
Cues to Action and Self-Efficacy in the Health Belief Model: Perceived Risk as Mediating Roles Towards Enhancing Customer Engagement Rohayah Adiman, Noraznira Abd Razak, Nur Mellisa Muhammad Faisal Wee	128

PAPERS

Information Management and Business Review (IMBR)
Vol. 16, No. 4, Dec 2024 (ISSN 2220-3796)

A Correlation Analysis of the KAP Model against Online Scam Crimes in Malaysia

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Abstract: This study aims to analyze consumers' Knowledge, Attitude, and Practices (KAP) Model of online scam crimes in Malaysia following the increase in crime cases that have become a concern. By using a quantitative approach, data were collected through questionnaires and analyzed by using SPSS software to identify the relation between demography, internet usage, and consumers' cautious behavior. The KAP Model is adopted as the main framework to comprehend the consumers' interaction with their digital surroundings. The findings of this study show there are positive correlations between age, education, and awareness of online scam crimes. The findings also found that there are strong relations between internet users and social media with consumers' preventive behavior. This study aims to identify the gap in the literature about psychosocial factors that influence consumers' awareness. The result of this study is hoped to be a guide to the policymakers and the authorities in designing more effective prevention strategies to protect consumers from the threat of online scams as well as enhance digital literacy among Malaysians.

Keywords: O*nline scam, KAP model, knowledge, attitude, practice*

1. Introduction

In this sophisticated digital era, online scams have been one of the major threats faced by internet users around the world, including in Malaysia. According to a current report, online scam cases have shown a disturbing increase, with various types of scams such as phishing, financial fraud, and identity theft that have become prevalent. This situation has urged researchers to delve deep into understanding how internet users can protect themselves against these threats. One of the approaches used is the KAP Model (Knowledge, Attitudes, Practices) adapted from research related to cyber security and now is being implemented into the study of online scams.

The National Security Council (NSC) on 4th of March 2024 has reported 107,716 online scam cases detected from 2020 until 2023. These scam cases involved losses of RM 3.2 billion and until January 2024, several 131 hotline numbers involving fraud activities have been terminated. Although various parties such as the Royal Malaysia Police (PDRM) in collaboration with the government and government agencies have disseminated information about the modus operandi of online scams, it has not been fully effective.

Therefore, this study is not only substantial in comprehending the influential factors and the cautious behavior of internet users but also plays a role in developing more effective preventive strategies. In the context of Malaysia, where the level of digital literacy varies according to demographics, this study can contribute to public policy and awareness campaigns. By identifying how education and age can influence awareness of online scams, this study can help in structuring targeted educational programs to reduce scam risks among internet users.

Based on the background of the research population which focuses on respondents from among the faculty members (Faculty of Business, Hospitality and Technology), Islamic University Melaka, Malaysia, the following is the statistics of cases and losses from cybercrimes in Melaka in the year 2023.

Table 1: Statistics of Cases and Losses from Cyber Crimes Melaka Contingent 2023

No.	Modus operandi	Number of Cases	Number of Losses (RM)
1.	Online purchasing scam	528	5,963,514.62
2.	Non-existent investment scams	296	21,844,890.68
3.	Non-existent loan scams	259	1,885,451.29
4.	Other cyber scams;		
	● TAC scams	221	3,611,713.54
	● Contest scams		
	● Other cyber-related scams		
5.	Phone scams	156	5,900,861.58
6.	Love/parcel scams	46	730,279.43
7.	Job offer scams	45	561,638.87
8.	Impersonation scams	20	52,500.00
	Total	**1571**	**40,550,850.01**

Source: PDRM Melaka (2024)

Problem Statement

Online scams have become a concerning global phenomenon, with a far-reaching impact on individuals and organizations. In Malaysia, the increase in online scam cases mirrors the global trend, where more advanced technology has become an opportunity for cybercriminals to exploit the weakness of internet users. Abdul Wahab, Pitchan, & Salman, (2023) mention that since 2014, reports of the MCMC have ascertained that one of the main challenges of the technological world in Malaysia today is the occurrence of online crimes resultant of various social media networks that open up opportunities to criminals to commit online scams. This issue is supported by an article disseminated by the National Security Council on March 18th, 2024 where they reported 34,497 frauds (scams) involving RM 1.218 billion of losses as well as 12,851 charges of cases being recorded nationwide in 2023. Based on these statistics, several 6,434 investigation papers were opened throughout the year 2023 through the National Scams Report Centre (NSRC) involving RM 105 million in losses.

Due to this, multiple efforts have been made by the PDRM such as providing a portal for Mule Check to inspect telephone and banking account numbers that are involved and CCID Infoline service to channel information related to this crime. Besides that, there are 1610 campaigns and 3727 speeches have been organized in 2023 to spread awareness regarding this online scam crime. This issue is not in line with the context of research in Malaysia because there is not so much research done regarding online scams that is being talked about in line with the increment of case statistics every year.

Moreover, since there are increments in the effort to educate consumers about the risks of online scams, the level of digital literacy among Malaysians is inadequate to overcome this threat effectively. There are many researchers such as Bashir et al. (2022), Patil and Arra (2022), Althibyani and Al-Zahrani (2023), Kimpe et al (2022), and Abdul Wahab et al., (2023), where they indicate that lacking knowledge in preventing and the attitude in avoiding from becoming the victim of online scams are the main factors contributing to this crime.

Therefore, this study is conducted with three main objectives by adapting the KAP Model against online scam crimes. Specifically, the objectives are:

- To study the correlation between knowledge and online scams.
- To identify the correlation between attitude and online scams.
- To study the correlation between preventive measures and online scams.

2. Literature Review

Online Scam Crimes

The rapid advancement of technology has made easy access to information digitally. However, the study by Abdul Wahab et al., (2023) shows that there are negative effects towards technology users since there are irresponsible parties who take advantage by committing online scam crimes. In 2022, according to statistics published by the Malaysian government, the total number of losses due to online scams is RM 1.73 billion and between January to September 2023 it has increased to RM 687 million or 29 percent in comparison to the same duration in 2022 (National Security Council, 2024).

This happens because of society's lack of awareness and knowledge about online scam crimes. The Royal Malaysia Police (PDRM) through its Commercial Crime Investigation Department (CCID) has executed numerous security campaigns in giving explanations about the criminal modus operandi. According to CCID Bukit Aman, 3,689 crime prevention programs have been organized between January and May this year to enhance understanding and awareness in society. This activity must be done continuously because the tactics and modus operandi of online scam crimes are always changing. Bashir et al. (2022) also emphasized the importance of these campaigns in helping people understand the way the crime is committed.

Abdul Wahab et al., (2023) referring to a source by PDRM in 2022, have identified seven main modus operandi of online crimes including online purchasing scams, non-existent loan scams, non-existent investment scams, African scams, Macau scams, Business Email Compromise (BEC), and scam through SMS. Besides that, Abdul Karim & Lyndon (2023) have listed down several online scam crimes globally, such as cyber extortion, breach of user personal data, identity theft, psychological disorders, mental and cyberbullying as well as scams by using the name of well-known organizations in obtaining data.

Model of Knowledge, Attitude and Practice (KAP Model)

The Model of Knowledge, Attitude, and Practice (KAP Model) has been proven to be important in understanding and handling the issue more effectively. This model uses the combination of three main elements: knowledge about cybercrimes, attitude towards the prevention of cybercrimes, and the practice of online security. As for the aspect of knowledge, the latest research shows that the increase in knowledge about cybercrimes has significantly reduced the risks of being online scam victims. The knowledge includes understanding the types of crimes, the techniques used by scammers, as well as the methods to identify and avoid those threats. The study by Patil and Arra (2022) emphasizes the importance of cybersecurity education in raising awareness and understanding among the public. When Althibyani and Al-Zahrani (2023) did a study on the effect of digital citizenship on awareness and cybercrime prevention among higher education students, it was found that knowledge about digital laws and digital communication skills play important roles in reducing cybercrimes. Other than that, a study by Kimpe et al. (2022) found that any individual who feels he is well informed about online security tends to feel less prone to cybercrimes and is unlikely to take inadequate precautionary measures.

This is proved through a finding in a study by Abdul Wahab et al., (2023) where society's knowledge and awareness have a close correlation with the increase of online scam cases that are still at large. This is in line with the KAP Model introduced by Bennett (1976) where he outlines some important assumptions. Among them are: (i) the increment of one's knowledge will lead to the change of attitude; (ii) when knowledge increases, attitude and practice will change towards a more positive direction; and (iii) the more frequent an individual is exposed to a message, highly likely the message will influence the individual.

Next, an individual attitude toward cybercrime prevention also plays an important role in the KAP Model. This attitude comprises the readiness of the individual to practice safety precaution measures and the perception of the importance of cyber security issues. Besides that, Abdul Wahab et al. (2023) emphasized that unwary public attitudes can contribute to the increment of online scam crime cases. The study also divided the factor of attitude into two main themes: public opinion towards online scam crime prevention campaigns, as well as the feelings and emotions of the public towards the campaigns.

The findings of the study show that informants have a very positive opinion towards the campaigns and voluntarily get involved, assuming as an anticipated opportunity to increase knowledge and enhance cyber security skills. They think that such campaigns not only have to be continued in the future but also to enlarge their scope to be able to reach more individuals because the advantages are significant in enhancing awareness and community resilience against sophisticated cyber threats.

From the perspective of practice, the practice of online security is a practical manifestation of an individual's knowledge and attitude for example the use of security software, strong password management, and vigilance during interaction with suspicious emails or messages. Meanwhile, a study by Priya and Ranganathaan (2022) proposed that one of the ways to increase public awareness about cyber security is through a specially designed card, where this platform helps the players to learn about the various types of cyber-attacks as well as defense mechanisms. Other than that, a study by Simona Tache et al. (2021) about the role and responsibility of a certified auditor in reducing the effect of cyber scams emphasizes the importance of training, courses, and awareness workshops, particularly in financial sectors that frequently becoming the target of cyber scams towards the members in the organization.

Abdul Wahab et al., (2023) also mentioned that an individual will start to understand or learn a certain practice, and later build a positive attitude towards the practice. In the study, the researchers have classified those practices into two main themes, namely society's action towards the campaign and society's attitude towards the campaigns. The results of the study showed that the informants responded positively such as commitment to join upcoming campaigns and invite other people to join as well. Other than that, the informants share messages or information that they have during the campaign with family and friends so that they receive the same knowledge. The informants take cautious measures to avoid them from being online scam crime victims, similar to the advice being imparted during the campaign. Moreover, the informants are always vigilant, which is emphasized in the campaign so as not to fall victim to online scams.

Practices like this are very essential to protect ourselves and others from the cybercrime threat which is increasing in the digital era nowadays. Positive practices that are cultivated through the campaigns not only help individuals avoid being online scam victims but also strengthen society's awareness about the importance of protecting personal information on digital platforms. In a wider context, the practices of sharing information and experiences from this campaign have the potential to create a larger awareness network in the community. By this, the effort to combat cybercrime becomes a collective responsibility, where every individual plays an important role in ensuring cyber security in an individual and society.

3. Methodology

This study uses a quantitative design by using the questionnaire distribution to collect data. Data in this study is obtained through the use of a questionnaire form that is structured based on secondary sources that have been tested, then gathered and processed by using the Statistical Package for Social Sciences (SPSS) software. In this study, descriptive analysis and correlation were done. Correlation analysis was used to understand the relationship between KAP Model and online scams. Furthermore, the findings from the study were analyzed by using a descriptive analysis method, aimed to analyze data that is received from the questionnaire form filled in by the respondents.

This research uses a simple random sampling method. Simple random probability sampling is a sampling technique where every member of the population has the same opportunity to be selected as a research respondent. In sections B, C, D, and E, the questionnaires will be measured by using the Likert Scale with five levels for respondents to indicate their level of agreement with the statements provided, where 1 indicates strongly disagree and 5 indicates strongly agree.

The distribution of the questionnaires is done through the Google Form platform and the findings of this study will be analysed. The population for this study is 413 among the Faculty of Business, Hospitality and

Technology members, Islamic University Melaka, Malaysia. By referring to the Krejcie and Morgan (1970) sample size determination table, the sample size for this study is 201.

Table 2: Distribution of Questionnaires

Aspects	No. of Questions
Section A: Respondents' Background	8
Section B: Online Scams	4
Section C: Knowledge Related to Online Scams	5
Section D: Attitude Towards Online Scams	5
Section E: Steps to Overcome Online Scams	5
No. of Questions	**27**

Source: Author's Illustration

The selection of respondents from among the faculty members is relevant referring to the victim list recorded in Melaka as follows:

Table 3: Statistics of Cyber Crime Victims According to Contingent Occupation Melaka Year 2023

No.	Occupation		2023	
			No. of Cases	Total of Losses (RM)
1.	Government	Teachers	47	1,294,020.72
		Health	26	404,103.68
		Police	14	40,990.00
		Military	7	35,698.00
		Others	139	2,268,665.79
2.	Private		732	11,176,617.71
3.	Students		143	1,010,618.22
4.	Businessmen		139	8,683,181.72
5.	Business		20	241,504.80
6.	Domestic Engineers		16	390,312.77
7.	Entrepreneur		166	4,022,700.18
8.	Pensioners		122	10,982,436.42
	Total		**1571**	**40,550,850.01**

Source: PDRM Melaka (2024)

4. Findings

This section elaborates on the findings from the research from the descriptive analysis and correlation generated through SPSS.

Descriptive Analysis Findings

The results from the displayed descriptive analysis in the tables depict a whole picture of the research respondents based on several variables of demography and attitude. Below is a brief elaboration for every variable:

Table 4: Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Men	79	39.3	39.3	39.3
	Woman	122	60.7	60.7	100.0
	Total	201	100.0	100.0	

Source: Generated by SPSS

Table 5: Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-20	93	46.3	46.3	46.3
	21-30	92	45.8	45.8	92.0
	31-40	9	4.5	4.5	96.5
	41-50	7	3.5	3.5	100.0
	Total	201	100.0	100.0	

Source: Generated by SPSS

Table 6: Level of Education

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	SPM	9	4.5	4.5	4.5
	STPM	2	1.0	1.0	5.5
	Diploma	100	49.8	49.8	55.2
	Bachelor's Degree	79	39.3	39.3	94.5
	Master's Degree	10	5.0	5.0	99.5
	Doctor of Philosophy	1	.5	.5	100.0
	Total	201	100.0	100.0	

Source: Generated by SPSS

Table 7: Internet Usage in a Day

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	less than 2 hours a day	3	1.5	1.5	1.5
	3-4 hours a day	32	15.9	15.9	17.4
	5-6 hours a day	64	31.8	31.8	49.3
	more than 6 hours a day	102	50.7	50.7	100.0
	Total	201	100.0	100.0	

Source: Generated by SPSS

Table 8: Daily Use of Social Media

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	less than 2 hours a day	16	8.0	8.0	8.0
	3-4 hours a day	67	33.3	33.3	41.3
	5-6 hours a day	45	22.4	22.4	63.7
	more than 6 hours a day	73	36.3	36.3	100.0
	Total	201	100.0	100.0	

Source: Generated by SPSS

Table 9: Frequency of Using the Application

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Facebook	35	17.4	17.4	17.4
	Instagram	58	28.9	28.9	46.3
	Whatsapp	52	25.9	25.9	72.1
	Tiktok	32	15.9	15.9	88.1
	Telegram	14	7.0	7.0	95.0

Other	10	5.0	5.0	100.0
Total	201	100.0	100.0	

Source: Generated by SPSS

Table 10: Organizing Seminars Can Provide Awareness

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	201	100.0	100.0	100.0

Source: Generated by SPSS

Of the total of 201 respondents, 39.3% were males and 60.7% were females. This shows that there are more female respondents in this study. The majority of respondents were between the ages of 18-20 (46.3%), followed by those aged 21-30 (45.8%). The age group of 31-40 years (4.5%) and 41-50 years (3.5%) is less. As for the level of education, respondents with a Diploma (49.8%) made up the largest group, followed by those with a Bachelor's Degree (39.3%). Only a small number of respondents had higher levels of education such as Master's Degree (5.0%) and Doctor of Philosophy (0.5%).

In addition to demographic data, the respondent behavior data such as daily internet usage indicates that the majority of respondents spend more than 6 hours per day online (50.7%). Meanwhile, 31.8% of respondents use the internet for 5-6 hours, and 15.9% for 3-4 hours. As for social media usage, findings show that 36.3% of respondents spend more than 6 hours per day on social media, followed by 33.3% who spend 3-4 hours per day. Additionally, data on the frequency of app usage reveals that Instagram (28.9%) and WhatsApp (25.9%) are the most commonly used apps by respondents, followed by Facebook (17.4%) and TikTok (15.9%). Ultimately, all respondents (100%) agree that efforts to raise awareness such as organizing seminars can help in educating about the threats of online scams.

Reliability

Table 11: Reliability Statistics

Cronbach's Alpha	N of Items
.936	19

Source: Generated by SPSS

The reliability statistics indicate a Cronbach's Alpha value of 0.936 for the 19 items, which constitute the list of questions for both dependent and independent variables. A Cronbach's Alpha of 0.936 indicates that the instrument used has an excellent level of reliability. Generally, an Alpha value above 0.7 is considered acceptable, and a value above 0.9 is considered excellent. Therefore, the instrument used in this study is highly consistent internally. This means that the items in the questionnaire or the test measure the same concept effectively, and their results remain stable when retested under the same conditions.

Correlation analysis findings

Pearson correlation is used to measure the strength and direction of the linear relationship between two variables to address the objective of this study. The findings for all three factors are as follows:

The Relationship between knowledge and online scam.

Table 12: Correlations

		DV	KNOWLEDGE
DV	Pearson Correlation	1	.589**
	Sig. (2-tailed)		.000
	N	201	201
KNOWLEDGE	Pearson Correlation	.589**	1

	Sig. (2-tailed)	.000	
	N	201	201

**. Correlation is significant at the 0.01 level (2-tailed).
Source: Generated by SPSS

For the first objective of the study, the correlation between DV and KNOWLEDGE was 0.589. This suggests that there is a moderately strong positive correlation between DV and KNOWLEDGE. A positive correlation means that when the KNOWLEDGE value increases, the DV value also tends to increase. From a significant point of view, a p-value (or Sig.) of 0.000 indicates that this correlation is very statistically significant because the p-value is smaller than 0.01. Therefore, there is a moderately strong positive correlation between the variables DV and KNOWLEDGE, and this correlation is statistically significant. This means that knowledge may have a positive effect on DV variables in the context of this study.

The Relationship between attitudes and online Scams.

Table 13: Correlations

		DV	ATTITUDE
DV	Pearson Correlation	1	.422**
	Sig. (2-tailed)		.000
	N	201	201
ATTITUDE	Pearson Correlation	.422**	1
	Sig. (2-tailed)	.000	
	N	201	201

**. Correlation is significant at the 0.01 level (2-tailed).
Source: Generated by SPSS

For the second objective of the study, the results of the analysis showed that the correlation between DV and ATTITUDE was 0.422. This suggests that there is a moderate positive correlation between DV and ATTITUDE. This positive association means that when the ATTITUDE value increases, the DV value also tends to increase, but not as strongly as the correlation in the previous analysis (DV and KNOWLEDGE). From a significant point of view, the value of p (or Sig.) is 0.000, indicating that this correlation is statistically significant. Therefore, there was a moderately positive correlation between the variables DV and ATTITUDE, and this correlation was statistically significant. Although this correlation is not as strong as the correlation between DV and KNOWLEDGE, it still suggests that attitude may have a positive influence on DV variables.

The relationship between preventive measures and online scams.

Table 14: Correlations

		DV	PRACTICE
DV	Pearson Correlation	1	.565**
	Sig. (2-tailed)		.000
	N	201	201
PRACTICE	Pearson Correlation	.565**	1
	Sig. (2-tailed)	.000	
	N	201	201

**. Correlation is significant at the 0.01 level (2-tailed).
Source: Generated by SPSS

For the third objective of this study, the correlation result between the dependent variable (possibly the outcome variable) and PRACTICE is 0.565. This indicates a strong positive correlation between the dependent variable and PRACTICE. This positive correlation means that as the value of PRACTICE increases, the value of the dependent variable also tends to increase, with a similar strength of association as with DV and KNOWLEDGE in the initial analysis. In terms of significance, the p-value (or Sig.) of 0.000 indicates that this correlation is highly statistically significant. Thus, there was a moderately strong positive correlation between DV and PRACTICE, and this correlation was statistically significant indicating that PRACTICE may have a strong positive influence on the DV variable.

Discussion

This study aims to examine the relationship between consumers' knowledge, attitudes, and practices (KAP) and their awareness of online scams. The findings of the study showed that there was a significant positive correlation between all elements of KAP and consumers' cautious behavior towards the threat of online scams.

Knowledge

The correlation between knowledge and awareness of online scams is the strongest in this analysis ($r=0.589$, $p<0.01$). This indicates that increased knowledge among users plays a crucial role in enhancing their awareness of online scam risks. Sufficient knowledge about types of scams, modus operandi, and preventive measures enables individuals to act more vigilantly. These findings are consistent with previous studies by Patil and Arra (2022) that highlight the importance of cybersecurity education in improving users' understanding.

Attitude

Although the correlation between attitudes and awareness of online scams was more modest than knowledge ($r=0.422$, $p<0.01$), it still showed an important role in determining consumer caution. Positive attitudes towards digital safety measures such as trust in the effectiveness of awareness campaigns influence consumers' desire to practice proper preventive measures. Although attitudes are not as strong as the knowledge factor, this study supports the findings of Abdul Wahab et al. (2023) that proactive attitudes can reduce the risk of becoming a victim of online scams.

Practice

Online safety practices also show a significant correlation with cautious behavior ($r=0.565$, $p<0.01$). These findings suggest that users who follow safety measures such as using antivirus software, strong passwords, and avoiding suspicious links are better able to protect themselves from online scams. This aligns with a study by Simona Tache E. et al. (2021) which confirmed that good cybersecurity practices play a critical role in safeguarding users from cybercrime.

Research Implications and Gaps

The strong correlation between knowledge and safety practices indicates the need to strengthen cybersecurity education programs, especially among young and less educated individuals. However, this study found that the correlation between demographics such as education level and awareness of online scams still requires further research to understand its effects in more detail. Overall, the findings of this study confirm the importance of the KAP Model in understanding user behavior towards online safety. This study also suggests that an increase in awareness should be fostered through a broader cybersecurity education, promoting a positive attitude and continuous online safety practices among internet users in Malaysia.

5. Conclusion and Recommendations

This study successfully demonstrated a significant relationship between users' knowledge, attitudes, and practices towards online scam prevention in Malaysia, especially using the KAP model approach. The findings of the study showed that security knowledge and practices were key factors in increasing consumer awareness of online scams, while attitudes played a modest role in the study. This confirms that cybersecurity education is important in preventing online scams and protecting internet users.

The following are suggestions to strengthen management and address online scams:

Cybersecurity Education Enhancement: The government and educational institutions need to expand public awareness campaigns, especially among young and less educated consumers. Cybersecurity courses should be incorporated into the official curriculum at the school and university levels.
Awareness Campaign through Social Media: Considering that most users spend more than 6 hours per day on social media, popular social media platforms like Instagram, TikTok, and WhatsApp can be used to disseminate information about online scam prevention.
Collaboration with the Private Sector: Internet service providers and technology companies need to be involved in anti-fraud campaigns by providing online cybersecurity warnings and educational resources to customers.
Online Scam Prevention Tool Development: The development of more user-friendly security software and online scam detection tools should be encouraged to help users identify threats and prevent online scam crimes from becoming more prevalent.
Advanced Studies: Further investigation needs to be conducted to examine in greater depth the impact of demographic factors such as age and education level on user attitudes towards cybersecurity, as well as a study on more specific trends in cyber scams in Malaysia.

With a more holistic and collaborative approach, online scam prevention measures in Malaysia can be further strengthened, reducing the risk of users falling victim to online scams.

Acknowledgment: The published article is the result of research funding awarded by Universiti Islam Melaka (UNIMEL) through the Incentive Research Grant (IRG) 2024/2025.

References

Abdul Karim, M. Y. & Lyndon, N. (2023). Panandgan Dunia Pengguna Perniagaan Dalam Talian Tentang Jenayah Siber. *Malaysian Journal of Social Sciences and Humanities (MJSSH)*, *8*(7), e002392. https://doi.org/10.47405/mjssh.v8i7.2392

Abdul Wahab, E., Pitchan, M. A., & Salman, A. (2023). Pengetahuan, Sikap and Amalan Masyarakat di Kuala Lumpur Terhadap Kempen Pencegahan Jenayah Penipuan Dalam Talian. *Jurnal Komunikasi: Malaysian Journal of Communication*, *39*(1), 240–258

Althibyani, H.A. & Al-Zahrani, A.M. (2023). Investigating the Effect of Students' Knowledge, Beliefs, and Digital Citizenship Skills on the Prevention of Cybercrime. *Sustainability*, *15*, 11512. https://doi.org/10.3390/su151511512

Bashir, A., Azwardi, A., Soebyakto, B. B., Atiyatna, D. P., Hamidi, I., Hamira, H., & Dwi, R. S. (2022). Raising Awareness and Knowledge of Rural Communities against Lottery Fraud and Illegal Online Loans through Telephone and Short Message Services. *Sricommerce: Journal of Sriwijaya Community Services*, *3*(2), 89–96. https://doi.org/10.29259/jscs.v3i2.83

Bennett, C. F. (1976). Analyzing impacts of extension programs. Washington: U.S. Dept. of Agriculture, Extension Service.

Berita RTM (2024). 107, 716 Kes Penipuan dalam Talian Dikesan dari 2020 hingga 2023. https://berita.rtm.gov.my/nasional/senarai-berita-nasional/senarai-artikel/107-716-kes-penipuan-dalam-talian-dikesan-dari-2020-hingga-2023

De Kimpe, L., Walrave, M., Verdegem, P & Ponnet, K. (2022). What we think we know about cybersecurity: an investigation of the relationship between perceived knowledge, internet trust, and protection motivation in a cybercrime context, Behaviour & Information Technology, 41:8, 1796-1808, DOI: 10.1080/0144929X.2021.1905066

Jabatan Perangkaan Malaysia. (2022). *Poket Stats Negeri Melaka ST3 2022*

Kosmo (2024). 34, 497 Kes 'Scam' Babit Lebih RM 1.2 Bilion Kerugian pada 2023. https://www.kosmo.com.my/2024/03/18/34497-kes-scam-babit-lebih-rm1-2-bilion-kerugian-pada-2023/

Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. Educational and Psychological Measurement, 30(3), 607–610

Majlis Keselamatan Negara (2024). Scam Atas Talian, Jenayah Utama Abad Ke-21. https://www.mkn.gov.my/web/ms/2024/01/25/scam-atas-talian-jenayah-utama-abad-ke-21/

Patil, K. and Arra, S. R. (2022). Detection of Phishing and User Awareness Training in Information Security: A Systematic Literature Review. 2nd International Conference on Innovative Practices in Technology and Management (ICIPTM), Gautam Buddha Nagar, India, 2022, 780-786, doi: 10.1109/ICIPTM54933.2022.9753912

Priya, P. M. & Ranganathan, A. (2022). *Cyber* Awareness Learning Imitation Environment (CALIE): A Card Game to Provide Cyber Security Awareness for Various Groups of Practitioners Int. J. Advanced Networking and Applications, 14(02), 5334-5341.

PDRM Melaka (2024). Statistik Jumlah Kes and Kerugian Jenayah Siber Kontinjen Melaka Tahun 2023

PDRM Melaka (2024). Statistik Mangsa Jenayah Siber Mengikut Pekerjaan Kontinjen Melaka Tahun 2023

Simona T. E., Magdalena, A. A. & Mihaela, D. M. (2021). The Role of The Chartered Accountant in Diminishing the Effects of Cyber *Fraud*. Journal of Financial Study, Valahia University of Targoviste, Romania

Information Management and Business Review (IMBR)
Vol. 16, No. 4, Dec 2024 (ISSN 2220-3796)

Awareness of Takaful Ownership among the Kuala Klawang Community: Challenge or Opportunity?

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Abstract: The Takaful industry in Malaysia has grown rapidly in line with the development of the Islamic banking industry. This development offers an alternative approach to Islamic risk management and control. The study aims to examine the impact of financial, attitude, and knowledge towards the awareness of Takaful among the Kuala Klawang district, Jelebu community. The findings of the study obtained through the distribution of a questionnaire of 90 respondents were analyzed and focused on correlation and regression analysis. The result of the study shows a moderate correlation between financial, attitude, and knowledge towards takaful awareness. Takaful is a reliable financial instrument offering guaranteed and safe protection.

Keywords: *Takaful, awareness, finance, attitude, knowledge*

1. Introduction

One of the strategies in risk management in terms of reducing uncertainty risk is known as takaful. Takaful is also one of the appropriate financial instruments for more guaranteed and safe protection. The strength of takaful and its uniqueness lies in providing Sharia-based protection to an individual or household if faced with the risk of uncertainty in the financial context such as accidents, illness, death, and so on. The concept of takaful has been developed into a tradable protection scheme. Various takaful plans and packages are offered to meet the increasingly complex human protection needs.

The Takaful industry plays a crucial role in maintaining the financial well-being of individuals and communities. Despite the positive growth of the takaful industry in the country, less than half of the Malaysian population is covered by takaful. The level of awareness among the Malaysian population regarding takaful is still low with only 40% having the protection of takaful according to the Deputy Minister of Finance 1 (2023). Furthermore, the lack of awareness of takaful ownership is seen not only among the poor and low-income communities but also involves all levels of society in Malaysia. Among B40 communities, even though there are affordable takaful offers introduced, they still put the takaful option as the second option in fulfilling it because they are more likely to prioritize their income in meeting basic needs and other ancillary needs. This problem is in line with Thaidi et al (2022), where the result shows that disease and the economic downturn make the less able community need protection and help. In the meantime, screening services in the private health sector are quite expensive to perform subsidized screening while government clinics or hospitals require a relatively long procedure. This problem is in line with Abdul Rahim & Che Saperiz (2021) where the results show that disease and the economic downturn make the less able community need protection and help. In the meantime, screening services in the private health sector are quite expensive to perform subsidized screening while government clinics or hospitals require a relatively long procedure.

According to the Governor of Bank Negara Malaysia (BNM), it shows a large number of Malaysians are still 'short-term minded' regarding financial management. This is due to the attitude of Malaysians who do not care about managing financial risks and facing unexpected situations. This becomes more serious to face disease threats and a challenging economic climate. The level of awareness about takaful is seen to be related financially. In addition, according to the Credit Counselling and Management Agency (AKPK), it shows that most Malaysians are forced into debt when they need money to face an emergency. Therefore, the objective of this study is to examine whether finances, attitude, and knowledge have a significant influence on Takaful awareness among the community in the district of Kuala Klawang, Jelebu.

2. Literature Review

Overview of Takaful

Yaari (1965) stated in the Theory of Consumer - Uncertain Lifetime, Life Insurance by Marshal and Fisher that both were aware of the uncertainty of survival but for one reason or another they did not expound on how a consumer might be expected to react to this uncertainty if he is to behave "rationally". Arlan and Abdullah (2024) found that awareness significantly influences the acceptance of Takaful. Awareness is about the customer's understanding of a particular product, service, or situation (Rogers, 1995). This can help customers choose products in their decision-making during the buying process (Raza, Ahmed, Ali and Qureshi, 2019). Hassan et al. (2018) state that insurance nowadays is no longer a luxury but rather a necessity. Takaful operators should create awareness among Malaysian consumers about Takaful products to penetrate the market. This is supported by researchers Xu, Prybutok, and Blankson (2019) also found that consumer awareness significantly influences purchasing decisions. Previous studies have shown that there is prejudice against those who choose not to invest in Takaful and a poor understanding of it (Hassan and Abbas, 2020).

Moreover, good financial management refers to how an individual can make an adequate expenditure distribution that can make payments on any form of financing loans (Fan & Babiarz, 2019), which is also supported in a study conducted by Yusoff et al. (2021). Poor financial management contributes to financial problems that may persist and will affect life in the future. According to a previous study conducted by Meerangani & Mad Zin (2022), the study stated that the financial factor was a barrier. This is where, in the survey conducted, most respondents agreed that their financial situation is a major obstacle to producing a tainted product. Therefore, it needs to be properly maintained for comfort and quality of life. In the meantime, based on a freelance study conducted by Sang et al. (2020), stated that the level of financial knowledge among Malaysians is low. Therefore, many people in Malaysia are plagued by problems related to the failure of financial planning and errors in managing finances. This causes them to be unable to understand the function and importance of takaful protection.

Additionally, the Oxford Learner's Dictionary explains that attitude is a way of thinking and feeling about someone or something. Attitude is also said to be the way an individual behaves towards another individual, or it can also be said about something that shows how the individual thinks and feels (Oxford, 2021). According to a study conducted by Md. Jusoh and Jaafar (2019), it is the opinion that the ownership of this takaful plan will protect them from unwanted things happening and that it is a good financial planning step. The study also stated that the majority of respondents had a positive attitude towards the ownership of this takaful plan. However, according to a recent study by Meerangani & Mad Zin (2022), the level of acceptance was moderately high among civil servants who owned takaful because they still did not know about the benefits and importance of takaful to themselves.

According to a previous study conducted by Awang et al. (2022), the results of the findings showed that the respondent's level of knowledge about the product's protection is at a moderate level because there are still some individuals who do not pay attention to the services provided by the company. Furthermore, according to a previous study conducted by Md. Jusoh & Jaafar (2019), the level of education and knowledge on takaful awareness is moving in parallel. Highly educated consumers are more aware of the benefits of having takaful coverage that has long-term savings and can avoid incurring losses.

3. Methodology

This study used a correlational research design to investigate the relationships between finances, attitudes, and knowledge toward takaful awareness. The research is designed as a descriptive study, employing structured questionnaires as the primary data collection tool. The sample was drawn from the Kuala Klawang district's population of 40,000, using a purposive sampling method. Based on Tabachnick & Fidell (2013) formula, a sample size of 90 respondents was deemed appropriate. The questionnaire includes a five-point Likert scale to capture the intensity of respondents' financial, attitudes, and knowledge towards takaful awareness.

Data analysis was conducted using the Statistical Package for Social Sciences (SPSS) Version 27.0. The Pearson Correlation method was applied to determine the strength and direction of the relationships between the

dependent variable (takaful awareness) and the independent variables (financial, attitudes, and knowledge). This analysis provided the degree to which each factor influenced the level of takaful awareness among respondents. Additionally, Multiple Regression Analysis was employed to examine the predictive power of each independent variable on the dependent variable. This technique allowed the study to assess the relative impact of financial, attitudes, and knowledge on takaful awareness, providing a more comprehensive understanding of how these factors interact. The findings suggest that all three factors financial, attitudes, and knowledge significantly contribute to variations in takaful awareness, reinforcing the importance of these variables in shaping public understanding and acceptance of takaful. Arlan and Abdullah (2024) found that awareness significantly influences the acceptance of Takaful.

4. Findings and Discussion

All the data was analyzed using several statistical methods, which included descriptive analysis of variables and correlation analysis. Descriptive data analysis is used in this study to explain the age, gender, race, status, and income of respondents among the residents of Kuala Klawang, Jelebu.

Table 1: Demographic Characteristics

Demographic	Category	Frequencies	Percentage (%)
Age (years)	20 - 25	23	25.6
	26 - 30	19	21.1
	31 - 35	10	11.1
	36 - 40	15	16.7
	41 - 45	8	8.8
	45 and above	15	16.7
Gender	Male	38	42.2
	Female	52	57.8
Race	Malay	78	86.7
	Chinese	9	10.0
	Indian	3	3.3
Status	Married	47	52.2
	Single	36	40.0
	Others	7	7.8
Employment	Unemployed	22	24.4
	Student	24	26.7
	Self-employed	9	10.0
	Retired	20	22.2
	Private sector	11	12.3
	Government sector	4	4.4
Income (RM)	No income	13	14.4
	Less than 500	12	13.3
	501 - 1000	7	7.8
	1001 - 2000	5	5.6
	2001 - 3000	32	35.6
	Above 3000	21	23.3

Based on Table 1 the demographic distribution of respondents shows that the majority aged are in the group of 20-25 years (23.0%). In terms of gender, 38.0% of the respondents are male, while 52.0% are female, indicating that there are more female respondents compared to male respondents in this study. Ethnically, 78.0% of respondents are Malay, 9.0% are Indian, and 3.0% are Chinese. It indicates that the majority of respondents are Malay, and the study reflects a multicultural community. Regarding marital status, 47.0% of respondents are single, 36.0% are married, and 7.0% have other statuses, showing that there are more single respondents than married. Income distribution shows that 12.0% of respondents earn below RM 500, 7.0%

earn between RM 501 – RM 1000, 5.0% earn between RM 1001 – RM 2000, 32.0% earn between RM 2001 – RM 3000, and 21.0% earn more than RM 3000, while 13.0% have no income. It indicates that the majority of respondents have an income between RM 2001 – RM 3000. In terms of employment, 22.0% of respondents are unemployed, 24.0% are students, 9.0% are self-employed, 20.0% are retirees, 11.0% work in the private sector, and 4.0% work in the government sector. It shows that the majority of respondents in this study are students.

Table 2: Correlation Analysis with Awareness of Takaful

Independent Variables	*r*	*p*
Financial Status	0.447	< 0.001
Attitude	0.472	< 0.001
Knowledge	0.550	< 0.001

The analysis reveals a significant positive correlation between financial and awareness of takaful ($r = 0.447$, $p < .001$). According to the relationship strength metrics outlined by Davis (1971), the correlation between financial and takaful awareness is considered moderate. The positive Pearson correlation suggests that as individuals' financial status improves, their awareness of takaful also tends to increase. It indicates that financial stability plays a notable role in enhancing awareness of takaful within this community, although the relationship is not exceptionally strong.

Furthermore, a significant positive relationship was observed between attitude and awareness of takaful ($r = 0.472$, $p < .001$). Based on the strength of the relationship as described by Davis (1971), this correlation is classified as moderate. The positive Pearson correlation coefficient implies that individuals with more favorable attitudes towards takaful exhibit higher levels of awareness. This finding underscores the importance of attitudes in influencing awareness levels, suggesting that cultivating a positive attitude towards takaful may significantly enhance awareness among individuals.

Finally, a significant positive correlation between knowledge and awareness of takaful ($r = 0.550$, $p < .001$). According to Davis (1971) criteria for relationship strength, this correlation is deemed strong. The positive Pearson correlation indicates that increased knowledge about takaful corresponds with higher levels of awareness. This suggests that enhancing individuals' knowledge about takaful is crucial for raising overall awareness. It emphasizes the role of education and information dissemination in fostering a better understanding of takaful within the community.

Overall, these findings highlight the relationship between all the variables, financial, attitude, and knowledge towards the awareness of takaful. The moderate to strong correlations suggest that financial resources, positive attitudes, and increased knowledge each contribute to greater awareness of takaful. Addressing these factors through targeted educational and promotional efforts could significantly improve takaful awareness in Kuala Klawang, Jelebu.

Table 3: Multiple Linear Regression

Dependent variable	Independent variable	β	BETA	t	Sig.
Awareness of Takaful (Y)	Constant	1.176		2.269	0.026
	Financial Status (X_1)	0.271	0.211	2.214	0.029
	Attitude (X_2)	0.172	0.217	2.192	0.031
	Knowledge (X_3)	0.299	0.355	3.524	0.001
R^2	0.392				
F	89.160				
Sig F	0.000				

The findings presented in Table 4.2 demonstrate that 39.2% of the variance in takaful awareness ($R^2 = 0.392$) is explained by three key factors: financial, attitude, and knowledge. The data in Table 4.2 also reveals a highly significant F-statistic ($F = 18.468$) and a p-value of 0.000, well below the conventional alpha threshold of 0.01. This indicates that the slope of the linear regression model is not equal to zero, confirming the appropriateness and robustness of the linear regression models proposed in this study.

The regression analysis suggests that the level of takaful awareness (Y) is significantly influenced by the three independent variables: financial (X1), attitude (X2), and knowledge (X3). Each of these factors plays a crucial role in shaping the level of awareness among the residents studied. This relationship is quantitatively expressed through the following regression equation:

$$Y = 1.176 + 0.271(X1) + 0.172(X2) + 0.299(X3)$$

The coefficients for this equation provide the degree to which each variable contributes to the awareness of takaful. The coefficient of financial (X1) at 0.271 indicates that, for each unit increase in the financial status of respondents, there is a corresponding 0.271 unit increase in takaful awareness. This finding highlights the importance of economic stability in fostering awareness and acceptance of takaful products.

Similarly, the coefficient for attitude (X2) at 0.172 demonstrates that a one-unit improvement in the attitude towards takaful results in a 0.172 unit increase in awareness. This suggests that cultivating a positive perception of takaful through effective communication strategies and education could be essential for enhancing awareness levels.

The strongest predictor in this model is knowledge (X3), with a coefficient of 0.299. This implies that a one-unit increase in knowledge about takaful correlates with a 0.299-unit rise in awareness, underscoring the pivotal role of education and information dissemination in promoting takaful awareness. This finding aligns with previous studies that have established knowledge as a fundamental driver of awareness and decision-making in financial and insurance products.

These results highlight the multifaceted nature of takaful awareness, where financial, attitude, and knowledge factors each contribute to varying extents. The implications of these findings are significant for policymakers, financial institutions, and marketers aiming to increase the adoption of takaful products.

5. Conclusion and Recommendations

This study determines the level of takaful awareness among the residents of Kuala Klawang, Jelebu district, through financial, attitudes, and knowledge. The findings show a moderate correlation between financial, attitude, and knowledge towards takaful awareness. Inadequate handling of finances leads to persistent financial issues that will impact one's life in the future (Yusoff et al., 2021). Thus, it is necessary to provide the locals with more knowledge about sound financial management so they can have takaful protection in case of unforeseen dangers or accidents. Furthermore, for attitude variables there exists a positive correlation towards takaful awareness. The data obtained from the research indicates that the population's awareness of takaful can be influenced by their safety concerns. Given that they were still unaware of the advantages and significance of takaful for themselves, the acceptance was moderately high (Meerangani & Mad Zin, 2022).

The relationship between knowledge and takaful awareness shows the highest value, automatically it determines that the respondents have a high degree of takaful knowledge, which may have an impact on their awareness of takaful. The study's findings unequivocally demonstrate how the three independent variables affect takaful awareness. Knowledge is the most powerful link. The degree of takaful awareness, education, and knowledge is increasing simultaneously. Consumers with higher levels of education are more conscious of the advantages of having long-term savings and loss prevention through takaful coverage (Md. Jusoh & Jaafar, 2019).

This study proposes that future research should further broaden its scope. This is to produce a more comprehensive and robust research outcome such as proposed on rural area populations. Several barriers arise in rural communities from being widely publicized. Based on the results, this research recommends that takaful agents broaden their marketing strategies to include the entire community. There are still issues preventing people in rural areas from having takaful, which means that their awareness of the product is still inadequate. Takaful agents must develop a marketing plan more appealing and simpler for the Malaysian community to embrace. The fact shows evidence that takaful agents are not being marketed through the proper channels to the general public. Increase the quantity of these takaful agencies in rural areas as well. Additionally, the takaful

agent may arrange to offer a special package for rural areas because the rural communities lead less capable lifestyles.

The community should exercise caution and wisdom when selecting a takaful protection plan so that they won't have a heavy financial burden if they choose to pay for the protection plan monthly. As a result, they must prioritize plans that are significant to them and their families. Individuals must be conscious of their financial situation and take appropriate action due to the uncertainty of the economy and, the value of money, and being ready for any kind of risk is imperative. The community must carefully plan and concentrate on the strategy outlined in takaful protection. This can assist the community in altering its way of life and in minimizing the losses that will inevitably occur.

Acknowledgment: The researchers would like to extend the greatest appreciation to the University Islam Melaka (UNIMEL) for Geran Penyelidikan Insentif (PI 3.0) with grant code GPI/24/F3/08

References

Abdul Rahim , N. R., & Che Saperiz, N. I. . (2021). Effectiveness of Public Service Announcement on Halal Knowledge among Muslim Teenagers in Time of Pandemic. *Ulum Islamiyyah*, *33*(S5), 5–18. https://doi.org/10.33102/uij.vol33noS5.399

Arlan, M. A., & Abdullah, M. A. B. (2024). The Determinant of Acceptance and Awareness of Takaful in East Malaysia. *Journal of Islamic Banking and Finance.* Jan–Mar, 51.

Awang, A., Mohamad, L. H., Ramly, A. F., & Sulong, C. N. (2022). Pengaruh Pengetahuan terhadap Persepsi Guru dalam Memilih Manfaat Insurans Konvensional dan Takaful: Kajian Di Tanah Merah. *Journal of Islamic, Social, Economics, and Development* (JISED), 7(47), 566-581.

Davis, A. (1971) Guidelines for the Interpretation of Effect Size for Correlations.

Fan, L., & Babiarz, P. (2019). The Determinants of Subjective Financial Satisfaction and The Moderating Roles of Gender and Marital Status. *Family and Consumer Sciences Research Journal,* 47(3), 237-259.

Hassan, H. A., & Abbas, S. K. (2020). Factors Influencing the Investors' Intention to Adopt Takaful (Islamic insurance) products: *A survey of Pakistan. Journal of Islamic Marketing*, 11(1), 1-13.

Hassan, R., Salman, S. A., Kassim, S., & Majdi, H. (2018). Awareness and Knowledge of Takaful in Malaysia: A Survey of Malaysian Consumers. *International Journal of Business and Social Science*, 9(11), 45-53.

Md Jusoh, Z., & Jaafar, M. I. (2019). Tahap Pengetahuan dan Sikap Pengguna terhadap Tingkah Laku Pemilikan Pelan Insurans. *Jurnal Pengguna Malaysia* , 32, 1–17.

Meerangani, K. A., & Mad Zin, S. (2022). Penerimaan Penjawat Awam terhadap Produk Takaful: Kajian di Daerah Petaling, Selangor. *Journal of Islamic Philanthropy and Social Finance* (JIPSF), 4(2), 92-101.

Oxford University Press. (2021). Oxford Learner's Dictionary. Oxford University Press. Retrieved from https://www.oxfordlearnersdictionaries.com/

Raza, S., Ali, M., & Qureshi, M. (2019). Influential Factors of Islamic Insurance Adoption: An Extension of Theory of Planned Behavior. *Journal of Islamic Marketing*. doi:http://dx.doi.org/10.1108/JIMA-03-2019-0047

Rogers, E. M. (1995). Diffusion of Innovations: Modifications of A Model for Telecommunications. Die Diffusion Von Innovationen in der Telekommunikation, 25-38.

Sang, L. T., Ulum, Z. K. A. B., Budin, D. S. A., & Mohidin, R. (2020). Hubungkait Pengetahuan Kewangan dan Kesedaran Insurans Hayat dan Takaful Keluarga. *OER@ UMS, 1-11.*

Tabachnick, B. G., & Fidell, L. S. (2013). Using Multivariate Statistics (6th ed.). Boston, MA: Pearson.

Thaidi, H. A. A., Salleh, A. Z., Ab Rahman, M. F., Ab Rahman, A., & Subri, I. M. (2022). Kawalan Penyakit Wabak Berjangkit: Satu Tinjauan Terhadap Takaful Mikro Berasaskan Zakat:[Infectious Plague Control: A Survey On Zakat-Based Micro Takaful]. *Ulum Islamiyyah*, *33*(3), 105-117

Xu, L., Prybutok, V. R., & Blankson, C. (2019). An Environmental Awareness Purchasing Intention Model. 367-381. doi:http://dx.doi.org/10.1108/IMDS-12-2017-059.1

Yaari, M. E. (1965). Uncertain Lifetime, Life Insurance, and The Theory of The Consumer. The Review of Economic Studies, 32(2), 137-150.

Yusoff, M. S., Othman, I. W., Shah, M. K. M., Esa, M. S., Zulhazmi, N. A., Ibrahim, M. A., & Ationg, R. (2021). Moratarium dan Pengurusan Kewangan Norma Baharu dalam Menginspirasi dan Mendidik Kepimpinan Komuniti Pendidikan Tinggi. *Journal of Islam, Social, Economies.*

Information Management and Business Review (IMBR)
Vol. 16, No. 4, Dec 2024 (ISSN 2220-3796)

Evaluating the Impact of Hospitality Service Quality on Legal Compliance and Customer Loyalty: A Case Study in Malacca

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Abstract: This study investigates the relationship between service quality, management practices, and customer loyalty in Malacca's hospitality sector, focusing on the legal implications for hospitality service providers. By surveying university students, this research identifies key aspects of customer satisfaction and explores the role of compliance with hospitality laws in shaping perceptions and loyalty. Quantitative analysis of the data reveals significant trends regarding the intersection of service quality and legal standards, offering insights for both policymakers and hospitality operators. The findings suggest that adherence to legal standards, combined with a focus on service quality can significantly enhance customer satisfaction and loyalty. The research concludes by proposing actionable recommendations for both hospitality operators and regulatory bodies to ensure improved service quality and legal compliance.

Keywords: *Service Quality, Legal Compliance, Customer Loyalty, Hospitality Sector, Customer Satisfaction*

1. Introduction

The hospitality sector is a significant contributor to economic development, supporting tourism, job creation, and local economies (Cristian & John, 2018). It encompasses a wide array of services, including accommodations, food and beverage, entertainment, and transportation, all of which play a crucial role in enhancing the tourist experience. In Malacca, a UNESCO World Heritage site with a rich cultural heritage, the hospitality industry is vital for sustaining tourism. As a key tourist destination, Malacca relies heavily on high-quality hospitality services to attract and retain visitors from around the world.

In today's competitive hospitality landscape, service quality is a critical driver of customer satisfaction and loyalty. The ability of hospitality providers to deliver services that meet or exceed customer expectations is central to their success. Key factors such as staff responsiveness, facility cleanliness, visual appeal, and effective management practices significantly influence customer perceptions and loyalty. However, an often-overlooked aspect that can impact service quality and customer loyalty is legal compliance.

Legal compliance in the hospitality industry refers to adherence to a set of rules and regulations established by governing authorities to ensure the safety, health, and rights of customers and employees (Anca et al, 2023). These regulations include health and safety standards, fire safety, food safety, consumer protection, employment laws, and environmental regulations. Compliance with these legal standards is essential not only to avoid legal repercussions but also to build customer trust and ensure a safe environment. In an era where customers are increasingly informed and conscious of their rights, non-compliance can lead to reputational damage, legal consequences, and diminished customer loyalty.

Compliance with legal standards not only helps service providers mitigate risks but also contributes to building a trustworthy relationship with customers, thereby boosting loyalty and repeat patronage. The hospitality industry is people-centric and establishing trust is fundamental to creating a positive customer experience. When customers perceive that their health, safety, and rights are prioritized, they are more likely to develop a positive attitude toward the establishment, enhancing their overall experience and loyalty. On the other hand, negligence in legal compliance can result in negative word-of-mouth and a decline in customer trust and loyalty.

The COVID-19 pandemic has further highlighted the importance of health and safety compliance in the hospitality sector. With heightened awareness of hygiene and safety, customers are more discerning about the places they choose to visit. Businesses that strictly adhere to health and safety protocols are more likely to attract and retain customers (Georgios, 2003). The pandemic has reshaped customer expectations, making legal compliance a fundamental component of service quality. In Malacca, where tourism is a major economic driver,

aligning with these evolving expectations is crucial for maintaining competitiveness and resilience in the hospitality sector.

This study aims to explore the intersection of service quality and legal compliance in Malacca's hospitality sector and examine how these factors collectively influence customer loyalty. By investigating the relationship between service quality, compliance, and loyalty, this study provides insights that can guide hospitality operators and policymakers in creating a customer-centric and sustainable service environment. Understanding this relationship is particularly relevant in culturally rich destinations like Malacca where the hospitality experience plays a central role in shaping tourists' perceptions.

2. Literature Review

The hospitality industry has long emphasized the importance of service quality as a determinant of customer satisfaction and loyalty. Ozturkcan and Okan (2018) proposed a model in which service quality is defined as the gap between customer expectations and their actual experiences. This model highlights five dimensions of service quality consisting of tangibles, reliability, responsiveness, assurance, and empathy which together contribute to a customer's perception of the overall service experience. In Malacca's highly competitive hospitality market, delivering high-quality services across these dimensions can be a key differentiator for hospitality businesses (Fojt, 1995).

Service quality in the hospitality sector encompasses both technical and functional elements. According to Fojt (1995), technical elements refer to what is delivered such as the quality of food, cleanliness of facilities, and efficiency of services, while functional elements refer to how the services are delivered, including staff behavior, empathy, and promptness. The importance of technical elements such as cleanliness and facility maintenance has been further supported by recent research, which has shown that these factors significantly influence customer satisfaction and loyalty (Grace & Chia-Chi, 2009).

Legal compliance, another crucial aspect of hospitality management, has received growing attention in recent years. Legal compliance involves adhering to regulations related to health and safety, consumer protection, food hygiene, and labor laws. Compliance with these legal requirements is not only critical for avoiding fines and penalties but also for building customer trust and ensuring that hospitality businesses operate with integrity (Amani, 2024). Legal compliance has been shown to play a significant role in enhancing customer trust, especially when customers are aware that their health, safety, and rights are being prioritized (Katherine & Yu-Shan, 2023). This connection between legal compliance and service quality is particularly relevant in the context of COVID-19 as the pandemic has raised awareness of health and safety protocols.

The COVID-19 pandemic has had a profound impact on the hospitality industry, changing customer expectations and increasing the importance of health and safety standards (Mehta et al., 2020). Customers are now more discerning and selective about the places they visit, paying closer attention to health, safety, and cleanliness. Hospitality businesses that demonstrate strict adherence to health and safety protocols have a competitive edge, as compliance with such regulations has become a fundamental expectation rather than a value-added feature. In Malacca, which relies heavily on tourism, the hospitality sector must align with these evolving expectations to remain resilient and competitive.

Despite the growing recognition of the importance of legal compliance, there is still limited empirical evidence on how compliance affects customer loyalty, especially in developing hospitality markets like Malaysia. A study conducted by Ratnawati et al. (2021) found that health and safety compliance significantly influenced customer satisfaction which in turn contributed to loyalty. The study also emphasized that customers are more likely to trust establishments that strictly follow regulatory guidelines, thus enhancing their overall experience and increasing their likelihood of return visits.

The concept of customer loyalty is closely linked to both service quality and legal compliance. Customer loyalty is defined as the intention of customers to return to a particular service provider and recommend it to others. Achieving customer loyalty is a critical outcome for hospitality businesses, as it directly impacts profitability and long-term success. Loyal customers are more likely to return, contribute to positive word-of-mouth, and

ultimately enhance the financial performance of hospitality establishments (Morris, 2000). Customer loyalty requires not only high-quality service delivery but also adherence to legal standards which ensures customer safety and satisfaction.

Customer satisfaction serves as a mediator between service quality and customer loyalty. According to Graham et al. (2010), customer satisfaction is an emotional response to the fulfillment of expectations. When hospitality services meet or exceed customer expectations, customers are more likely to develop positive emotions toward the service provider, thereby fostering loyalty. In Malacca's hospitality sector, service quality attributes such as tangibles, responsiveness, and assurance are significant predictors of customer satisfaction (Syed et al., 2019). However, the role of legal compliance in shaping customer satisfaction has received relatively little attention, which is a gap this study aims to address.

The relationship between service quality and legal compliance is symbiotic. Compliance with legal standards enhances service quality by ensuring that basic safety, health, and rights are protected, while high-quality service delivery builds a positive reputation and encourages compliance. For example, compliance with food safety regulations ensures that customers are served food that is safe and of high quality, which is a fundamental expectation in the hospitality sector. Likewise, adherence to fire safety regulations and emergency preparedness protocols creates a safe environment for guests, contributing to a sense of security and a positive guest experience.

Legal compliance also extends to consumer protection laws, which safeguard customers from unfair practices and ensure that their rights are upheld. Transparency in pricing, accurate information about services, and fair treatment are essential components of consumer protection. Customers expect hospitality providers to be transparent about their services and compliance with consumer protection regulations helps build trust and foster a positive relationship between hospitality businesses and their customers. In Malacca, where tourists come from diverse cultural backgrounds, ensuring compliance with consumer protection laws is particularly important to meet the expectations of both local and international visitors (Paul, 2018).

Employee-related regulations, such as labor laws and workplace safety standards also play a critical role in determining service quality. The hospitality industry is labor-intensive, and the quality of service provided is directly influenced by the well-being and motivation of employees. Compliance with employment laws such as fair wages, reasonable working hours, and safe working conditions contributes to a motivated workforce that is more likely to deliver high-quality service (Paul, 2018). When employees feel valued and supported, they are more likely to be engaged, courteous, and attentive to customers, which positively impacts the overall customer experience. Therefore, legal compliance benefits not only customers but also supports the well-being of employees which in turn enhances service quality.

The interplay between service quality, legal compliance, and customer loyalty is particularly significant in Malacca's hospitality sector, given the city's status as a UNESCO World Heritage site. Visitors to Malacca expect not only to immerse themselves in the cultural experience but also to receive high-quality hospitality services that meet international standards. Failure to comply with legal requirements can tarnish the reputation of the hospitality sector and by extension, Malacca's image as a tourist destination. Conversely, adherence to legal standards, combined with a focus on delivering exceptional service quality can enhance tourists' overall experience and contribute to positive word-of-mouth, which is crucial for sustaining tourism growth in the region (Filippo & Daniele, 2021).

The literature on the relationship between service quality, legal compliance, and customer loyalty is still evolving, especially in the context of developing countries. In the Malaysian context, studies have highlighted the importance of cultural sensitivity and customization of services to meet the expectations of diverse customer groups (Georgios, 2003). Legal compliance is also viewed as an important aspect of creating a service environment that respects cultural diversity and provides a safe and welcoming experience for all visitors. For instance, compliance with halal food regulations is a critical consideration for Muslim tourists visiting Malacca, and ensuring adherence to these standards can significantly enhance satisfaction and loyalty among this demographic (Osman et al., 2024).

The role of government policies and regulations in shaping service quality and customer loyalty has also been highlighted in the literature. Government agencies play a key role in enforcing compliance and supporting hospitality operators in meeting regulatory standards. Collaborative efforts between regulatory bodies and industry stakeholders are essential for creating a compliant and customer-focused hospitality sector (Hendra et al., 2024). In Malacca, policymakers can use insights from this study to design initiatives that promote legal compliance and enhance service quality, ultimately contributing to a more sustainable tourism sector.

In summary, the literature highlights the critical role of both service quality and legal compliance in achieving customer loyalty in the hospitality sector. While service quality has been extensively studied as a key determinant of customer satisfaction and loyalty, the role of legal compliance is equally important but less explored. Compliance with health, safety, consumer protection, and employment regulations not only ensures a safe and welcoming environment for customers but also builds trust and enhances the overall service experience. The interplay between these factors is particularly significant in Malacca, where the hospitality experience is central to the city's appeal as a tourist destination. By understanding and addressing the factors that influence customer loyalty, hospitality operators in Malacca can create a competitive advantage that attracts new customers and fosters long-term loyalty.

3. Methodology

This study used a quantitative approach to examine the relationship between service quality, legal compliance, and customer loyalty in Malacca's hospitality sector. Data was collected through surveys distributed to university students, who were asked to rate their experiences with various aspects of hospitality services in Malacca. The survey included questions related to demographic information, frequency of using hospitality services, and ratings of service quality dimensions, such as staff responsiveness, facility cleanliness, and the accuracy of service promises.

A Likert scale ranging from "Strongly Disagree" to "Strongly Agree" was used to assess respondents' perceptions of service quality and their level of loyalty. Descriptive statistics were employed to summarize the data, while correlation and regression analyses were used to determine relationships between service quality variables, legal compliance, and customer loyalty (Sobari et al., 2022). Additionally, graphical analysis including correlation heatmaps and distribution graphs was performed to visualize key findings.

The regression analysis revealed significant insights into the impact of different aspects of service quality on customer loyalty. For instance, the visual appeal of facilities was found to have a positive and significant relationship with customer loyalty, as evidenced by the R-squared value of 0.390 and a positive coefficient of 0.5207. Staff responsiveness also showed a significant effect, with an R-squared value of 0.244. These findings indicate that maintaining a visually appealing environment and ensuring staff responsiveness are key factors in fostering customer loyalty.

The quantitative methodology, combined with regression and correlation analyses, provided an objective assessment of how service quality and legal compliance influence customer loyalty. The findings offer valuable insights into the interplay of these factors and can guide hospitality operators and policymakers in developing effective strategies to enhance service quality and foster customer loyalty in Malacca.

4. Findings and Discussion

This section presents the findings of the study, including a detailed analysis of the survey data and the relationships between service quality, legal compliance, and customer loyalty. The data collected from university students in Malacca provide insights into how different factors influence customer loyalty in the hospitality sector.

The survey data revealed that the majority of respondents rated the visual appeal of facilities and staff positively, with 45% agreeing or strongly agreeing that the presentation was satisfactory. Additionally, 50% of respondents indicated that services were provided as promised, suggesting that expectations were largely met. A significant proportion of students (40%) reported feeling loyal to hospitality services in Malacca, attributing

this loyalty to service quality and adherence to promised standards (Abbass, 1991). The analysis also found a positive correlation between perceived quality and customer loyalty, emphasizing the importance of maintaining high service standards.

The correlation analysis aimed to identify the relationships between service quality dimensions, legal compliance, and customer loyalty.

Table 1: Correlation Analysis

Variable 1	Variable 2	Correlation Coefficient (r)
Visual Appeal	Customer Loyalty	0.62
Staff Responsiveness	Customer Loyalty	0.57
Legal Compliance	Customer Loyalty	0.49
Cleanliness	Customer Loyalty	0.53
Management Practices	Customer Loyalty	0.47

The correlation analysis indicates strong positive relationships between service quality variables and customer loyalty. The visual appeal of facilities and staff responsiveness show the highest correlation coefficients with customer loyalty, suggesting that these aspects are critical drivers of loyalty. Legal compliance and cleanliness also exhibit significant positive correlations, indicating that these elements contribute to enhancing customer trust and satisfaction. To further understand the impact of different aspects of service quality on customer loyalty, a linear regression analysis was conducted.

Table 2: Regression Analysis Summary

Predictor Variable	Coefficient (β)	Standard Error	R-squared (R^2)	P-value
Visual Appeal	0.5207	0.085	0.390	< 0.001
Staff Responsiveness	0.4319	0.090	0.244	< 0.001
Legal Compliance	0.3691	0.079	0.193	< 0.005
Cleanliness	0.2943	0.083	0.156	< 0.010

The regression analysis shows that the visual appeal of facilities is the most significant predictor of customer loyalty, accounting for approximately 39% of the variance in loyalty (R^2 = 0.390). Staff responsiveness also significantly contributes to customer loyalty with an R^2 value of 0.244. Legal compliance and cleanliness also show positive coefficients, suggesting their contribution to enhancing customer loyalty, although to a lesser extent compared to visual appeal and staff responsiveness.

The findings highlight the importance of maintaining visually appealing facilities and ensuring staff responsiveness in fostering customer loyalty. Visual appeal, which includes cleanliness, décor, and staff appearance, directly impacts customers' first impressions and overall perception of service quality (Siu-Kam et al., 2024). Staff responsiveness, defined as the ability to provide prompt and helpful service plays a critical role in enhancing customer satisfaction, especially during interactions that require immediate attention.

Legal compliance also plays a significant role in building customer loyalty. Compliance with health, safety, and consumer protection regulations is crucial in creating a safe and trustworthy environment for customers. Customers are more likely to remain loyal to hospitality providers who prioritize their safety and rights. These findings align with previous studies, such as those by Nazan et al. (2022), which emphasized the increased importance of health and safety compliance in the post-pandemic hospitality industry.

In addition to the quantitative findings, qualitative analysis of customer feedback provided further insights into areas that require improvement. The feedback was categorized into key themes, which include cleanliness, efficiency, and service quality. The analysis highlighted the following key areas for improvement:

Cleanliness

Cleanliness was a recurring theme in the feedback, with respondents emphasizing the importance of maintaining a clean environment in all areas of the hospitality establishment. The comments suggested that

consistent cleaning protocols, coupled with regular audits could help address customers' concerns about cleanliness.

Staff Efficiency and Responsiveness

Efficiency in handling customer requests and responsiveness in addressing issues were highlighted as critical aspects of the service that require improvement. Customers expressed the need for prompt responses, particularly during busy periods. Ensuring that staff are adequately trained and prepared to handle high-pressure situations can improve service delivery.

Positive Customer Interactions

While the majority of respondents provided positive feedback about the quality of staff interactions, some noted inconsistencies. Improving consistency in staff behavior and communication skills is crucial for ensuring that all customers have a positive experience. Providing ongoing training to staff members and monitoring service quality can help achieve this goal.

The findings of this study provide valuable insights into the relationship between service quality, legal compliance, and customer loyalty in Malacca's hospitality sector. The correlation and regression analyses indicate that service quality dimensions such as visual appeal, staff responsiveness, and cleanliness are significant predictors of customer loyalty. These findings underscore the importance of maintaining high service standards across multiple aspects of hospitality operations to foster customer loyalty (Morris, 2000).

Visual appeal, which emerged as the most significant predictor of customer loyalty, is a critical factor in shaping customers' perceptions of the overall quality of hospitality services (Urumsah, 2015). Customers tend to form their first impressions based on the visual presentation of facilities, staff, and overall ambiance. Therefore, investing in facility maintenance, cleanliness, and attractive décor is essential for creating a positive customer experience that drives loyalty.

Staff responsiveness was also found to be a key determinant of customer loyalty, highlighting the importance of well-trained and courteous staff who are capable of addressing customer needs promptly (Wills et al, 1990). Customers value prompt and attentive service, especially during moments when they require immediate assistance. Training programs focused on customer service skills, as well as incentives for staff to excel in responsiveness, can contribute to enhancing this aspect of service quality.

The study also found that legal compliance plays a significant role in influencing customer loyalty. Compliance with health, safety, and consumer rights regulations not only ensures a safe environment for customers but also contributes to building trust and loyalty. The post-pandemic era has heightened the importance of regulatory compliance, as customers are now more conscious of health and safety protocols (Lee & Venkateshwaran, 2022). Hospitality providers who demonstrate a strong commitment to legal compliance are more likely to retain customers and receive positive recommendations.

Cleanliness was highlighted as a recurring theme in both the quantitative and qualitative analyses. Cleanliness is an essential aspect of hospitality services that directly influences customer satisfaction and loyalty (Raksmey & Pei-Chun, 2021). Customers expect a clean environment in all areas, including guest rooms, common areas, and dining facilities. Ensuring consistent cleaning practices and conducting regular audits can help address customer concerns and improve overall service quality.

5. Conclusion and Recommendations

The findings of this study demonstrate the critical role of service quality and legal compliance in fostering customer loyalty within Malacca's hospitality sector. By analyzing both quantitative survey data and qualitative customer feedback, it is clear that aspects such as visual appeal, staff responsiveness, cleanliness, and adherence to legal standards are significant predictors of customer satisfaction and loyalty. The strong correlation between these variables suggests that improvements in service quality, coupled with stringent legal compliance, are essential for building a loyal customer base in the hospitality industry.

The regression analysis revealed that the visual appeal of facilities was the most influential predictor of customer loyalty, followed closely by staff responsiveness. This finding indicates that hospitality operators must prioritize the upkeep and aesthetic appeal of their facilities to create a positive first impression on customers. Additionally, staff responsiveness emerged as a critical determinant of customer loyalty, underscoring the importance of training and empowering employees to address customer needs promptly and effectively. The ability of staff members to interact courteously and attentively with customers significantly influences overall customer satisfaction and the likelihood of repeat patronage.

Legal compliance also plays an essential role in establishing customer trust and enhancing loyalty (Georgios, 2003). Compliance with health, safety, and consumer protection regulations not only ensures the well-being of customers but also contributes to a positive and trustworthy relationship between the service provider and its clientele. In the post-pandemic era, customers are increasingly conscious of health and safety standards, and businesses that demonstrate a commitment to complying with such regulations are likely to see an increase in customer loyalty. For policymakers, these findings highlight the importance of regulatory frameworks that support the hospitality sector in meeting customer expectations and maintaining high standards of service quality.

Cleanliness was another significant factor highlighted by both the quantitative and qualitative findings. Customers emphasized the importance of a clean and hygienic environment, which is essential for ensuring positive experiences in hospitality settings (Raksmey & Pei-Chun, 2021). Hospitality operators need to implement and maintain rigorous cleaning protocols to meet customer expectations and enhance their satisfaction. Regular cleanliness audits and housekeeping training programs can contribute to consistent cleanliness standards, which in turn positively impact customer perceptions and loyalty.

Based on the findings, several key recommendations can be made for hospitality operators and policymakers in Malacca:

Focus on Facility Maintenance and Visual Appeal
Hospitality operators should invest in the regular maintenance and enhancement of their facilities to ensure that they remain visually appealing to guests. Upkeep of the physical environment, including décor, cleanliness, and comfort can create a positive first impression which significantly influences customer satisfaction and loyalty. Incorporating attractive design elements and ensuring well-maintained infrastructure is critical to creating a welcoming and visually pleasing atmosphere (Madhavi et al., 2024).

Enhance Staff Training and Responsiveness
Staff responsiveness is a key determinant of customer loyalty and hospitality operators must prioritize staff training to improve this aspect of service quality. Training programs should focus on developing communication skills, emotional intelligence, and problem-solving abilities to ensure that staff can address customer needs promptly and effectively. Staff members should also be empowered to make decisions that enhance the customer experience, thereby improving responsiveness and reducing waiting times (Fojt, 1996).

Ensure Compliance with Legal Standards
Compliance with health, safety, and consumer protection regulations is crucial for establishing customer trust and loyalty. Hospitality operators should regularly review their compliance with these regulations and conduct internal audits to identify areas for improvement. Collaborating with regulatory authorities to stay updated on compliance requirements and best practices will help create a safe and trustworthy environment for guests. For policymakers, it is essential to provide clear guidelines and support for hospitality operators to help them meet regulatory requirements effectively (Zakaria & Esraa, 2022).

Acknowledgment: The researchers would like to extend the greatest appreciation to the Islamic University of Melaka (UNIMEL) for Geran Penyelidikan Insentif (GPI 3.0) with grant code GPI/24/F3/22

References

Abbass, F. A. (1991). Management challenges: A worldwide perspective. Management Decision, 29(6).

Amani, D. (2024). How do COVID-19 preventive measures build corporate reputation: Focus on the hospitality industry in Tanzania. International Hospitality Review, 38(1), 182-200.

Anca, C. Y., Oana, A. G., Ovidiu, I. C., Monica, M. & Hugues, S. (2023). The digital traveler: implications for data ethics and data governance in tourism and hospitality. Journal of Consumer Marketing, 40(2), 155-170.

Cristian, M. & John, T. B. (2018). Analytic perspectives on online purchasing in hotels: a review of literature and research directions. International Journal of Contemporary Hospitality Management, 30(1), 557-580.

Filippo, G. & Daniele, S. (2021). Tourism, economic growth, and sustainability in the Mediterranean region. In Tourism in the Mediterranean Sea: An Italian Perspective, 129-142.

Fojt, M. (1995). Strategies for service quality. Journal of Services Marketing, 9(3), 1-72.

Fojt, M. (1996). Managing change in the workplace. Management Decision, 34(5), 1-68.

Georgios, I. Z. (2003). MNEs, globalization, and digital economy: legal and economic aspects. Managerial Law, 45(1/2), 1-296.

Grace, T. R. & Chia-Chi, S. (2009). Factors influencing satisfaction and loyalty in online shopping: an integrated model. Online information review, 33(3), 458-475.

Graham, L. B., Janet, R. M., Beverley, A. S., Nerina, L. J. & Dieter, Z. (2010). Service encounter needs theory: A dyadic, psychosocial approach to understanding service encounters. In Emotions and Organizational Dynamism, 6, 221-258.

Hendra, O., Kurnianto, B. & Endrawijaya, I. (2024). Collaborative governance for aviation approved training organization: an adapted model for multi-stakeholder collaboration. Higher Education, Skills and Work-Based Learning, 14(2), 418-434.

Katherine, T. S. & Yu-Shan, H. (2023). A shift in corporate prioritization of CSR issues. Corporate Communications: An International Journal, 28(1), 68-85.

Lee, P. & Venkateshwaran, N. (2022). Readdressing accountability for occupational health and safety in a pandemic era. Meditari accountancy research, 31(1), 78-100.

Madhavi, P., Ashraf, M. S., Jane, A. & Seraphim, A. (2024). YouWalk-YouReclaim: a co-assessment approach for active university campus environments. Smart and Sustainable Built Environment.

Mehta, R., Singh, M. A., Hussain, S., Gavinolla, R M. & Mohanty, P. (2022). 'How are we surviving the pandemic, COVID-19?': perspectives from hospitality industry workers in Australia. In The Emerald Handbook of Destination Recovery in Tourism and Hospitality, 285-298.

Morris, C. J. (2000). Work futures. Management Research News, 23(9/10/11), 1-170.

Nazan, C., Denitsa, D. & Xiaoming, L. (2022). "Building back better": the impact of the COVID-19 pandemic on the resilience of the hospitality and tourism industries. International Journal of Contemporary Hospitality Management, 34(11), 4103-4122.

Osman, I., Junid, J., Ali, H., Buyong, Z. S., Syed Marzuki, S. Z. & Othman, N. (2024). Consumption values, image, and loyalty of Malaysian travellers towards Muslim-friendly accommodation recognition (MFAR). Journal of Islamic Marketing, 15(3), 682-719.

Paul, A. P. (2018). A History of the FTC's Bureau of Economics. In Healthcare Antitrust, Settlements, and the Federal Trade Commission (pp. 143-343). Emerald Publishing Limited.

Raksmey, S. & Pei-Chun, L. (2021). Do expectations towards Thai hospitality differ? The views of English vs Chinese-speaking travellers. International Journal of Culture, Tourism and Hospitality Research, 15(1), 43-58.

Ratnawati, A., Cokrohadisumarto, W. M. & Kholis, N. (2021). Improving the satisfaction and loyalty of BPJS healthcare in Indonesia: a Sharia perspective. Journal of Islamic Marketing, 12(7), 1316-1338.

Ozturkcan, S. & Okan, Y. E. (2018). Marketing management in Turkey. Emerald Publishing Limited.

Siu-Kam, J. L., Pimtong, T. & Wing-Sze, L. T. (2024). Impact of customers' needs on online information search of upscale restaurant attributes and customer satisfaction. British Food Journal, 126(3), 941-964.

Sobari, N., Kurniati, A. & Hardius, U. (2022). The influence of Islamic attributes and religious commitments toward halal wellness services customer satisfaction and loyalty. Journal of Islamic Marketing, 13(1), 177-197.

Syed, Z. A., Norita, A. & Avraam, P. (2019). Measuring service quality and customer satisfaction of the small-and-medium-sized hotels (SMSHs) industry: lessons from United Arab Emirates (UAE). Tourism Review, 74(3), 349-370.

Urumsah, D. (2015). Factors influencing consumers to use E-services in Indonesian airline companies. In E-services Adoption: Processes by firms in developing nations, 23, 5-254.

Wills, G., Kennedy, H. S., Cheese, J. & Rushton, A. (1990). Maximizing marketing effectiveness. Management Decision, 28(2).

Zakaria, E. & Esraa, F. Y. (2022). A systematic and critical review of Internet of Things in contemporary hospitality: a roadmap and avenues for future research. International Journal of Contemporary Hospitality Management, 35(2), 533-562.

Information Management and Business Review (IMBR)
Vol. 16, No. 4, Dec 2024 (ISSN 2220-3796)

Exploring the Determinants of Financial Well-Being among Rural Households

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Abstract: Household financial well-being plays an important role in the B40 community. This study aims to explore the determinants of financial well-being. The literature proves that the level of financial skills and access to financial knowledge significantly influence household financial well-being among the B40 community. In addition, the influence of external factors such as access to financial services, social support, or financial development programs also affects household financial management practices B40 community. This study emphasizes the elements of digital financial literacy, financial socialization, and savings and investment toward the financial well-being of rural households. This kind of concept paper can contribute to knowledge, especially in guiding students, academics, and policymakers, to learn about the concepts of rural financial well-being that exist.

Keywords: *Financial well-being, financial literacy, financial socialization, saving, investment*

1. Introduction

This study will focus on the specific study of financial management factors that affect the financial well-being of households in the B40 community. Deeper research into aspects of financial management, income diversification, and its direct impact on financial stability in households forms the basis of this research.

There have been several studies in the last 5 years that examine the financial well-being of individuals and communities and its relationship to social and community development. Among them is a study on "Financial Management Practices among Urban Poor: A Case Study in Malaysia" (Yusof & Rahman, 2017). This study explores financial management practices in the context of urban poor communities in Malaysia. The main focus of the study is to outline the savings strategies used as well as aspects of debt management that are a priority in the financial life of the B40 community. This research emphasizes the factors that affect financial stability and the strategies used by the B40 community to ensure more stable finances in their daily lives.

The study conducted by Hamid & Ismail (2019) on "Factors Contributing to Financial Satisfaction among B40 Urban Households in Malaysia". It emphasizes the factors that contribute to financial satisfaction among B40 households in urban areas of Malaysia. Through a combination of socioeconomic and psychological aspects, this study recognizes the elements that have a significant impact on financial satisfaction in this community.

This study is in line with the study: "Determinants of Household Resilience in Low-Cost Homeownership Program in Malaysia" (Lim & Tan, 2018). This study focuses on the factors that affect household resilience in the low-cost homeownership program in Malaysia. The research approach uses the context of the homeownership program as a starting point to identify the important elements that make up the household's ability to deal with financial pressure and challenging situations.

In addition, the study "Financial Literacy and Financial Well-Being among the B40 in Malaysia: The Mediating Role of Financial Behavior" also examines the relationship between financial literacy, financial behavior, and financial well-being among the B40 community in Malaysia. Emphasis is placed on the influence of financial literacy on financial behavior as well as its impact on financial well-being in a community context (Che Hashim & Abdul Manaf, 2020).

Study Household financial well-being among the B40 community plays an important role in ensuring economic stability and family well-being. However, there is a need to better understand and study in depth the factors that influence the financial management practices of individuals in this community as well as their relationship

with household well-being. Although previous studies have examined the relationship between financial literacy and household well-being, there is still a lack of understanding of the direct impact of certain factors such as effective financial management practices and income diversification on household financial well-being among the B40 community. A low-income family known as a B40 family is a family with a household income of RM 3855 per month and below. This group is very susceptible to high risk when there is economic pressure in a country.

Financial problems in the B40 group are often closely related to low income compared to the rising cost of living. This group often faces difficulties in meeting basic needs such as housing, education, health, and daily needs. The lack of access to good job opportunities and financial support is the main challenge for this group in producing prosperous finances Muhammad & Nasir (2023). Financial problems are among the factors that contribute to the B40 group and couples' self-pressure leading to the outbreak of domestic violence. The results of a previous study found that the pressure of financial problems faced in the household prompts husbands to commit various forms of abuse against their wives who are victims of domestic violence (Yusof et al, 2020).

The results of the 5th Population and Family Study found that one of the main causes of divorce in a marriage is normalized by poor financial planning among young people. Young people now make the 'trend' of marriage with unstable finances. This can be seen through statistics from the National Registration Department showing that financial problems are one of the main causes of divorce cases in Malaysia, which is 17,359 cases (Nadzri, 2020).

The Malaysian Marriage and Divorce Statistics Report in 2020 shows that the number of divorces among the people of this country increased by 12 percent which is 56,975 divorce cases recorded in 2019 compared to 50,862 in the previous year. According to the Malaysian Marriage and Divorce Statistics Report (2020), about 80 percent of the total number of divorce cases in this country involve the B40 group such as small traders, restaurant assistants, and factory workers and some are self-employed (Che Hashim et al, 2020).

Financial management in B40 community households plays an important role in ensuring economic stability and family well-being. However, there is a need to better understand and study in depth the relationship between financial management and household financial well-being. Although previous studies have examined the relationship between financial literacy and household well-being, there is a lack of understanding of the direct impact of certain factors such as effective financial management and income diversification on household financial well-being among the B40 community.

2. Literature Review

Financial Well-Being Among Rural Area

Financial well-being among rural communities is strongly influenced by several key factors, including digital financial literacy, financial socialization, and savings and investments. The following is a discussion of how each of these factors affects the financial well-being of rural communities: Digital financial literacy refers to an individual's ability to understand and use financial information through digital platforms. Among rural communities, digital financial literacy is important because it facilitates access to financial information, digital banking services, and investment opportunities. According to the study, the increase in digital financial literacy among rural residents is closely related to the increase in financial well-being because it allows them to make better financial decisions and reduce the risk of financial fraud Muhammad & Nasir (2023). Financial socialization involves the process by which individuals learn financial values, norms, and practices through social interactions with family, friends, and community. In rural areas, where access to formal education may be limited, financial socialization plays an important role in shaping financial understanding and behavior. Studies show that effective financial socialization through family and community can improve financial knowledge and financial management practices, which in turn contribute to better financial well-being. Ahmad & Zainal (2023) The addition is through Lim & Lee (2024) Savings and investments are the main determinants of financial well-being. Among rural communities, savings are generally lower than in urban communities, largely due to lower incomes and limited investment opportunities. However, initiatives to promote savings and investment, including the use of technology

The relationship of digital financial literacy to financial well-being

Digital financial literacy plays an important role in improving the financial well-being of households by enabling them to manage their finances more efficiently, protect themselves from financial risks, and take advantage of access to various financial services. Through this literacy, households can track expenses, save money, and invest better, as well as identify and avoid digital financial scams that can damage their well-being. In addition, digital financial literacy also expands access to financial services, including microloans and insurance, which previously may have been difficult to access, especially for the underprivileged. Overall, these skills contribute to the financial stability and improved living standards of households in the growing digital age.

Table 1: Literature Review for the relationship of digital financial literacy to financial well-being

Author & Year	Subjects Researched Study	Findings	Relationship to Financial Well-Being
Rahayu, R., Juita, V., & Rahman, A. (2024)	Studies show that digital financial literacy significantly influences financial behavior, including saving and spending habits, which in turn improves the financial well-being of women in Indonesia.	Digital financial literacy improves an individual's ability to better manage finances, leading to improved financial well-being through smarter savings and spending management.	Digital financial literacy improves an individual's ability to better manage finances, leading to improved financial well-being through smarter savings and spending management.
Lee, K., & Kim, S. (2023)	Digital Financial Literacy and Financial Well-Being in South Korea	Studies have found that digital financial literacy is closely related to financial well-being, especially among those who can protect themselves from digital fraud and make better financial decisions.	Digital financial literacy helps protect individuals from digital financial risks such as fraud, while improving overall financial well-being.
Singh, R., & Malik, S. (2022)	Financial Inclusion and Digital Financial Literacy in India	The results of the study show that digital financial literacy and financial inclusion are important factors that affect financial well-being. Digital financial literacy helps in improving access to financial services.	Digital financial literacy improves access to financial services, which is important for improving financial well-being, especially among disadvantaged communities.

The relationship of financial socialization to financial well-being

Financial socialization plays an important role in financial well-being among households by forming the basis of behavior and financial decisions taken throughout life. Financial socialization that begins in childhood, through exposure to family financial conversations, involvement in family financial management, and examples of financial behavior by parents or guardians, helps build strong financial values and norms. Studies show that individuals who receive good financial socialization from early on tend to make smarter financial decisions, which leads to stability and increased financial well-being in adulthood. This financial socialization also helps in the formation of a strong financial identity, which in turn contributes to the ability to manage finances effectively and achieve long-term financial goals.

Table 2: Literature Review The relationship of financial socialization to financial well-being

Author & Year	Subjects Researched Study	Findings	Relationship to Financial Well-Being
Young, J. H., Copeland, C. W., & Hudson, C. R. (2024)	Financial Socialization and Financial Well-Being Among Young Adults in the United States	This study found that financial socialization from childhood through parents, friends, and teachers has a significant impact on the financial well-being of young adults.	Strong financial socialization in childhood increases the ability to make better financial decisions in adulthood, leading to better financial well-being.
LeBaron, A. B., & Kelley, H. (2023)	The Role of Financial Socialization in the Formation of Financial Identity	This study shows that financial socialization from the family influences the formation of a strong financial identity, which in turn contributes to the individual's financial well-being.	A strong financial identity assists individuals in managing their finances more effectively, increasing their ability to achieve financial goals and overall financial well-being.
Danes, S. M., & Yang, J. (2022)	Childhood Consumer Experiences and Their Influence on Financial Well-Being	This study found that consumer experiences during childhood, such as exposure to family financial management, play an important role in shaping financial behavior in adulthood.	Financial experience from an early age through observation and involvement in family finances helps build the foundation for responsible financial behavior, which supports financial well-being later in life.

The relationship of digital financial literacy to financial well-being

The relationship between savings and investment plays an important role in determining a person's financial well-being. Savings are the basis of financial stability, providing savings that can be used for emergencies, paying short-term expenses, or as capital to start investments. (Bialowolski et al., 2024) Without sufficient savings, a person may face financial difficulties in the event of unexpected expenses. Such as medical costs or job loss. Next, investment is a step taken after having stable savings. Through investment, money saved can grow faster than just leaving it in a savings account. Investments in instruments such as stocks, bonds, or real estate have the potential to generate higher returns, which in turn can increase wealth and provide additional sources of income in the future (Jhonson et al., 2023).

The relationship between savings and investment is complementary, where savings provide a secure base against uncertainty, while investment offers opportunities to increase wealth. Individuals who have sufficient savings are usually more daring to invest because they have savings to face any risk. Financial well-being is achieved when there is a good balance between savings and investments. Adequate savings ensure financial security, while wise investment can lead to sustainable wealth growth. This balance allows individuals or families to enjoy peace of mind as well as financial stability while improving the overall well-being of life.

Table 3: literature review of the relationship of digital financial literacy to financial well-being

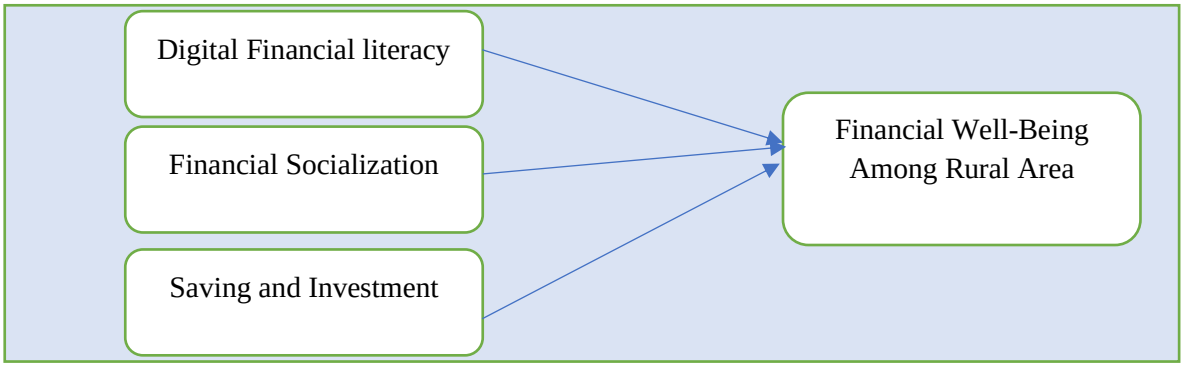
Author & Year	Subjects Researched Study	Findings	Relationship to Financial Well-Being
Mankiw, N. G. (2019)	Principles of Economics - Savings and Investments	Stating that savings is the foundation of financial stability, while investing allows money to grow faster through higher returns.	Savings provide savings for emergencies and short-term expenses, while investments increase wealth, both of which contribute to financial stability and long-term well-being.
Bodie, Z., Kane, A., & Marcus, A. J. (2014)	Investment and Wealth Growth	Investments in stocks, bonds, and real estate have the potential to provide higher returns than regular savings, which can increase wealth and additional income.	Successful investments can increase one's income and wealth, which contributes to financial well-being by providing an additional source of income for the future.
Modigliani, F., & Brumberg, R. (1954)	Life Cycle Theory - The Relationship between Savings, Investments, and Financial Well-Being	Suggests that individuals tend to save at a young age and invest for financial well-being in old age, balancing savings and investments throughout life.	Support the importance of a balance between savings and investment to ensure lifelong financial well-being, especially in the face of financial challenges in old age.
Keynes, J. M. (1936)	Theory of Aggregate Demand - Savings and Investment	Arguing that high savings without investment can lead to a decline in aggregate demand, which in turn can weaken the economy and overall financial well-being.	Emphasizes the need for investment to balance savings, ensuring that the economy continues to grow, which is essential to maintaining financial well-being in the long term.

3. Methodology

The proposed conceptual framework for determinants of financial well-being among households in rural areas in Malaysia is based on the underpinning theories of the Planned Behaviour Theory and Theory Acceptance Model, as well as past literature. Using systematic search methods, past literature was evaluated. This technique was constructed with three sub-processes—identification, screening, and eligibility—to ensure exhaustive and methodical searching. This procedure can be accurately described in the review to the extent that all database searches can be repeated. The current study follows a methodical examination of literature published on financial well-being. This study examines the literature published using keywords such as “financial well-being”, “digital financial literacy”, “financial socialization”, “saving and investment” and “rural area” using the Boolean operator “AND” and “OR”. Specifically, the combination of keywords has primarily centered on financial well-being and rural areas. The first step is identification, during which time the researcher seeks out alternate forms of keywords such as synonyms, antonyms, and related terms. From the beginning of 2017 until the end of 2024, all databases were searched using Boolean operators, phrase searches, truncation, wild card, and field code functions, either individually or in combination, based on the primary and enhanced keywords: ("FINANCIAL WELL-BEING*" OR "FWB" OR “FINANCIAL WELLBEING) AND ("RURAL AREA”). Scopus and Web of Science were selected as the two primary databases to search for relevant articles and materials for the review. Four (4) different databases were accessed to provide more context. It was decided to use Google Scholar, Research Gate, Mendeley, and university libraries. Only 29 of the articles were selected and the rest of the duplicate records were from multiple databases.

4. Proposed Conceptual Framework

Figure 1: Proposed Conceptual Framework On Financial Well-Being In Rural Area



Based on the findings of previous studies, it has been shown that elements of digital financial literacy, financial socialization, and savings and investment affect financial well-being among rural communities.

5. Discussion and Conclusion

Financial well-being among rural households is influenced by several key factors, including digital financial literacy, financial socialization, as well as savings and investment practices. Digital financial literacy plays an important role in empowering rural households to access financial information, use financial technology, and make better financial decisions. Although access to technology may be limited, those who are digitally literate have the opportunity to take advantage of mobile banking applications, e-wallets, and online investment platforms, which can increase their financial stability and growth.

Financial socialization forms the basis of financial values and behavior which is important in managing household finances. In rural contexts, this socialization often occurs through interactions with family and community members, where the roles of parents, friends, and teachers are very important. Households exposed to good financial socialization tend to be smarter in making financial decisions, such as managing daily expenses, saving money, and investing.

Savings and investments are two critical elements that complement each other in achieving financial well-being. Households that practice savings consistently have a stronger financial foundation, which allows them to survive in emergencies. At the same time, investing in productive assets can increase wealth and provide additional income. Although access to investment opportunities may be more limited in rural areas, good financial literacy and financial socialization support can encourage households to find and take advantage of these opportunities.

Conclusion: Financial well-being among rural households can be improved through a combination of digital financial literacy, effective financial socialization, and smart savings and investment practices. All these factors are interrelated and together contribute to improving the quality of life and long-term financial stability of rural households.

Acknowledgment: The published article is the result of research funding awarded by Universiti Islam Melaka through the Incentive Research Grant (IRG).

References

Ahmad, N. H., & Zainal, A.(2023). Financial Socialization in Rural Households: Implications for Financial Behavior and Well-being. International Journal of Financial Studies.

Aziz, A. R. A., & Musa, N. N. (2023). Pengurusan Krisis Rumah Tangga dalam Mencapai Kesejahteraan.Malaysian Journal of Social Sciences and Humanities (MJSSH), 8(1), e002168-e002168.

Aziz, N. A., & Zainal, N. Z. (2018). The Development of Socioeconomic Classification Model for B40 Group in Malaysia. International Journal of Engineering & Technology, 7(3.25), 180–183.

Bialowolski, P., Xiao, J. J., & Weziak-Bialowolska, D.(2024). Do All Savings Matter Equally? Saving Types and Emotional Well-Being Among Older Adults: Evidence from Panel Data. Journal of Family and Economic Issues, 45(1), 88–105. https://doi.org/10.1007/s10834-023-09891-2

Bodie, Z., Kane, A., & Marcus, A. J.(2014). Investments. McGraw-Hill Education.

Che Hashim, R., & Abdul Manaf, N. H.(2020). Financial Literacy and Financial Well-Being among the B40 in Malaysia: The Mediating Role of Financial Behavior. Jurnal Pengurusan, 58.

Collins, J. M., & O'Rourke, C. M. (Eds.). (2010). Financial Education and Capability: Research, Education, Policy, and Practice. Oxford University Press.

Danes, S. M., & Yang, J.(2022). Financial Socialization, Childhood Experiences, and Financial Well-being.

Hamid, S., & Ismail, R. (2019). Factors Contributing to Financial Satisfaction among B40 Urban Households in Malaysia. International Journal of Economics, Management and Accounting, 27(1), 151–174.

Ibrahim, S., & Tan, L. H. (2020). Income Diversification and Household Stability: A Study among B40 Communities. Journal of Finance and Economics, 8(2), 112-127.

Jhonson, B., Andriani, R., Noviana, I., & Tamara, D. (2023). Influence of Digital Financial Literacy on Financial Well-Being Through Spending, Saving, and Investment Behavior in Indonesia. Journal of Business Studies and Management Review, 6(2), 157–168. https://doi.org/10.22437/jbsmr.v6i2.24793

Keynes, J. M.(1936). The General Theory of Employment, Interest and Money. Macmillan.

Lee, K., & Kim, S.(2023). The Impact of Digital Financial Literacy on Financial Well-being in South Korea. SpringerLink.

LeBaron, A. B., & Kelley, H.(2023). Financial Socialization: A Decade in Review. Journal of Family and Economic Issues.

Lim, C. K., & Tan, T. H. (2018). Determinants of Household Resilience in Low-Cost Homeownership Program in Malaysia. Journal of Construction in Developing Countries, 23(2), 89–104.

Lim, S. Y., & Lee, H. C.(2024). Savings and Investment Behavior in Rural Areas: The Role of Financial Technology. Asian Journal of Economic and Financial Research.

Mankiw, N. G. (2019). Principles of Economics. Cengage Learning.

Maslow, A. H.(1943). A Theory of Human Motivation. Psychological Review, 50(4), 370–396.

Modigliani, F., & Brumberg, R.(1954). Utility Analysis and the Consumption Function: An Interpretation of Cross-section Data. In K. K. Kurihara (Ed.), Post-Keynesian Economics (pp. 388-436). Rutgers University Press.

Mohammad, C. A., Mustapha, A. S., Ismail, F. H., Kirin, A., & Masruri, M.(2022). The Pengurusan Kewangan Islam: Ke Arah Kesejahteraan Kewangan Institusi Keluarga di Malaysia Semasa Pandemik Covid-19. Jurnal Islam Dan Masyarakat Kontemporari, 23(1), 282.

Muhammad, A. I., & Nasir, R.(2023). Digital Financial Literacy and Financial Well-being: A Study of Rural Communities. Journal of Rural Development and Financial Innovation.

Nadzri, S. I. M. (2020). Polemik Perceraian di Malaysia. Terengganu: TSIS.

O'Neill, B., & Xiao, J. J. (Eds.). (2016). Financial Behavior: Players, Services, Products, and Markets. Oxford University Press.

Rahayu, R., Juita, V., & Rahman, A. (2024). Digital Financial Literacy, Financial Behaviour, and Financial Well-being of Women in Indonesia. Atlantis Press.

Ramlan, A. F., & Ismail, N. (2018). The Impact of Financial Management Practices on Household Resilience: Evidence from B40 Families in Malaysia. International Journal of Management Studies, 5(1), 78-91.

Singh, R. & Malik, S. (2022). Financial Inclusion and Digital Financial Literacy: Do They Matter for Financial Well-being? Social Indicators Research.

Sulaiman, M. F., & Nasohah, Z. (2023). Sorotan Literatur Punca Perceraian Awal Perkahwinan di Malaysia [Literature Review on the Causes of Early Marriage Divorce in Malaysia]. BITARA International Journal of Civilizational Studies and Human Sciences, 6(4), 28-39.

Young, J. H., Copeland, C. W., & Hudson, C. R. (2024). Factors Mediating the Association between Financial Socialization and Financial Well-being. Financial Services Review.

Yassin, S. N. N. S., & Alma'amun, S. (2018). Pengurusan Kewangan Keluarga Dan Kursus Pra Perkahwinan Muslim di Malaysia. In 5th International Research Management & Innovation Conference.

Yusof, M. M., Azman, A., Bahrin, F. K. & Yahaya, M.(2020, March). Hubungan konflik kewangan terhadap kesejahteraan sosial mangsa wanita dalam isu keganasan rumah tangga. In Proceeding International Conference On Social Work (ICSW) (pp. 133-143).

Yusof, N. & Rahman, N. A. (2017). Financial Management Practices among Urban Poor: A Case Study in Malaysia. International Journal of Academic Research in Business and Social Sciences, 7(8), 414–427.

Information Management and Business Review (IMBR)
Vol. 16, No. 4, Dec 2024 (ISSN 2220-3796)

Role of Perceived Authenticity in Souvenir Buying Decisions among Tourists in Bandar Hilir Melaka

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Abstract: This study looks into the influence of perceived authenticity in tourists' souvenir purchasing selections in Bandar Hilir, Melaka, a UNESCO World legacy site known for its rich cultural legacy. The purpose of the study is to comprehend how visitors' attitudes, subjective norms, and sense of behavioral control are influenced by their perception of authenticity and how this affects their purchasing decisions. Grounded on the Theory of Planned Behavior (TPB), the study utilizes a quantitative method, utilizing a structured questionnaire to collect data from both domestic and international tourists visiting Bandar Hilir. This research contributes to the body of knowledge on consumer behavior in the context of cultural tourism by shedding light on the cognitive processes underlying the purchasing behavior of visitors. The results are also likely to have practical consequences for local artists and marketers.

Keywords: *Perceived Authenticity, Souvenir Buying Decisions, Theory of Planned Behavior, Cultural Tourism, Bandar Hilir Melaka, Consumer Behavior*

1. Introduction

This study aims to identify the role of perceived authenticity in souvenir purchasing decisions among tourists in Bandar Hilir, Melaka, a historic city. Several issues have been identified within this study. The first issue is that Malaysia lacks a souvenir that truly represents the country for international tourists to take home. It is further specified that Malaysia does not have a distinctive souvenir that reflects its identity due to its diverse cultures. For instance, when tourists visit Australia, the souvenirs they typically bring back are often related to kangaroos or koalas because Australia has established these animals as national icons. Similarly, in the Middle East, tourists usually bring back carpets as souvenirs. In contrast, Malaysia lacks a 'signature souvenir' that distinctly represents the country. The second issue is whether souvenir sellers can meet the demands of international tourists in terms of souvenir choices. Additionally, this study seeks to understand tourists' travel information and their souvenir preferences (Salina, 2015).

The perception of authenticity among tourists plays a crucial role in determining the value and significance of souvenirs. Tourists visiting Melaka often seek items that are unique to the region and that embody the cultural essence of the place. The increasing commercialization of tourism in Melaka has led to the proliferation of mass-produced souvenirs that may lack the depth of cultural connection. These items, often made cheaply and quickly, can sometimes overshadow the more authentic, artisan-produced goods. While these mass-produced items may still hold appeal for some tourists due to their affordability and convenience, they do not offer the same level of cultural authenticity as handcrafted goods.

Tourism is not a new activity. This sector has long been an economic driver for many countries, with several nations competing in the era of globalization to attract tourists. However, some countries also promote domestic tourism to encourage economic growth around tourist destinations. To develop this sector, many places with unique natural features have been opened and enhanced for tourism purposes. In Malaysia, the tourism industry has shown positive growth, with 4.5 million foreign tourist arrivals recorded in the first quarter of this year, mostly from ASEAN countries. The Deputy Minister of Tourism, Arts, and Culture, Khairul Firdaus Akhbar Khan, is optimistic that the country can achieve its target of 16.1 million tourists this year, with tourism revenue estimated to exceed RM49 billion (Chan, 2023).

The global tourism industry is currently expanding rapidly, with countries utilizing their natural and historical resources as tourist attractions. Indirectly, this industry helps countries generate revenue. Malaysia is also not left behind in this service sector. This study selects Bandar Hilir Melaka as the research location because it is rich in historical and cultural heritage, making it a major tourist destination in Malaysia. Melaka offers various attractions, from historical sites to modern entertainment, along with comfortable accommodation options

(Fam, Mohd Taib, Norfaridatul Akmaliah, Fadhlur, Azmi, Abdul Mutalib, Hamidah and Mohamad Fadzil Izad, 2017).

The selection of souvenirs is a process influenced by various factors, including personal preferences, cultural significance, and economic considerations. Previous studies on consumer behavior suggest that these factors are interrelated and can vary significantly depending on the demographic and psychographic characteristics of tourists (Wang, Yaouyuneyong, Sullivan, and Burgess, 2024). This diversity in behavior highlights the need for a thorough exploration of the elements that influence souvenir choices.

2. Literature Review

Bandar Hilir, located in the heart of Melaka, is a vibrant and historically significant area that attracts millions of tourists each year. Known for its rich cultural heritage, diverse architectural styles, and status as a UNESCO World Heritage Site, Bandar Hilir offers a unique blend of historical landmarks, cultural experiences, and bustling markets. Tourists visiting this area are often drawn to the diverse range of souvenirs available, which serve as tangible memories of their visit and as symbols of the local culture.

The act of purchasing souvenirs is a deeply ingrained part of the tourist experience. Souvenirs serve not only as personal mementos but also as gifts that represent the culture and identity of the destination. In a culturally rich area like Bandar Hilir, the authenticity of these souvenirs plays a crucial role in influencing tourists' purchasing decisions. Authentic souvenirs, which are perceived as genuine representations of the local culture, history, and traditions, are highly valued by tourists who seek to bring home a piece of the place they have visited.

Theoretical overview

The Theory of Planned Behavior (TPB), developed by Icek Ajzen in 1991, is a psychological theory that seeks to explain human behavior through three core components: Attitude Toward the Behavior, Subjective Norms, and Perceived Behavioral Control. These components interact to shape an individual's behavioral intentions, which in turn influence the actual behavior. In this study, TPB is an ideal theoretical framework to explore how perceived authenticity influences tourists' decisions to purchase souvenirs.

The Theory of Planned Behavior provides a comprehensive framework for understanding the factors that influence tourists' decisions to purchase authentic souvenirs in Bandar Hilir, Melaka. By examining how attitudes, subjective norms, and perceived behavioral control interact with perceived authenticity, researchers can gain deeper insights into the cognitive and social processes that drive souvenir-purchasing behavior among tourists. This application of TPB not only enhances the understanding of consumer behavior in tourism but also helps in developing strategies to promote authentic cultural products to tourists (Ajzen and Madden, 1986).

Authenticity

Perceived authenticity refers to the extent to which consumers believe a product or experience accurately represents the true essence or culture of a destination (Wang, 1999). In the context of tourism, authenticity is often linked to the historical and cultural significance of a destination, as well as the originality and craftsmanship of the products associated with it (Chhabra, Healy & Sills, 2003).

Tourists' perceptions of authenticity can significantly influence their purchasing decisions. Authentic souvenirs are often seen as more valuable and meaningful, as they provide a deeper connection to the destination (Kolar & Zabkar, 2010). This perceived value can lead to a greater willingness to purchase and a higher level of satisfaction with the tourism experience (Ye, Qiu & Yuen, 2019).

Attitude toward Souvenir Purchase

Attitude toward souvenir purchase refers to a tourist's overall positive or negative evaluation of the act of buying a souvenir. In the context of perceived authenticity, a favorable attitude is likely to emerge if the tourist perceives the souvenir as an authentic representation of the destination's culture. This positive attitude, in turn, significantly influences the intention to purchase. Ajzen (1991) argues that attitudes are crucial predictors of behavior, as they reflect an individual's favorable or unfavorable evaluation of the behavior in question. Lee

et al (2015) found that tourists with positive attitudes toward buying authentic products are more likely to engage in purchasing behavior. Studies by Ye, Qiu, and Yuen (2019) demonstrate that perceived authenticity enhances the value of souvenirs, leading to a more favorable attitude toward purchasing them. Attitudes towards authenticity are also shaped by individual cultural values, as identified in research by Papadopoulou, Vardarsuyu and Oghazi (2023), where cultural congruence enhances the perceived value and thus the attitude toward the purchase.

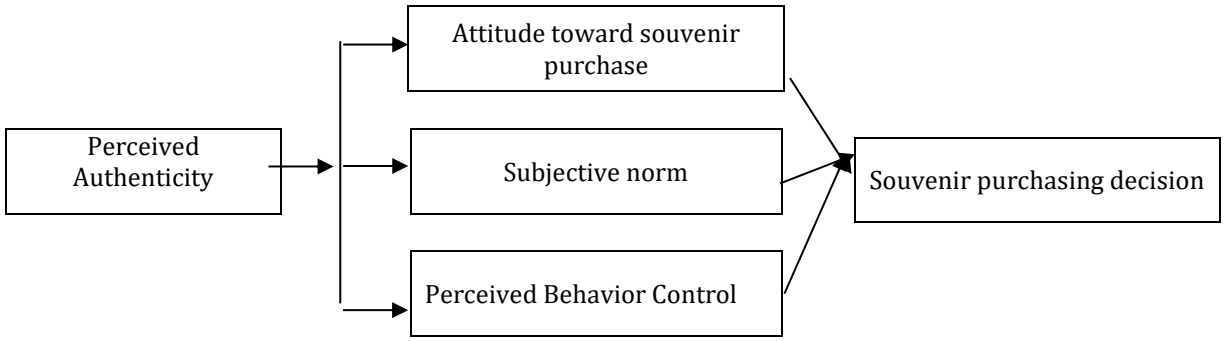
Subjective norm

Subjective norms refer to the perceived social pressure to engage or not engage in a behavior. In the context of souvenir purchasing, it involves the influence of family, friends, or cultural expectations on a tourist's decision to buy authentic souvenirs. According to Quintal, Lee, and Soutar (2010), subjective norms strongly influence tourists' decisions to engage in culturally respectful behavior, including the purchase of authentic souvenirs. Lam and Hsu (2006) demonstrated that tourists often feel compelled to purchase souvenirs that align with the cultural expectations of their social group. Subjective norms are influenced by cultural background, with research by Fang, Huang, Meng and Bai (2024) indicating that collectivist cultures place a higher emphasis on group expectations, impacting buying behavior. Meanwhile, research by Swanson and Timothy (2012) suggests that subjective norms can also amplify the effects of perceived behavioral control, making tourists more likely to purchase authentic souvenirs if they believe they will meet social expectations.

Perceived behavior control

Perceived behavioral control refers to the individual's perception of their ability to perform the behavior, considering internal and external factors (Ajzen, 1991). This involves the perceived ease or difficulty of performing the behavior, which, in this case, is the purchase of authentic souvenirs. Tourists' perceived behavioral control can be influenced by factors such as their confidence in identifying authentic souvenirs, the availability of authentic products, and the financial or time constraints they face (Sparks, 2007). This perception can either facilitate or hinder the decision to purchase authentic souvenirs.

Conceptual Framework



(Adaptation from Theory of Planned Behavior)

3. Methodology

Methods for collecting literature

The entire basis for this conceptual study is a survey and analysis of the literature, along with data from earlier empirical studies. Several publications were looked through during the literature evaluation, and it was discovered that a few researchers had done high-quality work. This information is crucial for understanding how this study was put together. The Google search engine and online digital books were two further techniques that were employed.

This section delineates the study methodologies utilized by researchers to collect data from participants. To guarantee the validity and correctness of the data gathered by the goals of the study, every method or methodology used must be appropriate and in line with the study's environment. Additionally, the research equipment, study design, and methodology are described in detail in this paper.

Data collection for future research

This research aims to understand how perceived authenticity influences souvenir-buying decisions among tourists in Bandar Hilir, Melaka. To achieve this, the research will adopt a quantitative methodology, employing a survey-based approach. The following sections outline the research design, sampling method, data collection process, and data analysis techniques.

The target population for this study consists of international and domestic tourists who visit Bandar Hilir, Melaka. This location is a popular tourist destination known for its rich cultural heritage and variety of souvenirs. A stratified random sampling method will be employed to ensure that both international and domestic tourists are adequately represented. The population will be divided into two strata: international tourists and domestic tourists, and random samples will be drawn from each stratum (Etikan, Musa, & Alkassim, 2016). The sample size will be determined using Cochran's formula (Cochran, 1977), which is appropriate for determining sample sizes in large populations. An estimated sample size of 300 respondents will be targeted to ensure adequate power for statistical analysis.

A structured questionnaire will be used as the primary data collection instrument. The questionnaire will be designed to measure the key variables: Perceived Authenticity, Attitude Toward Souvenir Purchase, Subjective Norms, Perceived Behavioral Control, and Souvenir Buying Decision. A 5-point Likert scale ranging from "Strongly Disagree" to "Strongly Agree" will be employed to measure the constructs. This scale is widely used in behavioral research to assess attitudes, beliefs, and perceptions (Likert, 1932).

Data will be analyzed using SPSS (Statistical Package for the Social Sciences) version 26.0. This software is widely used for social science research and offers a range of statistical tools for data analysis (Pallant, 2020). Descriptive statistics (mean, standard deviation, frequency distribution) will be used to summarize the demographic characteristics of the respondents and their responses to the survey items. Multiple regression analysis will be employed to test the relationships between perceived authenticity (independent variable) and the mediating variables (attitude, subjective norms, perceived behavioral control) on the souvenir buying decision (dependent variable) (Hair, Black, Babin, & Anderson, 2019). The PROCESS macro for SPSS (Hayes, 2017) will be used to conduct mediation analysis, examining the indirect effects of perceived authenticity on souvenir-buying decisions through the mediating variables. Multiple regression and mediation analyses are appropriate for testing the complex relationships between variables in the TPB framework and understanding the mediating effects of attitude, subjective norms, and perceived behavioral control.

4. Findings

The literature found was very helpful in assisting the researcher to understand this conceptual paper very well and led the researcher to some meaningful findings. In this section, the findings from relevant literature are summarized to provide insights into how perceived authenticity influences souvenir-buying decisions among tourists. These findings are categorized based on key themes identified in the literature.

Perceived authenticity plays a crucial role in the decision-making process of tourists when purchasing souvenirs. Tourists are increasingly seeking souvenirs that they perceive as authentic, which they believe capture the essence of the culture, history, and uniqueness of the destination (Kolar & Zabkar, 2010). Authenticity in souvenirs is often associated with items that are handmade, locally produced, and reflective of traditional craftsmanship (Chhabra, 2005). Studies have shown that souvenirs perceived as authentic are more likely to be purchased because they are viewed as more valuable and meaningful (Suttikun and Meeprom, 2021). Literature indicates that the higher the perceived authenticity of a souvenir, the stronger the tourist's intention to purchase it. Tourists are motivated by the desire to bring back items that are not only representative of their travel experience but also serve as tangible memories of the destination (Swanson & Timothy, 2012). Perceived authenticity also enhances the cultural and symbolic value of souvenirs, making them more desirable. This cultural value is particularly significant in heritage sites like Bandar Hilir, and Melaka, where souvenirs often embody the rich history and cultural identity of the area (UNESCO, 2008).

Furthermore, tourists' attitudes toward purchasing authentic souvenirs are influenced by their personal values, experiences, and the perceived cultural significance of the item. A positive attitude towards authenticity

often leads to a higher likelihood of purchase (Wang, 1999). Tourists who value authenticity are likely to view the purchase of such souvenirs as a way to support local communities and preserve cultural heritage.

There is also a growing trend among tourists towards ethical consumption, where the authenticity of a souvenir is linked to its ethical production and the fair treatment of artisans (Tamer, Rasha and Miral, 2024). This ethical perspective further strengthens the positive attitude toward buying authentic souvenirs. Tourists who have previously had positive experiences with authentic souvenirs are more likely to develop a favorable attitude toward purchasing similar items in the future.

Subjective norms, or the perceived social pressure to purchase authentic souvenirs, play a significant role in tourists' buying decisions. These norms are often shaped by cultural expectations, peer influence, and the desire to conform to social standards (Fishbein & Ajzen, 2010). In many cultures, there is an expectation to bring back souvenirs that are authentic and representative of the destination. This cultural expectation can strongly influence tourists' purchasing behavior, especially in heritage-rich locations like Bandar Hilir, and Melaka (Ham and Weiler, 2002). The influence of peers and family members can also impact the decision to purchase authentic souvenirs. Tourists may feel encouraged or obligated to buy authentic items to meet the expectations of their social circle (White, Smith, Terry, Greenslade and McKimmie, 2009).

Perceived behavioral control refers to the tourists' perception of their ability to purchase authentic souvenirs, considering factors such as accessibility, price, and their knowledge or confidence in identifying authentic products (Ajzen, 1991). The ease of finding authentic souvenirs can significantly influence purchase decisions. If tourists perceive that authentic items are readily available and easy to access, they are more likely to buy them (Creswell, 2014). Tourists who feel confident in their ability to distinguish between authentic and inauthentic souvenirs are more likely to make a purchase. This confidence is often built through prior knowledge or positive past experiences (Lee et al, 2007). The perceived affordability of authentic souvenirs also plays a role. Tourists may be willing to pay a premium for items they perceive as genuinely representative of the local culture, but price sensitivity can still impact the final decision.

In a nutshell, the previous literature consistently shows that perceived authenticity, when positively influencing attitude, subjective norms, and perceived behavioral control, leads to a higher likelihood of souvenir purchases. Tourists who perceive a souvenir as authentic, feel social pressure to purchase it, and believe they have the control to make the purchase are more likely to follow through with the buying decision. The decision to purchase authentic souvenirs is a complex process influenced by multiple factors, including emotional attachment to the destination, the desire for tangible memories, and the perceived quality and uniqueness of the souvenir (Swanson, 2004)

5. Conclusion and Recommendations

The findings from the literature suggest that tourists are increasingly prioritizing authentic souvenirs that they perceive as truly reflective of the destination's culture and heritage. These souvenirs are often handmade, locally produced, and imbued with traditional craftsmanship, which tourists value as tangible memories of their travel experiences. The study also highlighted the importance of factors such as attitude, subjective norms, and perceived behavioral control in the souvenir purchasing process. A positive attitude towards authentic souvenirs, influenced by personal values and social expectations, combined with the ease of access and confidence in identifying authenticity, significantly enhances the likelihood of purchase.
In the context of Bandar Hilir, Melaka, a heritage-rich area with a vibrant cultural history, the role of perceived authenticity in souvenir buying is particularly relevant. The cultural and symbolic significance of the souvenirs available in this area plays a crucial role in attracting tourists and encouraging them to make purchases that serve as lasting reminders of their visit.

Based on the conclusions drawn from this research, the following recommendations are proposed for stakeholders, including local artisans, souvenir retailers, and tourism authorities in Bandar Hilir, Melaka.
Enhance the Authenticity of Souvenirs
Local artisans and retailers should focus on producing and promoting souvenirs that reflect the authentic cultural and historical heritage of Melaka. Efforts should be made to ensure that the design, materials, and

production processes of these souvenirs are deeply rooted in local traditions. This not only adds value to the products but also enhances their appeal to tourists seeking authentic experiences.

Educate Tourists on Authenticity

Tourism authorities and souvenir retailers should implement educational initiatives to help tourists better understand and appreciate the authenticity of local souvenirs. This could include informational brochures, guided tours that highlight traditional craftsmanship, and in-store displays that explain the cultural significance of various souvenirs. By increasing tourists' knowledge and awareness, they are more likely to make informed purchasing decisions that favor authentic items.

Promote Ethical and Sustainable Practices

Given the growing trend of ethical consumption, it is recommended that souvenir producers and retailers in Melaka adopt and promote sustainable and ethical practices in the creation of their products. This includes fair trade practices, the use of environmentally friendly materials, and transparent production processes. Tourists are more likely to purchase souvenirs when they are confident that their purchases support ethical and sustainable practices.

Leverage Digital Platforms

To reach a wider audience, local artisans and retailers should consider leveraging digital platforms to showcase and sell authentic Melaka souvenirs. E-commerce websites, social media, and virtual marketplaces can help bridge the gap between local producers and international tourists, allowing them to purchase authentic souvenirs even after their visit. This not only boosts sales but also extends the reach of Melaka's cultural heritage beyond its geographical boundaries.

Foster Collaboration Among Stakeholders

Collaboration among local artisans, retailers, tourism authorities, and cultural institutions is essential to preserving the authenticity of Melaka's souvenirs. Joint initiatives, such as cultural festivals, craft workshops, and exhibitions, can help promote the unique cultural identity of Melaka and attract tourists who are interested in authentic cultural experiences. These collaborations can also provide a platform for artisans to showcase their work and connect with potential customers.

Regularly Update Product Offerings

While maintaining authenticity, it is also important for souvenir producers to regularly update and innovate their product offerings to meet changing tourist preferences. This could include creating limited-edition items, introducing modern twists on traditional designs, or collaborating with contemporary artists. By keeping the product offerings fresh and relevant, local artisans can sustain tourists' interest and encourage repeat purchases.

In sum, by embracing authenticity as the cornerstone of the souvenir industry in Bandar Hilir, Melaka, stakeholders not only preserve the rich cultural heritage of the region but also create lasting, meaningful connections with tourists that transcend the mere act of purchasing, turning each souvenir into a cherished embodiment of the Melakan experience.

Acknowledgment: The published article is the result of research funding awarded by Universiti Islam Melaka through the Incentive Research Grant (IRG).

References

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179-211. https://doi.org/10.1016/0749-5978(91)90020-T

Ajzen, I., & Madden, T. J. (1986). Prediction of goal-directed behavior: Attitudes, intentions, and perceived behavioral control. *Journal of Experimental Social Psychology*, 22(5), 453-474. https://doi.org/10.1016/0022-1031(86)90045-4

Chan, Y.S. (2023). Retrieved from https://www.malaysiakini.com/letters/691212#google_vignette

Chhabra, D. (2005). Staged authenticity and heritage tourism. *Annals of Tourism Research*, 30(3), 702-719. https://doi.org/10.1016/S0160-7383(03)00044-6

Chhabra, D., Healy, R., & Sills, E. (2003). Staged authenticity and heritage tourism. *Annals of Tourism Research*, 30(3), 702-719. https://doi.org/10.1016/S0160-7383(03)00044-6

Cochran, W. G. (1977). *Sampling Techniques* (3rd ed.). John Wiley & Sons.

Creswell, J. W. (2014). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (4th ed.). Sage Publications.

Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics, 5*(1), 1-4. https://doi.org/10.11648/j.ajtas.20160501.11

Fam, S, Mohd Taib, D., Norfaridatul Akmaliah, O., Fadhlur, R. A, Haslinda, M., Abdul Mutalib, M.A, Hamidah, N., and Mohamad Fadzil Izad, A. S. (2017). Why Tourists Visit Melaka? *Proceedings of 2017 China Marketing International Conference (CMIC 2017), Marketing Strategy in the Sharing Economy: Localization and Globalization, Beijing, China, 14-17 July 2017*, pages 785-807. Retrieved from https://www.researchgate.net/publication/324274263_Why_Tourists_Visit_Melaka

Fang, Z., Huang, J., Meng, X., and Bai, H. (2024). Analysis of Purchasing Intention of Green Home Decoration Materials Based on Extended Theory of Planned Behavior. Retrieved from https://www.researchgate.net/publication/233202581_Relationships_among_attitudes_and_subjective_norms_Testing_the_theory_of_reasoned_action_across_cultures

Fishbein, M., & Ajzen, I. (2010). *Belief, Attitude, Intention, and Behavior: An Introduction to Theory and Research*. Addison-Wesley.

Lam, T., & Hsu, C. H. (2006). Reference group influences among Chinese travelers. *Journal of Travel Research*, 44(4), 474-484. https://doi.org/10.1177/0047287506286729

Ham, S., & Weiler, B. (2002). Interpretation as the centerpiece of sustainable wildlife tourism. In *Sustainable Tourism: A Global Perspective* (pp. 35-44). Elsevier.

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). *Multivariate Data Analysis* (8th ed.). Cengage Learning.

Hayes, A. F. (2017). *Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach* (2nd ed.). The Guilford Press.

Kolar, T., & Zabkar, V. (2010). A consumer-based model of authenticity: An oxymoron or the foundation of cultural heritage marketing? *Tourism Management*, 31(5), 652-664. https://doi.org/10.1016/j.tourman.2009.07.010

Lee, H. Y., Qu, H., & Kim, Y. S. (2007). A study of the impact of personal innovativeness on online travel shopping behavior—A case study of Korean travelers. *Tourism Management*, 28(3), 829-839. https://doi.org/10.1016/j.tourman.2006.05.011

Lee, T. H., Jan, F. H., & Tsai, H. C. (2015). Tourists' behavioral intentions toward environmentally responsible museums: An application of the theory of planned behavior. *Journal of Sustainable Tourism*, 23(6), 836-857. https://doi.org/10.1080/09669582.2015.1012031

Likert, R. (1932). A technique for the measurement of attitudes. *Archives of Psychology, 22*(140), 1-55.

Papadopoulou, C., Vardarsuyu, M., and Oghazi, P. (2023). Examining the relationships between brand authenticity, perceived value, and brand forgiveness: The role of cross-cultural happiness. Journal of Business Research. Volume number 167. Retrieved from https://doi.org/10.1016/j.jbusres.2023.114154

Pallant, J. (2020). *SPSS Survival Manual: A Step-by-Step Guide to Data Analysis Using IBM SPSS* (7th ed.). Routledge.

Quintal, V. A., & Lee, L., and Soutar, M. (2010). A dual-process view of tourists' in-group and out-group perceptions: Understanding the role of subjective norms. *Journal of Travel Research*, 53(5), 720-730. https://doi.org/10.1177/0047287513516390

Salina, M. S. (2015). Mengenalpasti Pilihan Cenderamata Oleh Pelancong Antarabangsa Di Melaka Bandaraya Bersejarah. *Universiti Teknologi Malaysia Institutional Repository.* http://dms.library.utm.my:8080/vital/access/manager/Repository/vital:86253

Swanson, K. K., & Timothy, D. J. (2012). Souvenirs: Icons of meaning, commercialization, and commoditization. *Tourism Management*, 33(3), 489-499. https://doi.org/10.1016/j.tourman.2011.10.007

Sparks, B., & Pan, G. W. (2009). Chinese outbound tourists: Understanding their attitudes, constraints, and use of information sources. *Tourism Management*, 30(4), 483-494.

https://doi.org/10.1016/j.tourman.2008.10.014

Sparks, B. (2007). Planning a wine tourism vacation? Factors that help to predict tourist behavioral intentions.

Suttikun, C., and Meeprom, S. (2021). Examining the effect of perceived quality of authentic souvenir products, perceived value, and satisfaction on customer loyalty. Retrieved from https://www.researchgate.net/publication/354518749_Examining_the_effect_of_perceived_quality_of_authentic_souvenir_product_perceived_value_and_satisfaction_on_customer_loyalty

Tamer, H. A., Rasha, A. K., and Miral, A. D. (2024). Effect of Sellers' Ethical Behavior in Traditional Markets on Tourists' Souvenir Purchase Intention. Does Ethnocentrism Matter? Journal of Ecohumanism. Volume number 3, Issue number 27, Page number 224 – 235. Retrieved from https://www.researchgate.net/publication/384492484_Effect_of_Sellers'_Ethical_Behavior_in_Traditional_Markets_on_Tourists'_Souvenir_Purchase_Intention_Does_Ethnocentrism_Matter

UNESCO. (2008). Melaka and George Town, Historic Cities of the Straits of Malacca. Retrieved from https://whc.unesco.org/en/list/1223/

Wang, W., Yaoyuneyong, G., Sullivan, P., and Burgess, B. (2024). The influence of value perceptions on tourist souvenir purchase decisions. Retrieved from https://www.researchgate.net/publication/377458205_The_influence_of_value_perceptions_on_tourist_souvenir_purchase_decisions

Wang, N. (1999). Rethinking authenticity in tourism experience. *Annals of Tourism Research*, 26(2), 349-370. https://doi.org/10.1016/S0160-7383(98)00103-0

White, K., Smith, J. R., Terry, D. J., Greenslade, J. H., & McKimmie, B. M. (2009). Social influence in the theory of planned behavior: The role of descriptive, injunctive, and in-group norms. *British Journal of Social Psychology*, 48(1), 135-158. https://doi.org/10.1348/014466608X295207

Wang, N. (1999). Rethinking authenticity in tourism experience. *Annals of Tourism Research*, 26(2), 349-370. https://doi.org/10.1016/S0160-7383(98)00103-0

Ye, B. H., Qiu, H., & Yuen, P. P. (2019). Perceived authenticity of heritage tourism experiences and its consequences: A study of historic districts in Hangzhou, China. *Journal of Destination Marketing & Management*, 11, 83-91. https://doi.org/10.1016/j.jdmm.2018.12.002

Information Management and Business Review (IMBR)
Vol. 16, No. 4, Dec 2024 (ISSN 2220-3796)

The Prioritization of Sustainable Development Goals by Major Malaysian Islamic Banks: A Comparative Analysis

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Abstract: The banking sector's alignment with Sustainable Development Goals (SDGs) is critical for advancing global sustainability efforts as it facilitates financial intermediation. A key issue remains the need for more consistency in how Islamic banks prioritize SDGs, making it difficult to assess their collective impact. This study aims to compare the SDG prioritization across Islamic banks in Malaysia, addressing the current variation in sustainability efforts. This study uses qualitative methods by analyzing existing frameworks in the bank's Annual Report and Sustainability Report. Based on the comparative analysis, the study proposes a standardized SDG framework tailored to Islamic banks, ensuring alignment with Shariah principles and international sustainability standards. The findings highlight disparities in SDG prioritization among Islamic banks and suggest recommendations for more unified and effective sustainability strategies within Malaysia's Islamic banking sector. These insights could guide policymakers and banks toward more impactful sustainability initiatives.

Keywords: *Islamic Banks, Islamic Subsidiaries, Sustainable Development Goals (SDGs), Prioritization, Sustainability Framework*

1. Introduction

On September 25, 2015, Malaysia and 192 United Nations (UN) member states adopted the 2030 Agenda for Sustainable Development (MoE, 2022). The 17 Sustainable Development Goals (SDGs) aim to eliminate poverty, preserve the planet, and ensure prosperity for all human beings. The United Nations (UN) SDGs provide a blueprint for a better and sustainable future, addressing global challenges such as poverty, inequality, climate change, environmental degradation, prosperity, peace, and justice. Nations are strongly encouraged to work towards achieving the SDGs by 2030. Here is a list of the goals:

Figure 1: The 17 Goals of Sustainable Development Goals (Source: UN, 2015)

These interconnected goals balance economic growth, social inclusion, and environmental protection. Taking examples from Indonesia, they have implemented standards related to the Sustainable Development Goals (SDGs) for banks and the financial sector. The country has made significant strides in promoting sustainable finance through initiatives led by the Financial Services Authority of Indonesia and Bank Indonesia (Monash University, 2023). These frameworks and guidelines are designed to unify the sustainability efforts of financial institutions in Indonesia, ensuring their initiatives are measurable and comparable.

Although Malaysia has developed its standards and frameworks related to the Sustainable Development Goals (SDGs) for the banking sector, it has yet to have a single unified SDG standard like Indonesia. However, several initiatives are in place to guide banks in aligning their operations with sustainability objectives (Shahrom & Kunhibava, 2023). This fragmentation reduces the ability to compare and assess their contribution to sustainability. These issues highlight the need for a comparative analysis to explore how Islamic banks in Malaysia can create a more unified and effective approach to SDG integration.

Unlike most studies addressing sustainability in banking, this research specifically compares SDG prioritization across Islamic banks in Malaysia. The novelty lies in identifying which SDG banks prioritize and understanding why certain goals are emphasized over others, filling a gap in the existing literature. The study proposes developing a standardized SDG framework tailored to Islamic banks, ensuring compliance with Shariah principles and alignment with international SDG standards. This aspect is novel as it provides a unified approach that can be adopted across the Islamic finance sector. The rest of this article is organized as follows: Section 2 provides an overview of the Sustainable Development Goals and its recent implementation in Malaysia. Section 3 explains this study's qualitative methodology and data collection process. Section 4 discusses the results obtained. Finally, Section 5 presents the conclusion of this study.

2. Literature Review

Malaysia Performance on Sustainable Development Goals Report

The Malaysian government has fully aligned the SDGs goals with its budget since the 11th Malaysia Plan (2016-20) for the development of the nation's economy (MoF, 2021). This can also be seen in the Twelve Plan (2021-2025) which reflects Malaysian commitments with a focus on the eradication of extreme poverty (Economic Planning Unit, 2021). This integration aims to align the country's development objectives with global standards, optimize resource allocation, and enhance monitoring for effective implementation.

Malaysia pursuing the 2030 Agenda over three phases with each phase lasting five years. The first phase is between 2016 and 2030. The government assesses the achievement of goals every 5 years in drawing up the next phase of the Roadmap and Five-Year National Development Plans (MoE, 2022). The performance of Malaysia in achieving the Sustainable Development Goals (SDGs) is being monitored by the coordination of the National Physical Planning Council and the National Council for Local Government. Through the Local Government Star Rating System, the implementation of SDG will be assessed. Relevant legislation such as the Local Government Act 1976, Town and Country Planning Act 1976, and Road, Drainage and Building Act 1974 are being enforced and will be improved for better governance mechanisms (Economic Planning Unit, 2021).

According to the SDG 2023 report, Malaysia excels in various indicators, including eliminating extreme poverty, basic health metrics, literacy rates, access to electricity and water in urban areas, internet penetration, and managing fish stock. As we reach the midpoint of our SDG journey, it becomes essential to identify the areas where the nation is performing well and the aspects hindering progress towards achieving the SDGs. Malaysia has made notable progress, achieving about 43% of its SDG targets, significantly higher than the global average of 17%. Malaysia is ahead in areas like education, healthcare, and infrastructure. Its "Madani" economic framework emphasizes compassion, sustainability, and justice, aligning with the SDGs beyond mere economic interests. The country is actively addressing gaps in environmental sustainability and societal well-being (SDG Centre Malaysia, 2023).

Recent SDGs framework implementation for the Banking Sector Malaysia

Malaysia has developed its standards and frameworks related to the Sustainable Development Goals (SDGs) for the banking sector. While it may not have a single unified SDG standard like Indonesia, several initiatives are in place to guide banks in aligning their operations with sustainability objectives. Malaysian banks are guided by Bank Negara Malaysia frameworks like the Climate Change and Principle-based Taxonomy 2021 (CCPT) and the Value-based Intermediation Assessment Framework 2017 (VBIAF). These frameworks aim to integrate environmental, social, and governance (ESG) considerations into financial practices (PwC, 2021).

The Malaysian government introduced the Green Technology Financing Scheme (GTFS) in 2010. It was designed to promote the growth of green technology and sustainable development by providing easier access to financing for green technology-related projects. Next, the Securities Commission of Malaysia implemented the Sustainable and Responsible Investment (SRI) Framework in 2014 to support the issuance of sustainable investment products, including green sukuk, which aligns with various SDGs (IFAC, 2021). The framework allows Islamic banks to issue sukuk which also known as Islamic bonds, to fund sustainable development projects.

Further in April 2021, the Malaysian Government released the SDG Sukuk Framework, showcasing how Islamic Finance institutions can actively support the nation's plan (Ruslina, 2021). These initiatives reflect Malaysia's commitment to advancing sustainable finance and aligning with global standards for responsible banking.

Trends in the Selection of Sustainable Development Goals (SDGs) among selected Islamic banks in Malaysia

Achieving the Sustainable Development Goals (SDGs) is not solely the government's responsibility; it requires the active participation and collaboration of all stakeholders, including banking institutions (Nik Mahdi, Fernando & Abdalla, 2023). Industry participants have established its Sustainable Development Goal Framework, which aligns its mission and operations with the UN SDGs.

For example, Maybank Group, the bank has implemented a Sustainable Product Framework that classifies its financial products as sustainable. It targets significant financing to various sectors and aims to improve lives across ASEAN by mobilizing substantial funds towards sustainability efforts (Business Today, 2022). CIMB has similarly committed to specific SDG targets and has identified seven key SDGs as part of its sustainability strategy (Eco-Business, 2023). AmBank evaluates the impact of its operations to prioritize SDGs, reflecting an adaptable approach to its sustainability agenda (AmBank Group, 2023).

Since Meutia and Febrianti (2017) revealed that the level of Corporate Social Responsibility disclosure by Islamic banking in Indonesia is better than Islamic banking in Malaysia, thus this study integrates the sustainability practices among Islamic banking in Malaysia.

3. Research Methodology

This study conducts a comparative analysis of the prioritization of Sustainable Development Goals (SDGs) by full-fledged Islamic banks and Islamic banking subsidiaries under banking groups in Malaysia. The main references were the official reports and data from the selected banking institutions' annual and sustainability reports, which are publicly available on the website. The research identifies key SDGs highlighted in the Annual Reports and Sustainability Report of all full-fledged Islamic Banking and five major Islamic Banking Subsidiary in Malaysia over 5 years (2019–2023). These reports offer insight into their corporate strategies, including sustainability initiatives. These reports are also reliable and relevant as they are audited before release. In line with Bank Negara Malaysia's (BNM) recommendation, the Sustainability Report was found to have been prepared following the Global Reporting Initiative (GRI) Standards' Core option and the Bursa Malaysia Sustainability Reporting Guide (2nd Edition), Malaysia Code of Corporate Governance (MCCG) by the Securities Commission Malaysia, while also being guided by the United Nations Sustainable Development Goals (UN SDGs).

A content analysis approach will be employed to identify which SDGs are being prioritized by each bank, using a pre-determined set of SDG-related keywords. According to Hussin, using content analysis of Annual Reports

in sustainability and Islamic banking contexts makes them highly relevant as references for your research methodology (2018). The choice of sampling was specifically based on the operation license received by the Islamic bank and the size of the baking group's asset value. In total, 3 full-fledged Islamic banks and 7 major Islamic bank subsidiaries under its banking group were reviewed. One limitation of this study is the varying level of detail provided in the sustainability sections of each bank's annual report, which may affect the consistency and depth of the comparative analysis.

4. Findings and Discussion

This study evaluates the Sustainable Development Goals (SDGs) prioritized by these full-fledged Islamic banks and Malaysia's main Islamic banking subsidiaries. The study reveals significant variations in focus and commitment. These variations happen because each institution has tailored its approach to sustainability based on its unique operational strategies and business models and often tailors their SDG priorities based on the needs of its stakeholders.

For instance, RHB Bank expanded its SDG focus from six to 11 goals between 2020 and 2023, reflecting its increasing engagement with climate and sustainability initiatives. Similarly, Maybank gradually increased its SDG focus from 12 in 2019 to 14 by 2023, aligning with its overarching goal of "Humanising Financial Services." In contrast, CIMB has steadily focused on seven SDGs since its strategic exercise in 2018. These findings illustrate Islamic banks' diverse strategies in response to global sustainability challenges, reflecting their evolving roles as key drivers of sustainable finance in Malaysia.

Table 1 presents the accumulated list of SDGs prioritized by year from 2019 to 2023 by 10 banks. Tables 2 and 3 outline the prioritized SDGs by the 10 banks over five years, from 2019 to 2023, based on their Annual Reports and Sustainability Reports as published on their respective websites. Three full-fledged Islamic banks, namely Bank Islam, Bank Muamalat, and MBSB have been chosen for this study. Seven Islamic bank subsidiaries from various banking groups have also been included, specifically Maybank Group, CIMB Group, AmBank Group, Public Bank Group, and Hong Leong Bank Group.

RHB Group, CIMB Group, Maybank Group, AmBank Group (starting in 2022), Public Bank Group, Hong Leong Bank Group, and MBSB have published dedicated Sustainability Reports, while others detail their sustainability commitments within their Annual Reports. Table 1 tabulates which SDGs receive the most and the least attention. It is a summary based on Tables 2 and 3. This table shows that SDG4, SDG8, SDG12, and SDG13 are the banks' most chosen focus, while SDG2, SDG6, and SDG14 are the least favorites. This table also highlights an upward trend in banks prioritizing SDGs. However, there are some limitations where there are two banks did not specify their focus SDG focus in 2019, and one bank has yet to publish its report for 2023.

Our analysis found the most focused and least favorite SDGs, contrasting previous work. The study by Jan et al (2022) highlighted that SDG-9, SDG-17, SDG-11, and SDG-1 appear to have the highest disclosure scores, while SDG-16 has the lowest from 2011 until 2020. The study also found that corporate sustainability reporting was low during that time. Compared with our study, 7 out of 10 banks have disclosed their sustainability performance separately in reports other than the Annual Report. This positive trend from our report is a sign of increasing awareness among the banks to assess and monitor the corporate performance in line with international objectives.

Table 1: Numbers of banks prioritizing SDGs by year

UN SDGs	2019	2020	2021	2022	2023
SDG 1: No Poverty	2	5	5	4	4
*SDG 2: Zero hunger	2	2	3	2	2
SDG 3: Good health and well-being	3	5	5	4	4
**SDG 4: Quality education	7	9	9	8	7

SDG 5: Gender equality	6	6	7	6	7
*SDG 6: Clean water and sanitation	-	1	1	-	1
SDG 7: Affordable and clean energy	2	5	5	6	7
**SDG 8: Decent work and economic growth	8	10	10	10	9
SDG 9: Industry, innovation, and infrastructure	7	8	8	7	8
SDG 10: Reduce inequalities	5	6	6	7	5
SDG 11: Sustainable cities and communities	4	6	7	6	7
**SDG 12: Responsible consumption and production	8	10	10	9	9
**SDG 13: Climate Action	8	8	8	9	9
*SDG 14: Life below water	-	2	2	1	3
SDG 15: Life on land	2	5	4	3	3
SDG 16: Peace, justice, and strong institutions	5	7	7	7	8
SDG 17: Partnerships for the goals	1	2	4	4	5

*SDG2, SDG6, and SDG14 were found to be the least favorite
**SDG4, SDG8, SDG12 and SDG13 were found to be most favourable.

Table 2: List of SDGs prioritized by Full-fledged Islamic Banks in Malaysia

UN SDGs	MBSB					BANK MUAMALAT					BANK ISLAM				
	2019	2020	2021	2022	2023	2019	2020	2021	2022	2023	2019	2020	2021	2022	2023
SDG 1						It does not specify which SDGs are being prioritized.				The Annual Report has yet to be published.	It does not specify which SDGs are being prioritized.	/	/		/
SDG 2															
SDG 3												/	/		
SDG 4	/	/	/	/	/		/	/	/			/	/		
SDG 5												/	/		/
SDG 6												/	/		
SDG 7				/	/							/	/	/	/
SDG 8	/	/	/	/	/		/	/	/			/	/	/	/
SDG 9				/	/							/	/		
SDG 10				/	/		/	/	/			/	/	/	/
SDG 11	/	/	/	/	/							/	/	/	
SDG 12	/	/	/	/	/		/	/	/			/	/		/
SDG 13	/	/	/	/	/							/	/	/	/
SDG 14												/	/		
SDG 15												/	/		
SDG 16				/	/		/	/	/			/	/		/
SDG 17				/	/							/	/		

From 2019 to 2021, MBSB focused on the same five SDGs, but in 2022 and 2023, this number increased to 10 SDGs, maintaining the same prioritized SDG. Bank Muamalat had no specific SDG focus in 2019, but from 2020 to 2022, it prioritized five similar SDGs for the 3 years. Bank Islam did not specify its SDG focus in 2019. However, in 2020 and 2021, the bank addressed efforts related to 16 SDGs by leaving only SDG2 behind. In 2022, it narrowed this focus to five SDGs, and by 2023, it had increased prioritized to eight SDGs.

Table 3: List of SDGs prioritized by Islamic Banking Subsidiaries in Malaysia under their respective banking groups. (Part 1)

UN SDGs	MAYBANK GROUP					CIMB GROUP					AMBANK GROUP				
	2019	2020	2021	2022	2023	2019	2020	2021	2022	2023	2019	2020	2021	2022	2023
SDG 1	/	/	/	/	/										
SDG 2											/	/	/	/	/
SDG 3		/	/	/	/						/	/	/	/	/
SDG 4	/	/	/	/	/						/	/	/	/	/
SDG 5	/	/	/	/	/						/	/	/	/	/
SDG 6															
SDG 7	/	/	/	/	/										
SDG 8	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
SDG 9	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
SDG 10	/	/	/	/	/	/	/	/	/	/					
SDG 11	/	/	/	/	/						/	/	/	/	/
SDG 12	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
SDG 13	/	/	/	/	/	/	/	/	/	/				/	/
SDG 14															
SDG 15	/	/	/	/	/	/	/	/	/	/					
SDG 16			/	/	/	/	/	/	/	/	/	/	/	/	/
SDG 17	/	/	/	/	/										

Maybank Group is dedicated to its mission of "Humanising Financial Services," focused on 12 SDGs in 2019, increased this number to 13 SDGs in 2020, and has since prioritized 14 SDGs from 2021 to 2023. CIMB Group, as part of a strategic initiative launched in 2018, identified seven key SDGs as its focus areas, which have remained consistent through 2023, guiding the bank's sustainability efforts effectively. Meanwhile, AmBank Group optimizes its SDG contributions by prioritizing ten SDGs for 2022 and 2023. In 2021, it reported nine priority SDGs, utilizing a methodology that evaluated the impact of its operations on each goal. By 2019, AmBank had expanded its SDG reporting to include nine SDGs, up from four in the previous year.

Table 3: List of SDGs prioritized by Islamic Banking Subsidiaries in Malaysia under their respective banking groups. (Part 2)

UN SDGs	RHB GROUP					AFFIN GROUP				
	2019	2020	2021	2022	2023	2019	2020	2021	2022	2023
SDG 1						/	/	/	/	
SDG 2						/	/	/	/	
SDG 3						/	/	/	/	/
SDG 4	/	/	/	/	/	/	/	/	/	/
SDG 5	/	/	/	/	/	/	/	/	/	/
SDG 6										/
SDG 7					/	/	/	/	/	/
SDG 8	/	/	/	/	/	/	/	/	/	/
SDG 9	/	/	/	/	/	/	/	/		/
SDG 10						/	/	/	/	
SDG 11					/	/	/	/	/	/
SDG 12	/	/	/	/	/	/	/	/	/	/
SDG 13	/	/	/	/	/	/	/	/	/	/
SDG 14					/					/
SDG 15							/			
SDG 16					/	/	/			
SDG 17					/			/	/	/

RHB Group began its sustainability journey by prioritizing six SDGs in 2019. By 2023, the bank expanded its focus to include SDG 7, 11, 14, 16, and SDG 17. By 2023, RHB Group identified and prioritized 11 SDGs, a significant increase from the six prioritized in 2022, reflecting an expansion of its sustainability and climate initiatives. RHB also disclosed as being the only bank that fully supports and focuses on marine conservation efforts as outlined by the UN SDG 14: "Life Below Water", through our Ocean Harmoni initiative. Starting in 2019, Affin Group focused on 13 SDGs, showcasing its commitment to sustainability. This focus shifted to 14 SDGs in 2020 and then to 13 in 2021, reflecting a slightly different sustainability agenda. In 2022, the bank aligned its sustainability efforts with 12 UN SDGs. By 2023, Affin Group emphasized 12 SDGs despite shifting priorities.

Table 3: List of SDGs prioritized by Islamic Banking Subsidiaries in Malaysia under their respective banking groups. (Part 3)

UN SDGs	PUBLIC BANK GROUP					HONG LEONG BANK GROUP				
	2019	2020	2021	2022	2023	2019	2020	2021	2022	2023
SDG 1		/	/	/	/		/	/	/	/
SDG 2								/		/
SDG 3	/	/	/	/	/					
SDG 4	/	/	/	/	/	/	/	/	/	/
SDG 5	/	/	/	/	/	/		/	/	/
SDG 6										
SDG 7		/	/	/	/		/	/	/	/
SDG 8	/	/	/	/	/	/	/	/	/	/
SDG 9	/	/	/	/	/	/	/	/	/	/
SDG 10	/	/	/	/	/	/				
SDG 11		/	/	/	/			/		/
SDG 12	/	/	/	/	/	/	/	/	/	/
SDG 13	/	/	/	/	/	/	/	/	/	/
SDG 14							/	/	/	/
SDG 15							/	/	/	/
SDG 16	/	/	/	/	/	/	/	/	/	/
SDG 17								/	/	/

Public Bank's Group Sustainability Framework expanded its focus from 9 Sustainable Development Goals (SDGs) in 2019 to 12 United Nations SDGs (UN SDGs) from 2020 to 2023, reflecting its commitment to broader sustainability efforts. Public Bank Group has consistently published this report since 2016. As for Hong Leong Bank Group, it has been publishing its sustainability report since 2017. At Hong Leong Bank Group (HLB), eight UN Sustainable Development Goals (SDGs) were identified in 2019 as areas where the bank could make positive contributions. By 2023, this focus will be expanded by HLB to include 14 SDGs.

5. Conclusion and Recommendations

The study concludes that while the selection of SDGs contributes positively to the banks' corporate image and stakeholder relations, long-term financial benefits are still emerging. Banks have different approaches to selecting SDGs due to their unique business model, resource availability, and stakeholder demands. The findings further noted that although some SDGs are not being prioritized, they are still indirectly focused on by the banks as they might give impactful contributions. These lead to a diverse landscape within the banking sector. Thus, the related authority should formulate a standardized SDG framework tailored to Islamic banking practices, integrating Shariah principles with international sustainability standards. This unified framework will provide clear guidelines for Islamic banks and is necessary to ensure the ability to measure collective impact.

Additionally, encouraging collaboration among Islamic banks, industry stakeholders, and regulatory bodies can help share best practices and resources for SDG implementation. Joint initiatives can lead to more significant impacts and foster a unified approach to sustainability. By implementing these recommendations, the Islamic banking sector in Malaysia can improve its alignment with the SDGs and play a significant role in driving broader sustainability efforts within the nation.

Declaration of Competing Interest: The author declares that no financial interests or personal relationships could have influenced the work presented in this paper.

Acknowledgment: The authors express gratitude to Universiti Islam Melaka (UNIMEL) for providing research under grant number GPI/23/F1/09. This funding has been instrumental in facilitating the completion of this study on The Impact of Islamic Fintech Implementation in Promoting Sustainable Development Goals in Malaysia: A Case Study of Full-fledged Islamic Bank.

References

Affin Group. (2019-2023). *Annual Report*. Retrieved from https://affin.listedcompany.com/ar.html

AmBank Group. (n.d.). Our approach. Retrieved October 3, 2024, from https://www.ambankgroup.com/sustainability/our-approach

Bank Islam. (2019-2023). *Annual report*. Retrieved from https://www.bankislam.com/investors/

Bank Muamalat. (2019-2023). *Annual Report*. Retrieved from https://www.muamalat.com.my/investor-relations/annual-report/

Business Today (2022, September 1). *Maybank launches a sustainable product framework to drive sustainable finance*. https://www.businesstoday.com.my/2022/09/01/maybank-launches-sustainable-product-framework-to-drive-sustainable-finance/

CIMB Group. (2019-2023) *Annual Report*. Retrieved from https://www.cimb.com/en/investor-relations/annual-reports-listing.html

Committee on the Global Financial System (CGFS) and the Financial Stability Board (FSB). (2017). *FinTech Credit Market structure, business models and financial stability implications*. Financial Stability Board. https://themalaysianreserve.com/2023/11/27/the-growth-of-islamic-fintech-in-msia/

Eco-Business. (2023, September 12). *CIMB doubles its sustainable finance target to US$13 billion for 2024*. https://www.eco-business.com/news/cimb-doubles-its-sustainable-finance-target-to-us13-billion-for-2024/

Economic Planning Unit. (2021). *Twelfth Malaysia Plan (2021–2025)*. Ministry of Economy, Malaysia. https://www.ekonomi.gov.my/sites/default/files/flipping_book/TwelfthPlan/mobile/index.html

Hussain, N., Rigoni, U. & Orij, R.P. (2018) Corporate Governance and Sustainability Performance: Analysis of Triple Bottom Line Performance. *J Bus Ethics,* 149, 411–432 (2018). https://doi.org/10.1007/s10551-016-3099-5

International Federation of Accountants (IFAC), (2021, September 13). Facilitating the SDGs: Islamic finance Part 1-Malaysia's leadership in Sukuk. https://www.ifac.org/knowledge-gateway/discussion/facilitating-sdgs-islamic-finance-part-1-malaysia-s-leadership-sukuk

Islamic Finance News. (2022). *MDEC's 2022 Islamic Fintech Dialogue Report.* https://www.islamicfinancenews.com/roundtables/islamic-fintech-dialogue-report2022

Jan, A. A., Lai, F. W., Asif, M., Akhtar, S., & Ullah, S. (2022). Embedding sustainability into bank strategy: implications for sustainable development goals reporting. *International Journal of Sustainable Development & World Ecology*, *30*(3), 229–243. https://doi.org/10.1080/13504509.2022.2134230

Maybank. (2019-2023). *our sustainability journey*. Retrieved October 3, 2024, from https://www.maybank.com/en/sustainability.page

Malaysia Digital Economy Corporation (MDEC). (2022). Driving sustainable development in Malaysia. https://mdec.my/esg-mdcap/resources/driving-sustainable-development-in-malaysia

Meutia, I., Febrianti, D. (2017). Islamic social reporting in Islamic banking: Stakeholders theory perspective. Pap. 2022 Read SHS Web Conf. 34, 12001.

Ministry of Finance Malaysia, MoF. (2021). *Economic outlook 2021*. Ministry of Finance Malaysia. https://www.mof.gov.my

Ministry of Economy Malaysia. (n.d.). *SDG Roadmap Phase I (2016–2020)*. Retrieved November 18, 2024, from https://www.ekonomi.gov.my/sites/default/files/2021-05/SDG_Roadmap_Phase_I_2016-2020.pdf

MBSB. (2019-2023) *Annual Report*. Retrieved from https://www.mbsb.com.my/ar.html

Mordor Intelligence. (2024). Fintech industry in Malaysia size & share analysis - Growth trends & forecasts (2024 - 2029). https://www.mordorintelligence.com/industry-reports/malaysia-fintech-market

Monash University. (2023, April 4*). How sustainability disclosure can help Indonesian corporations to compete and thrive. Monash Lens*. https://lens.monash.edu/@business-economy/2023/04/04/1385586/how-sustainability-disclosure-can-help-indonesian-corporations-to-compete-and-thrive

New Straits Times (NST). (2024, September 17). *Malaysia achieves 43 percent SDG performance, surpassing the 17 percent global average*. https://www.sdgcentre.gov.my/malaysia-achieves-43-pct-sdg-performance-surpassing-17-pct-global-average/

Nik Mahdi, N. A., Fernando, Y., & Abdalla, Y. A. (2023). Understanding the Sustainable Development Goals Concept: Malaysia Report and Trend. *Journal of Governance and Integrity*, *5*(3), 317–327. https://doi.org/10.15282/jgi.5.3.2022.8938

Sustainable Banking and Finance Network. (2023, November 7*). OJK and Bank Indonesia advance sustainable finance policies.* https://www.sbfnetwork.org/ojk-and-bank-indonesia-advance-sustainable-finance-policies/

Suhaimi, A. (2023). Assistant Governor's keynote address at the 3rd Annual Islamic Fintech Leaders Summit. https://www.bnm.gov.my/-/agsa-aifls3

United Nations Development Programme (UNDP), (2022). *Indonesia SDG investor map highlights SDG enabling investment for development impact*. https://sdgprivatefinance.undp.org/resources/news/indonesia-sdg-investor-map-highlights-sdg-enabling-investments-development-impact

United Nations (2015). *Communications materials for the Sustainable Development Goals.* Retrieved October 7, 2024, from https://www.un.org/sustainabledevelopment/news/communications-material/

PricewaterhouseCoopers (PwC). (2021). *Accelerating ESG integration in Malaysian banks.* https://www.pwc.com/my/en/publications/2021/accelerating-esg-integration-in-malaysian-banks.html

Public Bank (2019-2023). Sustainability Report. Retrieved October 8, 2024, from https://www.publicbankgroup.com/sustainability/sustainability-disclosures/

RHB Group. (2019-2023). *Sustainability report*. Retrieved October 3, 2024, from https://www.rhbgroup.com/investor-relations/financial-reports/annual-reports/sustainability-report/index.html

Ruslina, R. (2021, June 21). Toward a green economy: Mapping SDGs against Malaysia's annual budget. *Islamic Finance News*. https://www.islamicfinancenews.com/toward-a-green-economy-mapping-sdgs-against-malaysias-annual-budget.html

Shahrom, Z. R., & Kunhibava, S. (2023). *Malaysia's sustainable banking regulatory framework: Value-based intermediation and climate change principle-based taxonomy. In Green finance instruments, fintech, and investment strategies: Sustainable portfolio management post-COVID era* (pp. 125-166). Cham: Springer.

SDG Centre Malaysia. (2023, May 24). *Malaysia achieves 43 percent SDG performance, surpassing the 17 percent global average*. https://www.sdgcentre.gov.my/malaysia-achieves-43-pct-sdg-performance-surpassing-17-pct-global-average/

Information Management and Business Review (IMBR)
Vol. 16, No. 4, Dec 2024 (ISSN 2220-3796)

The Relationship Between Parenting Styles and Kindergarten Children's Social Skills

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Abstract: The discussion that takes place in this article sheds light on the relationship between parenting styles and social skills among children. The aim of this study is to (i) identify the level of parenting style practised by parents; (ii) identify the level of social skills among children; (iii) identify the level of social skills among children according to the domains; and (iv) determine the relationship between parenting style and social skills among children. The researcher used the parenting style instrument by Baumrind and *Preschool and Kindergarten Behaviour Scale* (PKBS-2). The parenting style instrument comprises 32 items, whereas PKBS-2 contains 42 items. The instruments have been employed to gather data about parenting style and social skills among children, categorised into three (3) domains namely social cooperation (A1), social interaction (A2) and social independence (A3). From the outcome, parenting style significantly influences the social skills among preschool children. This indicates that a responsive parenting style is important in ensuring that the children's social skills develop in full form. The impact of this work is to help parents practise a responsive parenting style to ensure that their children will have a formidable set of social skills.

Keywords: *Parenting style, social skills, parenting, PKBS-2, preschool students*

1. Introduction

Good social skills are instrumental to children in the preschool phase. This is reasoned by the fact that during preschool education, children require social skills such as the capability to socialise, interact, converse, share and many others. The preschool expects the children to become engaged actively in the teaching and learning process (P&P) with the teacher. According to a study by *Children and Youth Health* (CYH), children's capabilities to form friendships, cooperate, mutually help one another, demonstrate empathy, be patient, become a good listener, socialise with peers, interact positively and listen to, and follow teacher's instructions, are crucial. Children can negotiate, cooperate and share after they interact and socialise with one another (Hasan & Zaini, 2021). These youngsters who build their socialisation experience and have stable emotions, can adapt to the school environment and show good performance academically (Nachiappan et al., 2017).

The studies by Yu et. al, (2021) and Renny & Shahin, (2020) suggested that children's psychological well-being depends on the parenting style practised by their parents. This is harmonious with the discovery by Tur-Porcar (2017) showing that the type of parenting style significantly contributes to the formation of children's behaviour and social skills. Parents who give their children the right push and encouragement, who normally issue warnings and punishments that are appropriate to discipline the children and who are engaged in discussions about their children's problems or disciplinary issues, exhibit an authoritative parenting style (Razak and Hashim, 2022).

Conversely, these authoritarian parents harbour high hopes towards their children but they are slightly nonchalant about the children's feelings and desires. According to Shahin (2020), children raised by authoritarian parents often rebel, feel vengeful, panic, and anxious, become quiet, and shy, have low self-esteem, lack the motivation to be independent, and have negative thinking. Meanwhile, the permissive parenting style involves parents who are too soft-spoken and flexible towards their children, tending to their every need without protest or restriction. Such a parenting style is characterised by a very low parental control where they see their children as mature individuals leading to low reliance on the parents.

The parenting style practised by parents is the main determining factor for the behaviour shown by the children. The social skills among children are important to help them acclimatise to the school environment in their schooling years. According to Maleki et al, (2018), social skills are the basis of the lives of children, helping them to accommodate to the social environment where the behaviour they show is consistent with the norms

of the society. Similarly, Soto-Icaza, Aboitiz, and Billeke (2015) asserted that children's capability to socialise in their social realm is closely connected to their communication and interaction skills.

The objectives of this study are (i) to identify the level of parenting style among parents; (ii) to identify the level of social skills among children; (iii) to identify the level of social skills among children according to the following domains (a) social cooperation (A1); (b) social interaction (A2); and (c) social freedom (A3). Finally, to determine the relationship between parenting style and social skills among children.

2. Literature Review

Parents are the first educators when it comes to forming the personality of every individual, where a family is the smallest pillar in society (Muallifah & Fatcholli, 2024). Thus, parents play a vital role in educating and supporting the holistic development of their children. According to Muallifah and Fatcholli (2024), the parents' success in educating their children is influenced by their skills and parenting style. Muslim religious scholars like Ibn Khaldun also emphasised the importance of parental responsibilities in providing religious knowledge, instilling moral and social values, stimulating the children's thinking, and equipping them with practical knowledge ready for their vocational preparation in the future (Zur Raffar et al., 2021). Additionally, Zur Raffar et al. (2021) stated that the significance of social education to children is to inculcate the principles of respecting the rights of others and showing polite and considerate behaviours to society.

Parenting style is the behaviour that the parents adopt to educate, care for, and form their children's behaviour where parents stand out as an integral factor in the lives of the children (Mokhtar & Mohamed, 2024). According to Ahmad and Kutty (2024), parents' mistakes in educating their children can become detrimental to the individual, family, society as well as to the nation. At the same time, it can pose a great negative impact on the children's emotional and mental development such as being deprived of love, having unstable emotions, low self-esteem, disciplinary problems and many more. Parents and caretakers will be able to make smarter decisions in lending support to the children's growth and well-being by understanding how different parenting styles can influence the development of the children (Kausar & Afaq, 2024).

Muhammad Suwayd, as cited by Fariddudin et al. (2022), stated that the development of social skills seeks to train children to become able to adapt themselves to society, be it with adults or peers. This is important because the exponential growth of technology and social media can hurt children. The study further stated that the extensive use of social media can lead to poor self-confidence, can be damaging to mental health, and can disturb one's emotions. The best parenting style can help control negative behaviour and support children's development of social skills. Thus, parents need to be creative in choosing the best method to develop the social aspect within their children (Fariddudin et al., 2022).

Desa et al. (2015) discussed parenting skills, family functions, and psychological well-being among parents who examined the social issues caused by family dysfunction using the Parenting Behaviour Scale. This study adopts the quantitative approach using questionnaires involving 231 respondents in the areas of Alor Star, Kota Bharu, and Klang Valley, including 20 Likert Scale items. This study aims to reflect on the scenarios in society and the requirement of psychological knowledge to build a prosperous family.

Nonetheless, the previous study by Mohammad Rawi et al. (2017), looked into the relationship between the type of communication and parenting style with the deviant behaviour among teenagers. This study discussed the social issues related to teenagers' involvement in delinquency due to the lack of family attention. This study used Albert's Social Cognitive Theory and Erik Erikson's Psychosocial Theory, with a sample of 48 teenagers at the Interactive Workshop, Social Welfare Department Pahang, through a quantitative study using instruments and questionnaire. Researchers hope that future studies can look into the appropriate parenting style for different situations to ensure the mental development of teenagers and to prevent deviant behaviour.

In general, not all children have a well-off family; a lot of them have lost their parents at a young age, they may have lost one parent, or both their parents and their financial situation is dire (Nashihin, 2019a). The laws dictate that every child has the right to live, be cared for, be guided with love stay with their family and receive due attention (Nashihin, H., 2022). The role of the parents is very important in realising the rights of the

children, and one of the efforts in achieving this is by setting up alternative agencies such as the Children's Welfare Board (LKSA) or orphanages (Hafidz & Nashihin, 2021).

According to Razak & Hashim (2022), parents must be wise in choosing the appropriate parenting style for their children's positive development. Children's development experts found that behavioural issues among children and teenagers often stem from ineffective parenting styles. Baumrind (1967) classified parenting styles into three types: authoritative, authoritarian, and permissive. Parents practising the authoritative style are associated with the acts of providing consolidation and encouragement to their children. Parents have a role in forming children's personalities and behaviour while increasing their self-development to produce productive individuals. The parenting style practised influences the behaviour, social skills, emotional and psychological well-being, and the parent-child relationship (Che Husin et al., 2023).

According to Abdul et al. (2023), social skills are one of the most important skills in the lives of children as the social skills development at this early stage helps children face various social situations in their lives. This is also a remarkable stage, as it helps children's development to become more productive. The social interactions of the children involve their relationship with other children, influencing one another until a relationship pattern is established (Hasan & Zaini, 2021).

In a study by Hasan & Zaini (2021), social skills are defined, by Children and Youth Health (CYH), as the capability to make friends, learn to cooperate, be mutually helpful, have patience, empathise, listen well, interact with peers, communicate positively and follow instructions. Other than that, Abdul et al. (2023) in their studies referred to Docksai (2010) concerning children's development of social skills that can have a positive effect not only on the interpersonal aspect but also on their academic achievement.

Parents tend to choose a parenting style based on their ethnicity and culture, level of education and income with a variation of parenting styles observed in different communities and individuals (Lari, 2023). Zarra-Nezhad et al. (2022) stated that parents are the most significant factor in children's development. Baumrind (1991) identified three commonly used parenting styles: permissive, authoritarian, and authoritative, and discussed how these styles play an important role in children's behavioural outcomes. The authoritative style involves high reactions and hopes from children (Lari, 2023). This style balances reaction and hope. In turn, the authoritarian style pays attention to the safety of the children and this is depicted by Yadav & Chandola (2019), as unique, demanding, rigid, and controlling. Baumrind (1991) also identified the permissive parenting style that encompasses a supportive and friendly approach without setting any limitations.

Any parenting style is often recognised through social interactions and it seldom takes place when an individual is alone (Zarra-Nezhad et al., 2020). According to Lari (2023), an effective parenting style is important to ensure that our children grow in the right environment and build their capacity to address social issues effectively. Sukatin et al. (2020) stressed the fact that parenting style is important for children's social development, helping to avert issues that can emerge at the preschool level, such as the reluctance to play with friends, the fact that they do not want to share and show less cooperative attitude when they are playing. Syahrul & Nurhafizah (2021), added that family, early social experience, and the environment influence the children's social development. Social development needs to take place earlier when children start interacting within and outside their homes (Anzani & Insan, 2020). In the work by Nabila et al. (2022), it is discovered that a better parenting style leads to better social skills among children, whereas a weak parenting style hurts social development.

Several studies have been established such as the studies by Rizka & Bacotang (2018), aiming to identify the relationship between parenting style (authoritative, authoritarian, permissive) and social skills (social cooperation, social interaction and social freedom) among preschool children in Banda Aceh. 242 parents from two preschools in Banda Aceh were chosen as the samples for this quantitative study. The Parenting Style and Dimension) Questionnaire (PSDQ) and the Preschool and Kindergarten Behaviour Scale (PKBS) were adopted to collect the data through the survey. Data were analysed using the Pearson Correlation.

Even so, in previous studies conducted by Salavera et al., (2022) results were analysed from the emotional and social scales that are associated with parenting style, and it shows that children raised under the democratic

parenting regime tend to get higher marks in social skills compared to children educated under other parenting regimes, and they have average marks in emotional skills. It is found that parenting style has a direct influence on social skills, which is likely to become better when emotions act as a mediator between the two constructs. This result points to the fact that parenting style is closely associated with both emotional and social skills. Another discovery establishes that emotions play a mediating role in the relationship between parenting style and social skills. Given the impact of parenting style on emotional and social skills, more studies are required to address this issue.

Additionally, the study by Paz et al., (2021), examined the relationship between parenting style and social skills developed among students of Form 12 in a school in the Zone IV district, Zambales during the academic year 2018-2019. This study uses a descriptive survey from selected secondary schools in the Subic district. It is found that the authoritative parenting style was named by students as the style most frequently used by their parents, while the parents only sometimes adopt the authoritarian, permissive and neutral approaches.

The study by Yankati & Patil (2024), looked into the parenting style of the mothers to preschool children in rural and urban areas in UAS, Dharwad, from 2020-2023. Samples comprise 200 parents (100 from rural areas and 100 from urban areas) with children aged 3-6 years who go to Anganwadi and attend the daycare centre. The correlation research design is adopted to determine the link between the parenting style and factors related to children in rural and urban settings. The mothers' parenting style tool developed by Robinson helps to measure the parenting style, and a questionnaire was used to gather information about the children's era.

Parenting is the factor that influences the formation of children's personalities, such as making children feel uncomfortable and having the tendency to withdraw from society, showing the preference to be alone, and finding it difficult to trust others leading to poor academic performance in school (Makagingge et al., 2019). Zarra-Nezhad et al. (2022), stated that social skills involve good interactions with other people. The capability to interact with others and to form a good interpersonal relationship, such as talking, making friends, showing good behaviour, and caring for other people's feelings, is also known as social skills (Yadav & Chandola, 2019).

3. Methodology

The quantitative method is used to analyse the data that have been gathered systematically (Darussalam & Hussin, 2021). This study will detail the objectives, study questions and the variables concerned. The theoretical approach used to assess and test the study hypotheses and their relationship with the study variables will be based on Creswell & Creswell (2020). This research uses a quantitative method, with the data analysed descriptively and by inference. The study design involves the implementation of the project and, the collection of all the data required based on the objectives, study questions and variables determined (Darussalam & Hussin 2021). Researchers settled for Baumrind's parenting style instrument as cited in Abdul Gafoor et al. (2014) and the *Preschool and Kindergarten Behaviour Scale* (PKBS-2) by Merrell (1994). This parenting style instrument comprises 32 items covering four domains: (i) authoritarian parenting style, (ii) authoritative parenting style, (iii) permissive parenting style, and (iv) neutral parenting style. Meanwhile, PKBS-2 contains 34 items to review the social skills. This instrument was used to obtain data about parenting style and social skills among children, covering three domains: social cooperation (A1), social interaction (A2), and social freedom (A3).

Reliability in research refers to the analysis of Cronbach's Alpha value, where the range accepted and seen as credible is 0.60 above (Darussalam & Hussin, 2021). The table below shows the Cronbach's Alpha value for the research instrument adopted:

Table 1: The Reliability of the Study Instrument

Study Instrument	Total number of items	Cronbach's Alpha Value
parenting style	32 items	0.82
social skills	34 items	0.74

4. Study Findings

Researchers conducted a pilot study where a total of 58 respondents had taken part in this research. According to Darusalam & Hussin (2021) before the statistical analysis, a set of complete data was keyed into the SPSS *software*, where they were subjected to the data cleaning process to avoid missing data or remote data cases so that the analysis of the study findings can be obtained accurately and the study objectives can be answered (Darusalam & Hussin, 2021, Damanhuri, 2021,). The data cleaning was executed through multiple imputations to verify that all the samples have answered all items and that the variables investigated have received full feedback.

Descriptive Analysis

According to Darussalam & Hussin (2021), descriptive analysis is used to display information and data obtained for a population and sample. The information shown is the outcome of the data analysis in the form of mean, standard deviation, normal distribution, coding and missing data where it gives a picture of the characteristics of the variables in a piece of research (Creswell & Creswell, 2020; Damanhuri, 2021).

The study findings will be tabulated for every variable examined. Three (3) study questions need to be analysed descriptively and one (1) analysed by inference. The questions are as follows:

What is the level of parenting style among parents?

Table 2: The Overall Frequency of Parenting Style

Variable	Frequency	Percentage (%)	Mean	Standard Deviation
Very Frequently (3)	14	24.1	1.35	0.48
Frequently (2)	41	70.7		
Seldom (1)	3	5.2		
Total (N)	58	100		

Table 2 shows the mean value for parenting style which is 1.35 and the standard variation of 0.48. The frequency of a mother's, father's or caretaker's parenting style choosing *seldom* (1) shows that the parenting style (n = 3) equals 5.2 percent, whereas for the frequency *frequently* (2) the parenting style (n = 41) equals 70.7 percent and *very frequently* (3) exhibiting that the parenting style (n = 14) is equal to 24.1 percent.

Thus, this shows that the majority of the parents or caretakers demonstrate their parenting style *frequently* (2) where 70.7 percent is the highest, followed by *very frequently* (3) which is 24.1 percent and finally, *seldom* (1) which is 5.2 percent. The data show that a mother, a father, or a caretaker displays a moderate level of parenting style.

What is the level of social skills among children?

Table 3: The Frequency of Children's social skills

Social Skills	Frequency	Percentage (%)	Mean	Standard Deviation
High (4)	5	12.03	1.50	0.50
Moderate (3)	44	75.90		
Low (2)	6	10.30		
Very Low (1)	3	5.20		

Table 3 shows the mean value for social skills which is 1.50 and the standard deviation is 0.50. The frequency of the children's social skills is based on the assessment of the mother, father or caretaker of the children. The frequency of social skills for the children is Very Low (1) which is (n = 3) or 5.2 percent. Next, the frequency is Low (2) which is (n = 6) or 10.3 percent. The children's social skills then are Moderate (3) which is (n = 44) or 75.9 percent and finally, it is High which is (n = 5) or equal to 12.03 percent.

Therefore, it shows that the majority of the children's social skills are at (2) High level which is equal to 75.9 percent. The second highest is the Low level of social skills which is 10.3 percent, the third one is the High level

of social skills which is 12.03 percent and the final one is the Very Low level of social skills which is 5.2 percent. The data show that the social skills possessed by the children as assessed by their mother, father or caretaker remain at a Moderate level.

What are the levels of social skills among children according to the domains?

a. Social Cooperation (A1);
b. Social Interaction (A2);
c. Social Independence (A3);

Table 4: The Frequency Of Social Skills Children According To Domain

Variable	Frequency	Percentage (%)	Mean Value	Standard Deviation
Social Cooperation (A1)			1.23	0.48
High	6	10.3		
Moderate	44	75.9		
Low	5	8.6		
Very Low	3	5.2		
Social Interaction (A2)			1.15	0.40
High	0	0		
Moderate	38	65.5		
Low	12	20.7		
Very Low	8	13.8		
Social Independence (A3)			1.54	0.54
High	0	0		
Moderate	45	77.6		
Low	13	22.4		
Very Low	0	0		

Table 4 highlights the mean value for social skills under the domain of Social Cooperation (A1) which is 1.23 and the standard deviation is 0.48, and the next one is the mean value for the social skills from the domain of Social Interaction (A2) which is 1.15 and standard deviation 0.40, and the mean value for the social skills from the domain Social Independence (A3) which is 1.54 with the standard deviation 0.54.

The frequency of the social skills among children for the domain of Social Cooperation (A1) is mostly at a moderate level which is (n = 44) or 75.9 percent. This is followed by a High level of Social Cooperation based on their mother, father or caretaker's assessment with (n = 6) or 10.3 per cent. In the third place, there is the Low level of Social Cooperation which is (n = 5) or 8.6 percent and finally, the Very Low level of Social Cooperation which is (n = 3) or 5.2 per cent.

The frequency of social skills among children for the domain of Social Interaction (A2) mostly remains at the Moderate level which is (n = 38) which is equal to 65.5 percent. This is then followed by the low level of Social Interaction the second place based on the assessment of the children's mother, father or caretaker with (n = 12) which is equal to 20.7 per cent. Then, in the third place, there is the Very Low Social Interaction which is (n = 8) or 13.8 percent and finally the High level of Social Interaction which is (n = 0) or 0 percent.

The frequency of social skills among children for the domain of Social Independence (A3) is mostly Moderate which is (n = 45) or 77.6 percent. In the second place, Social Independence is at a Low level based on the parent's or caretaker's assessment with (n = 13) or 22.4 percent. Then, for Social Independence, the High and Very Low levels note the same reading which is (n = 0) or 0 percent. Thus, the finding shows that the level of social skills among children according to the domain based on the parent's or caretaker's assessment suggests that the social skills that the children have are at a moderate level.

Inferential Analysis

Inferential analysis works by using the whole data to assess the relationship between the variables tested. The Pearson Correlation analysis of 'r' is the inferential statistics used on the data run in the parametric test results where it shows that the data are normally distributed. The correlation test seeks to test the significance level of the relationship and the direction of the relationship, be it positive or negative, between the variable parenting style and the social skills among kindergarten children aged 5 and 6 years old. Researchers used the interpretation of the 'r' Pearson Correlation Coefficient put forth by Cohen, Manion and Marrison (2011) in Darussalam & Hussin (2021).

Is there any significant relationship between parenting style and social skills among children?

Table 5: The Correlation Between Parenting Style and Children's Social Skills

Variable	Social Skills	Significant
Parenting style	.552**	.003

$p < .01$

Table 5 shows the outcome of the correlation analysis where there is a strong, moderate relationship between the variable *parenting style* with the variable *children's social skills* where the correlation of the coefficient value is r = .552, $p < .01$. This indicates that parenting style has a strong, moderate relationship on the formation of children's social skills. Results show that the correlation of the coefficient value for parenting style with children's social skills is 0.522 and the probability value is .003 tested on the confidence level of .01, whereby this probability value is found to be smaller than the confidence level ($p < .01$). With this, it is shown that parenting style has a positive relationship that is moderate, strong and significant with social skills among children [$r_{(58)} = .552$, $p < .01$].

5. Conclusion

This study is conducted to see the association between parenting style and children's social skills in their preschool age. The research outcome shows that the children's social skills are at Moderate and Low levels for these aspects- Social Cooperation, Social Interaction as well as Social Independence. The parenting styles examined are authoritative, authoritarian and permissive, and the parenting styles most demonstrated are authoritative and permissive. The study findings do not highlight the use of the authoritarian parenting style among the respondents involved. However, if further studies are to be done, it is suggested that other aspects are also examined, such as differences by race, location, and state with high crime rate, adding a bigger sample size, addressing gender issues and so on.

References

Abdul M. A., Osman, Z., Siraj, S., & Ismail H., (2023). Tahap pengetahuan guru tadika terhadap Kemahiran Sosial untuk Kanak-kanak: Satu analisis keperluan. *Jurnal Penyelidikan Pendidikan dan Teknologi Malaysia, 1*(1), 2976-2634.

Ahmad, M. & Kutty, F.M. (2024). Gaslighting, parenting styles, and the mental health of secondary school students. *Special Education 2*(1), 1-24.

Anzani, R. W., & Insan, I. K. (2020). Perkembangan Sosial Emosi pada Anak Usia Prasekolah. *PANDAWA, 2*(2), 180–193.

Baumrind, D. (1967). Childcare practices are implementing three patterns of preschool behaviour. *Genet Psychol Monogr, 75*, 43–88.

Baumrind, D. (1991). Effective parenting during the early adolescent transition. In P. A. Cowan & E. M. Herington (Eds.), Advances in family research series. *Family transitions* (pp. 111–163). Lawrence Erlbaum Associates, Inc.

Broadhead, P. (2003). *Tahun-tahun awal bermain dan belajar: Membangunkan kemahiran sosial dan kerjasama*. London: Routledge Falmer.

Che Husin, F. N., Mohd Yasin M. H., & Surat, S., (2023).Gaya Keibubapaan dan Ketagihan Penggunaan Peranti Teknologi Digital Kanak-kanak Bermasalah Pembelajaran, Jurnal Penyelidikan Pendidikan dan Teknologi Malaysia (JPPTM), 1(1), 43 - 52.

Cohen, L., Manion, L., & Morrison, K. (2011). Research Methods in Education (7th ed.). London: Routledge.

Creswell, J. W., & Creswell, J. D. (2020). Research Design: Qualitative, Quantitative, and Mixed Methods Approaches (5th ed.). SAGE

Darusalam, G., & Hussin, S., (2021), Metodologi Penyelidikan dalam Pendidikan: Amalan dan Analisis Kajian, (Edisi-3), Kuala Lumpur: Universiti Malaya.

Damanhuri, Z., (2021). Hubungan Ekspresi Emosi Ibu Bapa dengan Masalah Tingkah Laku Kanak-kanak di Negeri Melaka, master thesis Universiti Malaya.

Desa, A., Yusooff, F., Ahmad Zamani, Z., Abdul Kadir, N. B., Mohamed Sani, M. N., (2015). Kemahiran Keibubapaan, Kefungsian Keluarga dan Kesejahteraan Psikologi dalam Kalangan Ibubapa. Jurnal Psikologi Malaysia, 29(2), 32-42

Docksai, R. (2010). Teaching social skills: Success in school may be enhanced by better social relationships. *The Futurist*, 12-13.

Gafoor, A. K., & Kurukkan. A., (2014). Construction and validation of a scale of parenting style. Journal of Behavioral and Social Sciences, 2(4), 315-323.

Hafidz, & Nashihin, H., (2021). Implementasi Total Quality Mangement (Tqm) Di Madrasah Ibtidaiyah Darul Huda Yogyakarta. As-Sibyan, 3(2), 3750. Https://Doi.Org/10.52484/As_Sibyan.v3i2.189

Hasan, N. D., & Zaini, S. H. (2021). Application of social skills to children through role-playing activities. *Jurnal Pendidikan Awal children Kebangsaan, 10*(1), 25-40. https://doi.org/10.37134/jpak.vol10.1.3.2021

Husin, F. N. C., Yasin, M. H. M., & Surat, S. (2023). Gaya Keibubapaan Dan Ketagihan Penggunaan Peranti Teknologi Digital Kanak-kanak Bermasalah Pembelajaran. *Jurnal Penyelidikan Pendidikan dan Teknologi Malaysia (JPPTM), 1*(1), 43-52.

Kausar, R. & Afaq, U. (2024). The effects of parenting styles on child development. *Jahan-e-Tahqeeq 7*(2), 856-866.

Lari, N. (2023) Perceived parenting styles and child personality: A Qatari perspective. *Cogent Social Sciences, 9*(1), 2203549, DOI: 10.1080/23311886.2023.2203549

Makagingge, M., Karmila, M., & Chandra, A. (2019). Pengaruh Pola Asuh Orang Tua Terhadap Perilaku Sosial Anak (Studi Kasus Pada Anak Usia 3-4 Tahun di KBI Al Madina Sampangan Tahun Ajaran 2017-2018). *Yaa Bunayya: Jurnal Pendidikan Anak Usia Dini,* 3(2), 115–122. https://doi.org/10.24853/yby.3.2.16-122

Maleki, M., Chehrzad, M. M., Reza Masouleh, S. H., Kazemnezhad Leyli, E. (2018). Social skills in preschool children from their parents' points of view. J Holist Nurs Midwifery, 28(4), 218-223.

M. Fariddudin, S. N. F., Mohd Khambali @ Hambali, K., & Syed Abdul Rahman, S. M. H. (2022). Membina perkembangan dimensi sosial anak menurut perspektif al-Sunnah berdasarkan Kitab Manhaj al-Tarbiah al-Nabawiyyah Li al-Tifli. *The 8th International Prophetic Conference.*

Mohammad Rawi, A. H., and Abdullah, N., and Shamshul Al Kamal, S. N. S., (2017). Hubungan Antara Jenis Komunikasi dan Gaya Asuhan Ibu Bapa Terhadap Tingkah Laku Devian Remaja: Kajian Literatur (*Relationship Between The Type Of Communication And Parenting Style Towards Teen Deviant Behaviour: A Literature Review*). Journal Of Human Capital Development (JHCD), 10(7), 55-68.

Mokhtar, R. & Mohamed, S. (2024). Gaya Keibubapaan autoritatif di kalangan ibu bapa kanak-kanak prasekolah. *International Journal of Advanced Research in Education a Society, 6*(1), 465-477.

Muallifah & Fatcholli, I. (2024). Konsep Parenting Era Society 5.0 (Analisis Surat Al-Ahzab Ayat 21 Tafsir Al-Mishbah). *Advances in Humanities and Contemporary Studies, 5*(2), 83-91.

Nabila, P. A., Sukamti, N., & Usman, A. M., (2022). Hubungan pola asuh orang tua dengan perkembangan sosial dan kemandirian fizik anak usia prasekolah 4-6 tahun di taman kanak-kanak Wilayah Meruyung Kota Depok. *MAHESA: Malahayati Health Student Journal, 2*(2), 224-233.

Nashihin, H., (2019a). Konstruksi Budaya Sekolah Sebagai Wadah Internalisasi Nilai Karakter. At-Tajdid: Jurnal Ilmu Tarbiyah 8(1), 131–49.

Nashihin, H., (2022). Konstruksi Pendidikan Pesantren Berbasis Tasawuf Eco-spiritualism. Edukasi Islami : Jurnal Pendidikan Islam, 11(01), 1163–76. https://Doi.Org/10.30868/Ei.V11i01.2794.

Paz, A P.J., Farin, N. E., Uy, F. L., (2021). Parenting style and social skills developed among the Senior High School Grade 12 Students in Zone IV, Schools Division of Zambales, Published in EAS Journal of Humanities and Education, Sociology, 3(2), 79 - 85.

Philip, W. (1991). *Buku panduan pendidikan khas: Rujukan pengenalan*. Philadelphia: Akhbar Universiti Terbuka.

Razak, N. H., & Hashim, N. A. (2022). Pengaruh gaya keibubapaan terhadap penggunaan internet kanak-kanak. *Jurnal Pendidikan Awal children Kebangsaan, 11*(1), 50-57. https://doi.org/10.37134/jpak.vol11.1.5.2022

Renny, T. & Shahin, S. (2020). Parenting Style And Internet Use In Higher Secondary Students: The Interconnect, UGCCare Journal, 40(92)

Rima, A. (2017). Meningkatkan Perkembangan Sosial Anak Usia Dini Melalui Metode Proyek Pada Anak Kelompok B di TK Sayang Bunda Kelurahan Pijoan. Jurnal Meningkatkan Perkembangan Sosial Anak Usia Dini Melalui Metode Proyek Pada Anak Kelompok B Di Tk Sayang Bunda Kelurahan Pijoan.

Rizka, S. M., & Bacotang, J. (2018). The Relationship between Parenting Styles and Children's Social Skills, Proceeding of the International Conference on the Roles of Parents in Shaping Children's Characters (ICECED), Anjong Mon Mata, Banda Aceh, Indonesia, 258-262.

Salavera, C., Usán, P. & Quilez-Robres A. (2022), Exploring the Effect of Parental Styles on Social Skills: The Mediating Role of Effects. Int J Environ Res Public Health. 19(6), 3295. doi: 10.3390/ijerph19063295. PMID: 35328983; PMCID: PMC8953939.

Sukatin, Q. Y. H., Alivia, A. A., & Bella, R. (2020). Analisis Psikologi Perkembangan Sosial Emosional Anak Usia Dini. Bunayya: *Jurnal Pendidikan Anak, 6*(2), 156–171.

Sukatin, S., Chofifah, N., Turiyana, T., Paradise, M. R. ., Azkia, M. ., & Ummah, S. N. . (2020). Analisis Perkembangan Emosi Anak Usia Dini. Golden Age: *Jurnal Ilmiah Tumbuh Kembang Anak Usia Dini, 5*(2), 77–90. https://doi.org/10.14421/jga.2020.52-05

Suppiah, N., Edward Munovah, R. M., Abdullah, N., & Suffian, S. (2017). Perkembangan kognisi dalam anak-anak prasekolah melalui teknik bermain. Jurnal Pendidikan Awal Anak-anak Kebangsaan, 6(1), 34–44.

Syahrul, S., & Nurhafizah, N. (2021). Analisis Pengaruh Pola Asuh Orang Tua Terhadap Perkembangan Sosial dan Emosional Anak Usia Dini Di masa Pandemik Corona Virus 19. *Jurnal Basicedu, 5*(2), 683–696.

Tur-Porcar A. M. (2017) Parenting styles and Internet use: Psychology and Marketing, 34(11), 1016-1022.

Yadav, P. P. S., & Chandola, R. (2019). Authoritarian parenting style and its effect on self-esteem and coping strategies of 21-year-old girl. *Global Journal for Research Analysis, 8*(3), 100–113.

Yankati, V. A., & Patil, M., (2024), Parenting styles of parents of rural and urban Preschool children: Child correlated factors. IntJ Agric Extension Social Dev, 7(3), 445-451. DOI: 10.33545/26180723.2024.v7.i3e.445

Yu, L. and Luo & Tingyu. (2021). social Networking Addiction Among Hong Kong University Students: Its Health Consequences and Relationships With Parenting Behaviors. Frontiers in Public Health. 1-11.

Zarra-Nezhad, M., Viljaranta, J., Sajaniemi, N., Aunola, K., & Lerkkanen, M.K. (2022). The impact of children's socioemotional development on parenting styles: the moderating effect of social withdrawal. *Early Child Development and Care,* 192(7), 1032-1044, DOI:10.1080/03004430.2020.1835879

Zur Raffar, I. N. A., Hamjah, S. H., & Sulaiman, S. (2021). Challenges of Educating Adolescents in Muslim Families at Putrajaya. International Journal of Academic Research in Business and Social Sciences, 11(9), 1307–1317.

Information Management and Business Review (IMBR)
Vol. 16, No. 4, Dec 2024 (ISSN 2220-3796)

Bridging Innovation and Sustainability: A Systematic Review of Innovative Work Behavior and Green Practices

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Abstract: This systematic review explores the convergence of innovative work behavior (IWB) and green practices within organizations, aiming to bridge the critical gap between innovation and sustainability. The study synthesizes insights from academic literature to understand how IWB facilitates the adoption and enhancement of green practices and how these practices, in turn, support organizational sustainability. The review investigates the factors influencing employees' green innovative work behavior (GIWB), identifying key drivers, mediators, and moderators that shape the relationship between environmental corporate social responsibility (ECSR) and GIWB. The findings provide theoretical and practical insights for encouraging sustainability through innovation in the workplace, emphasizing the roles of leadership, organizational culture, and employee engagement. Furthermore, the review highlights challenges and facilitators in incorporating IWB with green practices, featuring successful case studies and best practices across various industries. The study underscores the importance of creating a positive environment for innovation to achieve sustainable outcomes, offering valuable insights for policymakers, managers, and scholars dedicated to advancing the sustainability agenda through innovative approaches. The review concludes with recommendations for future research and practical implications for enhancing the synergy between innovation and sustainability in organizational contexts.

Keywords: *Innovative Work Behavior, Green Practices, Environmental Corporate Social Responsibility, Green Innovative Work Behavior, Organizational Sustainability*

1. Introduction

Organizations are increasingly acknowledging the imperative to integrate sustainability with innovation in an era marked by escalating environmental concerns and intensifying competition. Sustainable Development Goals will be a big agenda for the world. This systematic review aims to synthesize the current state of research on the relationship between innovative work behavior and green practices, addressing the central question: How do organizational and individual factors influence the adoption of green innovative work behavior?

The intersection of innovation and sustainability is gradually recognized as a pivotal area for research and practice in modern organizations. As global environmental challenges intensify, the urgency for companies to adopt sustainable practices becomes more pronounced. Organizations are increasingly focusing on fostering innovative work behavior (IWB) among employees to drive sustainable development. IWB, characterized by the generation, promotion, and execution of new ideas, plays a crucial role in addressing environmental issues and enhancing corporate sustainability.

In this context, green innovative work behavior (GIWB) emerges as a key concept, referring to employees' proactive engagement in generating and implementing innovative solutions that contribute to environmental sustainability. Thoughtful the factors that drive GIWB are essential for organizations aiming to integrate sustainability into their core operations. This review provides a broad examination of the literature on the relationship between organizational initiatives, individual factors, and GIWB, with a particular focus on the roles of Environmental Corporate Social Responsibility (ECSR) and green human resource management (HRM) practices. ECSR encompasses organizational policies and practices reflecting a commitment to environmental sustainability, significantly influencing employees' attitudes and behaviors toward the environment (Renwick et al., 2013). Similarly, green HRM practices, including recruitment, training, performance management, and

rewards highlighting environmental goals, are crucial for fostering a culture of sustainability within organizations (Fahlevi et al., 2023).

Current trends indicate a growing emphasis on integrating sustainability into corporate strategy. Companies are increasingly adopting the circular economy model, which focuses on reducing waste and maximizing resource efficiency. This shift requires innovative methods and strong employee engagement in sustainable practices (Geissdoerfer et al., 2017). Additionally, the rise of digital technologies, such as artificial intelligence and the Internet of Things, is transforming how organizations implement and monitor sustainability initiatives, making it easier to track and enhance GIWB (Bonilla et al., 2018).

Literature has provided evidence for the significant role those organizational pursuits other than environmental human resource management (or green HRM practices) such as Green Corporate Social Responsibility initiatives and individual factors, i.e., creative self-efficacy or commitment play in stimulating employees' preventive proactivity behavior. One of the most important findings is how critical an alignment exists between organizational and personal values or Person-Organization (P-O) fit. Those are two ways in which strong alignment as feedback induces employees to self-determine through the sharing of innovative and sustainable practices.

Having this alignment is not only helpful but necessary for establishing an atmosphere where employees are inclined to contribute towards sustainable efforts. This highlights the need to develop strong ECSR policies that speak to these core beliefs and also associated systems as well as a supportive environment for individuals empowering them into believing they are creative-which in part has been facilitated by its implementation at an organizational level. The leadership and HR practices should be focused on creating an enabling environment via training, rewarding, and promoting a culture of innovation.

By bringing these elements together, organizations can craft a unified strategy that promotes both innovation and sustainability. Therefore, the current review advances existing literature by illustrating some of these mediating and moderating factors through which ECSR influences GIWB. However, several gaps remain in our comprehension of how P-O fit influences GIWB as well as the moderating effects different leadership styles have to offer (Samat et al. 2019).

Organizations seeking to negotiate the complexity of innovation and sustainability will combine advanced interpretations for an imperative synthesis, adequate not only to handle environmental issues but also to support their workforce in sustainability.

2. Methodology

To thoroughly investigate the factors influencing green innovative work behavior (GIWB), we employed a systematic review methodology. This methodology was chosen for its capacity to provide a comprehensive and unbiased synthesis of the existing literature, ensuring that our findings are both robust and replicable.

We began a search across several high-impact academic databases and journals, including Web of Science, Scopus, Google Scholar, JSTOR, and ScienceDirect. These sources were selected for their wide coverage of interdisciplinary research, which is essential for capturing the multifaceted nature of GIWB. A carefully crafted set of keywords was used to guide our search, including terms such as "green innovative work behavior," "environmental corporate social responsibility," "green HRM practices," "creative self-efficacy," "environmental commitment," and "Person-Organization fit (P-O fit)." These keywords were selected to ensure the retrieval of relevant articles that address various dimensions of GIWB.

Following the initial search, we undertook a selection process to identify studies directly relevant to our research objectives. This screening involved an initial review of titles and abstracts to exclude studies that did not align with our focus. For the remaining articles, a full-text review was conducted to confirm their relevance and adherence to our inclusion criteria. To enhance the reliability of our review, multiple researchers independently assessed the articles, minimizing potential bias and ensuring constancy in our selection process.

Key information was systematically extracted from each of the selected studies, including details such as authors and publication year, research objectives, methodological approaches, key findings, theoretical frameworks employed, and identified mediating and moderating factors. This careful extraction process was crucial in ensuring that we captured the full scope of each study's contributions to the field.

To synthesize the findings, we conducted a thematic analysis of the extracted data. This process involved coding the data and grouping similar themes to identify common patterns across the studies. By doing so, we were able to highlight the main drivers and barriers to GIWB. The thematic analysis allowed us to integrate findings from diverse fields, such as organizational behavior, human resource management, and environmental psychology, providing an understanding of the factors that influence GIWB.

Our systematic review methodology was grounded in established best practices, adhering to frameworks proposed by Denyer and Tranfield (2009) in *The Sage Handbook of Organizational Research Methods*, Petticrew and Roberts (2006) in *Systematic Reviews in the Social Sciences: A Practical Guide*, and Moher et al. (2009) in their PRISMA statement for systematic reviews and meta-analyses. These guidelines ensured that our review was conducted with rigor and could be replicated by future researchers.

The systematic review approach was particularly well-suited to our research due to the interdisciplinary nature of GIWB. By systematically searching, selecting, and analyzing relevant studies, we were able to provide a comprehensive overview of the existing literature, integrating insights from various disciplines. This approach not only ensured a thorough examination of the topic but also allowed us to offer valuable insights for both scholars and practitioners interested in green innovative work behavior within organizational contexts.

3. Findings

Innovative Work Behavior (IWB)

Innovative Work Behaviour (IWB) refers to the ability to convert fresh ideas into goods and/or services that are adopted by employers, other firms, or entire industries. It encompasses not only the generation of novel concepts but also their execution, which is vital in today's fast-changing world for both innovation and sustainability. IWB has been shown to contribute significantly to business performance by helping firms compete more effectively (De Jong & Den Hartog, 2010).

Based on Janssen (2000), IWB is not a one-time action but a continuous process. It is operationalized through the way employees behave at each stage of innovation efforts, from idea generation to full-blown commercial exploitation. Employees are not just coming up with ideas; they are also the ones who carry out these ideas. This engagement is crucial for developing and implementing environmentally sound ideas, known as Green Innovative Work Behaviour (GIWB).

Given the large scope of environmental problems that IWB projects address, new approaches are often needed. Ma Prieto and Pérez-Santana (2014) suggest that solving problems should involve being flexible and breaking patterns to find extraordinary solutions, which is especially crucial in the context of GIWB. Widodo and Mawarto (2020) emphasize that IWB is a fundamental tool for the future, as it contributes to solving various environmental problems by fostering sustainable and innovative solutions.

As the business landscape evolves, there is a growing demand for continuous innovation to adapt to increasing environmental concerns. Legault et al. (2016) state that employees are being encouraged to get involved in IWB at unprecedented levels to remain agile and adaptable to external conditions. This type of engagement is necessary for companies to be both competitive and sustainable.

The advantages of IWB extend beyond organizational success. According to Lukes and Stephan (2017), participating in IWB can improve working conditions, enhance job satisfaction, and boost general well-being among employees. Creating an innovative culture is not only in the best interest of the organization but also makes employees prefer working there. This spirit of innovation, aimed at sustainability, proves to be a win-win for both the firm and the environment.

More companies are now adopting advanced practices for sustainability initiatives due to increased attention to environmental issues in recent years. Kay and Newman (2023) argue that the pressure on organizations to address climate change has driven them to reduce their environmental impact by adopting GIWB. By practicing these behaviors, firms can enhance their competitive advantage and advance broader environmental sustainability schemes, illustrating the importance of IWB in driving sustainable change.

Research by Albort-Morant (2018) and Chang (2011) suggests that companies are moving towards innovative practices to minimize the environmental impacts of their daily operations. This reflects the necessity of innovation to save the planet, making companies sustainable in the long run. Employees play a crucial role in spotting areas for improvement and devising changes that increase sustainability and efficiency across the board.

A change in innovative work behaviors is paramount for organizational success, particularly regarding sustainability. Companies need employees who are continuously engaged in innovation activities. Janssen (2000) underlines the importance of employee involvement for any company adapting to new challenges and aiming for continued growth. When innovative efforts are aimed at environmental sustainability, they become a powerful tool for achieving GIWB.

While IWB has been the focal point, a broader takeaway is the promotion of an innovative culture at work and its relation to sustainability. By fostering such a culture, organizations can improve their operations, remain relevant, and create a workplace that employees feel good about, contributing to the sustainability of future generations.

Innovative Work Behaviour (IWB) is crucial for both innovation and sustainability. It involves not only generating novel ideas but also executing them effectively. IWB contributes significantly to business performance by helping firms compete more effectively (De Jong & Den Hartog, 2010). Employees engage in IWB at every stage of innovation, from idea generation to implementation, which is vital for developing environmentally sound ideas in Green Innovative Work Behaviour (GIWB).

Studies highlight the importance of flexibility and breaking patterns to find extraordinary solutions, especially in the context of GIWB (Ma Prieto & Pérez-Santana, 2014). The growing demand for continuous innovation is driven by increasing environmental concerns, making IWB essential for companies to remain competitive and sustainable (Legault et al., 2016).

Participating in IWB improves working conditions, enhances job satisfaction, and boosts general well-being among employees (Lukes & Stephan, 2017). Companies adopting green innovative behaviors can enhance their competitive advantage and advance broader environmental sustainability schemes (Kay & Newman, 2023).

Green Behavior

Green behavior in the workplace refers to everyday actions that help save the environment, such as waste reduction, energy conservation, and recycling initiatives. Robertson and Barling (2013) explain that green behaviors are crucial for any eco-healthy organization. Stern (2000) and environmental stewardship in the long term both agree that promoting green behavior is not a trendy sideshow.

At its core, green behavior involves adopting a spectrum of practices that reduce environmentally harmful effects from organizational operations. Ones and Dilchert (2012) describe this concept as ranging from simple energy conservation—such as turning off lights when not in use—to more complex endeavors like sustainable procurement or fostering a green organizational culture. Given the increasing environmental consciousness, it is critical to follow these practices (Lülfs & Hahn, 2013).

According to the Theory of Planned Behaviour (Ajzen, 1991), an individual's intentions result from a combination of attitudes, social norms, and perceived control. Within the realm of green behavior, this suggests that employees' attitudes toward pro-environmental behaviors are shaped by their peers and organizational culture (Grieves et al., 2013). Moreover, when employees have a strong social identity with environmentally friendly groups, this leads to ethical choices where proper conduct is paramount (Bartels et al., 2007).

In practical terms, green behavior in the workplace can include a variety of actions. Energy conservation is a simple yet effective example—turning off equipment when not in use or opting for energy-efficient appliances (Ones & Dilchert, 2012). Waste reduction efforts, like recycling and cutting down on paper usage, are also key (Norton, Zacher, & Ashkanasy, 2014). Beyond these, sustainable procurement practices—choosing suppliers with eco-friendly operations—and promoting green transportation options, such as carpooling or biking, further embed sustainability into the workplace (Walker, Di Sisto, & McBain, 2008, Young et al., 2015). Lo, Peters, and Kok (2012) add that establishing clear organizational policies, training programs, and awareness campaigns can significantly boost these green efforts.

Several factors drive the adoption of green behaviors in the workplace. At the individual level, personal values, environmental awareness, and knowledge are crucial (Norton et al., 2014). Organizational factors such as leadership support, a strong organizational culture, and incentives also play a significant role (Graves, Sarkis, & Zhu, 2013). External pressures, including regulatory issues and social expectations, guide firms toward better green practices (Delmas & Toffel, 2008).

The benefits of green actions are far-reaching. Studies have found that they dramatically lower the carbon footprint of an organization, conserve natural resources, and reduce waste (Chen, Lai, & Wen, 2006). Although there is often an initial outlay to implement some green practices, this can result in longer-term savings through energy efficiency, reduced waste, and improved operational efficiencies (Gadenne, Kennedy, & McKeiver, 2009). Promoting green behavior also fosters employee morale and job satisfaction while improving the organization's reputation (Daily, Bishop, & Massoud, 2012).

However, green practices can be challenging to enforce. Poor environmental awareness among employees, resistance to change from traditional working methods, and limited financial and human resources are significant barriers, especially for smaller organizations (Hanna et al., 2000; Bansal & Roth, 2000; Parker, Redmond, & Simpson, 2009).

Leadership is crucial in overcoming these challenges. Top management must demonstrate their commitment to environmental initiatives, which cascades down to employees (Robertson & Barling, 2013). Offering training and resources on environmental issues has been shown to raise awareness and commitment among employees (Boiral, 2009). This can create a ripple effect throughout the organization, encouraging workers through formal incentives and recognition of green behaviors (Govindarajulu & Daily, 2004). Policies promoting green behavior and common goods—such as recycling bins or energy-efficient appliances—can have significant impacts (Ramus & Steger, 2000).

Real-world examples highlight the effectiveness of these strategies. For instance, IBM is committed to sustainability efforts in energy management and waste minimization, leading to substantial environmental and economic savings (Berns et al., 2009). Unilever's Sustainable Living Plan sets ambitious targets for reducing environmental impact and promoting sustainable practices across all functions. Unilever has successfully broadened the range of employees adopting green behaviors through targeted training and awareness programs (Unilever, 2014).

In summary, promoting green behaviors at work is essential for achieving sustainability objectives and enhancing Corporate Social Responsibility. Understanding the motivators behind these behaviors, along with the obstacles and opportunities they present, will help organizations shape a more sustainable future. Additional research is needed on the long-term impact of green behavior on organizational performance and employee wellness (Daily et al., 2012), but existing evidence indicates that these practices benefit both society and individuals within organizations.

Intersection of Innovation and Sustainability

The synergy between innovation and sustainability is gaining traction as businesses and researchers alike recognize the critical role that innovative behaviors play in promoting green practices. Employees who engage in Green Innovative Work Behaviour (GIWB) aren't just solving problems—they're proactively tackling environmental challenges, which is vital for driving corporate green innovation. Studies by Fahlevi et al. (2023)

and Chen & Zhang (2024) emphasize that fostering innovation within organizations can simultaneously push sustainability efforts forward, creating a win-win situation for both the environment and the business.

This intersection between innovation and sustainability is becoming increasingly important as companies strive to balance environmental responsibility with competitive advantage. Innovative behaviors—especially those linked to green practices—are key to sustainable development within organizations. When employees engage in GIWB, they're not just contributing to the company's success; they're actively reducing environmental impacts and promoting sustainability. This might involve anything from developing eco-friendly products to optimizing processes that cut down on waste and energy use (Fahlevi et al., 2023; Chen & Zhang, 2024).

The connection between innovation and sustainability becomes even clearer when we consider how organizations leverage their innovative capacities to reach sustainability goals. Research has shown that fostering a culture of innovation can lead to significant progress in sustainable practices. For instance, Bos-Brouwers (2010) found that companies that encourage employees to think creatively about environmental issues are more likely to come up with sustainable solutions and new technologies. This dual benefit—improving environmental performance while boosting organizational growth and competitiveness—is a powerful argument for integrating innovation into sustainability strategies.

Corporate green innovation is about developing and implementing new products, processes, and practices that reduce environmental impact and promote sustainability. Chen, Lai and Wen (2006) showed that both internal and external factors drive green innovation. Internally, having a supportive organizational environment that encourages innovation is crucial for adopting green practices successfully. Externally, factors like regulatory pressures, market demands, and customer preferences for eco-friendly products push companies to innovate in sustainable ways (Rennings, 2000).

Consider some real-world examples of how companies have successfully integrated innovation and sustainability. Unilever's Sustainable Living Plan is a great case in point. By focusing on product innovation and sustainable sourcing, Unilever has developed products with lower environmental footprints and more efficient use of resources (Unilever, 2014). Similarly, IBM's Smarter Planet initiative demonstrates how data and technology can be harnessed to address environmental challenges, showcasing how innovation can drive sustainability on a global scale (Berns et al., 2009).

Adding to this, a study by Hart and Dowell (2011) explored how companies that focus on "natural-resource-based views" can create innovative strategies that lead to both competitive advantage and environmental sustainability. Their research suggests that when companies innovate with sustainability in mind, they're not just responding to market demands—they're setting themselves up for long-term success by aligning their operations with the environment's needs.

Moreover, a recent study by Bocken, Rana, and Short (2015) delves into sustainable business model innovation, where companies redesign their business models to create, deliver, and capture value in ways that also benefit the environment and society. This approach not only supports environmental sustainability but also drives new business opportunities and long-term viability.

The intersection of innovation and sustainability highlights the critical importance of cultivating a workplace culture that supports creativity and proactive engagement with environmental issues. By doing so, companies can reap the dual benefits of enhanced sustainability and a stronger competitive position in the market. As we move forward, more research is needed to explore the specific ways in which innovation drives sustainability and the long-term effects this has on organizational performance. However, the evidence so far is clear: integrating innovation with sustainability is not just beneficial—it's essential for future success.

Environmental Corporate Social Responsibility (ECSR)

Environmental Corporate Social Responsibility (ECSR) initiatives have emerged as powerful drivers of Green Innovative Work Behaviour (GIWB) within organizations. These initiatives go beyond traditional corporate

responsibilities by fostering a culture that aligns organizational values with environmental goals, ultimately promoting both sustainability and innovation.

ECSR initiatives help create a workplace environment where employees feel encouraged to engage in green behaviors and think creatively about sustainability challenges. Aguinis and Glavas (2012) emphasize that when companies align their strategies with environmental sustainability, it not only motivates employees to adopt greener behaviors but also inspires them to come up with innovative solutions to environmental issues. This alignment fosters a culture where sustainability is a core value, making employees more committed to these goals and more likely to participate in green initiatives.

Research shows that ECSR can significantly boost employees' creative self-efficacy—their belief in their ability to generate effective and innovative solutions. When employees see their organization as being environmentally responsible, they gain confidence in their ability to contribute to green innovation (Newman, Nielsen, & Miao, 2015). This sense of empowerment encourages them to propose and implement ideas that drive sustainability efforts forward.

Moreover, ECSR initiatives strengthen employees' commitment to environmental goals. This commitment is a key driver of GIWB, as employees who are personally dedicated to sustainability are more likely to engage in behaviors that support these objectives (Cantor et al., 2012). ECSR activities signal to employees that their company genuinely values environmental responsibility, which in turn deepens their commitment to participating in green practices and innovations.

Several studies provide strong evidence of the link between ECSR and GIWB. For example, Zientara and Zamojska (2018) found that employees working in organizations with robust ECSR programs were more likely to exhibit green innovative behaviors. This connection was further supported by their perception of organizational support for sustainability, suggesting that ECSR initiatives not only inspire green behavior but also enhance employees' motivation to innovate.

Similarly, research by Zhang, Jiang, and Qu (2020) demonstrated that ECSR positively influences GIWB by fostering a supportive organizational climate for innovation. Their study found that ECSR initiatives led to higher levels of environmental commitment and creative self-efficacy among employees, which in turn promoted green innovative behaviors.

These findings suggest that organizations looking to enhance their sustainability efforts should prioritize ECSR programs. By integrating ECSR into the core of their corporate strategy and clearly communicating these values to employees, companies can cultivate a culture of innovation that encourages employees to engage in GIWB. This approach not only contributes to environmental sustainability but also boosts organizational performance and competitiveness.

To make ECSR initiatives truly effective, organizations should incorporate them into every aspect of their corporate strategy and ensure that employees are fully engaged. This can be achieved through training programs, workshops, and educational activities that help employees understand the importance of sustainability and how they can contribute to green innovation. Providing the necessary resources and support for these initiatives empowers employees to take an active role in promoting sustainability within the organization.

ECSR initiatives are vital in driving GIWB, creating a workplace environment where sustainability and innovation thrive. By enhancing creative self-efficacy and environmental commitment, ECSR programs motivate employees to engage in green innovative behaviors. Organizations that invest in ECSR not only improve their environmental performance but also gain a competitive edge. However, further research is needed to fully understand the long-term impacts of ECSR on organizational sustainability and employee behavior.

Mediating Factors

Creative Self-Efficacy

Creative self-efficacy mediates the relationship between ECSR and GIWB, with higher self-efficacy leading to greater engagement in innovative and green behaviors (Tierney & Farmer, 2002; Chen & Zhang, 2024). When employees believe in their creative capabilities, they are more likely to engage in GIWB, leveraging their skills to address environmental challenges. A study conducted by Abdullah et al. (2019) found that creative self-efficacy is a strong predictor of both innovative work behavior and job success. According to Qadir and Chaudhry (2024), there is a positive relationship between green entrepreneurial self-efficacy and both innovative work behavior and entrepreneurial ambition. This relationship is influenced by attitudes towards entrepreneurship.

Furthermore, Pasha et al. (2022) have shown that ecopreneurship influences innovative work behavior by means of the mediation of creative self-efficacy. These studies emphasize the significance of creative self-efficacy and environmental concerns in promoting innovative work behaviors. According to Chen & Zhang (2023), Abdullah et al. (2019), Qadir & Chaudhry (2024), and Pasha et al. (2022), organizations can improve employee innovation and performance by encouraging environmental responsibility, fostering creative self-efficacy, and nurturing green entrepreneurial attitudes. Managers can improve employees' inventive behavior and entrepreneurial outcomes by prioritizing the development of their self-efficacy, especially in creative and sustainable environmental situations.

Environmental Commitment

Employees' commitment to environmental goals plays a crucial mediating role in the relationship between Environmental Corporate Social Responsibility (ECSR) and Green Innovative Work Behaviour (GIWB). This commitment reflects the extent to which employees internalize and prioritize environmental sustainability in their work and personal lives. Ramus and Steger (2000) highlight that employees who are personally committed to environmental sustainability are more inclined to adopt and promote green practices within their organizations.

Employees' commitment to environmental goals is influenced by their values and motivations. When individuals value environmental sustainability, they are more likely to engage in behaviors that support these goals, both at work and in their personal lives. This personal commitment acts as a powerful motivator, driving employees to go beyond the minimum requirements and actively seek out innovative solutions to environmental challenges. Ramus and Steger (2000) argue that this intrinsic motivation is a key factor in fostering GIWB, as it encourages employees to take initiative and implement green practices that align with their environmental values.

The mediating role of employees' commitment to environmental goals can be understood through its impact on various organizational outcomes. For instance, when employees are committed to environmental sustainability, they are more likely to support and participate in ECSR initiatives. This participation not only enhances the effectiveness of these initiatives but also fosters a culture of sustainability within the organization. Moreover, committed employees are more likely to share their knowledge and ideas with colleagues, contributing to a collaborative environment that supports GIWB.

Furthermore, the alignment between personal values and organizational goals is essential for fostering commitment to environmental sustainability. When employees perceive that their organization prioritizes environmental goals, they are more likely to feel a sense of alignment and commitment to these goals. This alignment reinforces their motivation to engage in green innovative behaviors, as they feel supported and valued by the organization. Therefore, organizations can enhance GIWB by promoting a culture that aligns with employees' values and supports their commitment to environmental sustainability.

In conclusion, employees' commitment to environmental goals mediates the relationship between ECSR and GIWB, reinforcing the importance of personal values and motivations in driving green innovative behaviors. By fostering a culture that aligns with employees' environmental values and supports their commitment to sustainability, organizations can enhance the effectiveness of ECSR initiatives and promote GIWB. This

commitment not only enhances organizational sustainability but also contributes to a collaborative and innovative work environment.

Moderating Factors

Person-Organization Fit

The alignment between an employee's values and the organization's values (P-O fit) moderates the impact of ECSR on GIWB. A high P-O fit enhances the positive effects of ECSR on creative self-efficacy and environmental commitment, while a low P-O fit weakens these effects (Kristof-Brown et al., 2005). Ensuring that employees feel a strong alignment with the organization's sustainability values can therefore enhance the effectiveness of ECSR initiatives.

Person-Organization Fit (P-O Fit) refers to the congruence between an individual's values, beliefs, and personality with the culture, values, and norms of an organization (Kristof-Brown et al., 2005). In the context of ECSR, a high P-O fit means that employees feel a strong alignment with the organization's environmental values, which can significantly enhance their engagement in green innovative work behaviors. Kristof-Brown et al. (2005) highlighted that a high P-O fit enhances the positive effects of ECSR initiatives on employees' creative self-efficacy and environmental commitment. When employees perceive that their values align with those of the organization, they are more likely to internalize the organization's environmental goals and exhibit innovative behaviors to support these goals. Conversely, a low P-O fit weakens these effects, as employees may feel disconnected from the organization's values and less motivated to engage in green innovative behaviors.

The mediating role of P-O fit in the relationship between ECSR and GIWB can be understood through its influence on employees' attitudes and behaviors. When there is a strong P-O fit, employees are more likely to experience job satisfaction, organizational commitment, and motivation to contribute to sustainability initiatives. This alignment fosters a supportive environment where employees feel empowered to innovate and implement green practices. Therefore, ensuring a high P-O fit can enhance the effectiveness of ECSR initiatives by promoting a culture of sustainability and innovation.

Leadership and HR Practices

Transformational leadership and green human resource management (HRM) practices are pivotal in fostering a culture of innovation and sustainability. Leaders play a crucial role in shaping an organizational environment that supports GIWB (Fahlevi et al., 2023; Poór et al., 2023). Green HRM practices, such as training and rewards for green behaviors, further reinforce this culture (Renwick et al., 2013). By promoting green leadership and HR practices, organizations can cultivate an environment where sustainability and innovation thrive together.

Transformational leadership is characterized by leaders who inspire and motivate employees to exceed their self-interests for the sake of the organization (Bass & Riggio, 2006). These leaders create a vision for the future, communicate this vision effectively, and foster an environment that encourages innovation and commitment to sustainability. Green Human Resource Management (HRM) practices involve incorporating environmental management into human resource policies, such as recruitment, training, performance appraisal, and rewards (Renwick et al., 2013). These practices aim to develop a workforce that is environmentally conscious and engaged in sustainable behaviors.

Fahlevi et al. (2023) and Poór et al. (2023) emphasize that transformational leaders play a crucial role in shaping an organizational culture that supports GIWB. Leaders who demonstrate a commitment to sustainability can inspire employees to embrace green practices and innovate in ways that align with environmental goals. Similarly, green HRM practices, such as providing training on sustainable practices and rewarding green behaviors, reinforce this culture by equipping employees with the necessary skills and motivation to engage in GIWB. Transformational leadership and green HRM practices act as mediators by creating an organizational environment that supports sustainability and innovation. Leaders who prioritize environmental goals and implement green HRM practices can cultivate a culture where employees feel empowered to innovate and contribute to the organization's sustainability objectives. This supportive environment enhances the impact of ECSR initiatives by fostering a workforce that is committed to green innovative behaviors.

The alignment between employees' values and the organization's sustainability values (P-O fit), along with the presence of transformational leadership and green HRM practices, plays a critical role in moderating the impact of ECSR on GIWB. High P-O fit, effective leadership, and supportive HR practices create an environment that enhances the effectiveness of ECSR initiatives by promoting a culture of sustainability and innovation. By focusing on these moderating factors, organizations can foster a workforce that is both committed to and capable of driving green innovation.

Discussion

This systematic review underscores the critical interplay between innovative work behavior (IWB) and green practices, emphasizing how they collectively contribute to organizational sustainability. The findings reveal that IWB, characterized by the generation and implementation of novel ideas, is instrumental in fostering sustainable practices within organizations. Employees engaging in IWB tend to develop solutions that minimize environmental impacts, thus enhancing corporate sustainability.

The literature indicates that a combination of organizational initiatives (Environmental Corporate Social Responsibility - ECSR, green HRM practices) and individual factors (creative self-efficacy, environmental commitment) drives employees' green innovative work behavior (GIWB). The moderating role of the Person-Organization (P-O) fit underscores the importance of aligning organizational and personal values to maximize the effectiveness of sustainability initiatives. This alignment is crucial for fostering an environment where employees feel empowered to engage in innovative and sustainable behaviors. Key drivers of GIWB include leadership, organizational culture, and employee engagement. Transformational leadership and green HRM practices significantly influence GIWB by creating a supportive environment that encourages innovation and sustainability. Leaders who prioritize environmental goals and implement green HRM practices, such as training and rewards for green behaviors, play a pivotal role in fostering a culture of sustainability and innovation (Renwick et al., 2013, Amrutha & Geetha, 2020).

The review also highlights the mediating role of creative self-efficacy and environmental commitment in the relationship between ECSR and GIWB. Employees with high creative self-efficacy and strong environmental commitment are more likely to engage in GIWB, leveraging their skills to address environmental challenges innovatively (Tierney & Farmer, 2002; Chen et al., 2015). ECSR initiatives align organizational values with environmental goals, thereby enhancing employees' creative self-efficacy and commitment to sustainability (Afsar et al., 2018). Moreover, the alignment between an employee's values and the organization's values (P-O fit) moderates the impact of ECSR on GIWB. A high P-O fit enhances the positive effects of ECSR on creative self-efficacy and environmental commitment, while a low P-O fit weakens these effects (Edwards & Cable, 2009). Ensuring that employees feel a strong alignment with the organization's sustainability values can therefore enhance the effectiveness of ECSR initiatives.

The integration of innovation and sustainability is essential for achieving long-term organizational success. By fostering a culture that supports creativity and proactive engagement in environmental issues, companies can achieve the dual benefits of enhanced sustainability and competitive advantage. Successful case studies, such as IBM's Smarter Planet initiative and Unilever's Sustainable Living Plan, demonstrate the potential of leveraging innovative capabilities to drive sustainable practices (Whelan & Fink, 2016). The literature indicates that a combination of organizational initiatives (ECSR, green HRM practices) and individual factors (creative self-efficacy, environmental commitment) drives employees' GIWB. The moderating role of P-O fit underscores the importance of aligning organizational and personal values to maximize the effectiveness of sustainability initiatives. This alignment is crucial for fostering an environment where employees feel empowered to engage in innovative and sustainable behaviors.

5. Conclusion

This systematic review has underscored the critical intersection of innovative work behavior (IWB) and green practices in fostering sustainability within organizations. By synthesizing findings from a diverse array of academic literature, this study has elucidated the multifaceted relationship between IWB and green practices, highlighting how innovative behaviors contribute to the implementation and enhancement of sustainable practices. Key drivers of green innovative work behavior (GIWB) such as Environmental Corporate Social

Responsibility (ECSR), green human resource management (HRM) practices, creative self-efficacy, and environmental commitment have been identified. These drivers play pivotal roles in shaping employees' proactive engagement in sustainability initiatives. The alignment between organizational values and individual values, encapsulated in the concept of Person-Organization (P-O) fit, emerges as a crucial moderating factor, ensuring that employees are deeply committed to the organization's sustainability goals.

The review has also brought to light the challenges and facilitators in integrating IWB with green practices. Successful case studies demonstrate that fostering a culture of innovation is indispensable for achieving sustainable outcomes. Leadership, organizational culture, and employee engagement are paramount in promoting IWB for green initiatives. The practical implications of these findings are significant for policymakers, managers, and scholars. Organizations should invest in robust ECSR policies, promote green HRM practices, and create supportive environments that enhance employees' creative self-efficacy and environmental commitment. Leadership should focus on modelling green behaviors and providing training and incentives to encourage sustainability.

Moreover, the review highlights the necessity for a conducive environment that supports innovation to achieve sustainability. This dual benefit not only enhances environmental performance but also contributes to organizational growth and competitiveness. Future research should explore the specific mechanisms through which P-O fit influences GIWB and the role of different leadership styles in promoting green innovation.
In conclusion, bridging innovation and sustainability through green practices requires a holistic approach that integrates organizational initiatives and individual factors. By fostering a culture that supports innovative and sustainable behaviors, organizations can make significant strides in addressing global environmental challenges while maintaining competitive advantage. This review provides a comprehensive framework for future research and practical applications, paving the way for enhanced synergy between innovation and sustainability in organizational contexts.

Acknowledgment: The authors would like to express their gratitude to Universiti Teknikal Malaysia Melaka (UTeM) for the financial support provided which made this research possible.

References

Aguinis, H., & Glavas, A. (2012). What we know and don't know about corporate social responsibility: A review and research agenda. Journal of Management, 38(4), 932-968. https://doi.org/10.1177/0149206311436079

Afsar, B., Cheema, S., & Javed, F. (2018). Activating employee's pro-environmental behaviors: The role of CSR, organizational identification, and environmentally specific servant leadership. Corporate Social Responsibility and Environmental Management, 25(5), 925-937. https://doi.org/10.1002/csr.1510

Albort-Morant, G., Leal-Rodríguez, A. L., Fernández-Rodríguez, V., & Ariza-Montes, A. (2018). Assessing the origins, evolution, and prospects of the literature on dynamic capabilities: A bibliometric analysis. European Research on Management and Business Economics, 24(1), 42-51. https://doi.org/10.1016/j.iedeen.2017.06.004

Ajzen, I. (1991). The Theory of Planned Behavior. Organizational Behavior and Human Decision Processes, 50(2), 179-211

Amrutha, V. N. & Geetha, S. N. (2019). A systematic review on green human resource management: Implications for social sustainability. Journal of Cleaner Production. 247. 119131. 10.1016/j.jclepro.2019.119131.

Bansal, P., & Roth, K. (2000). Why companies go green: A model of ecological responsiveness. Academy of Management Journal, 43(4), 717-736.

Bartels, J., Peters, O., de Jong, M., Pruyn, A., & van der Molen, M. (2007). Horizontal and vertical communication as determinants of professional and organizational identification. Personnel Review, 36(5), 677-694. https://doi.org/10.1108/00483480710774060

Bass, B. M., & Riggio, R. E. (2006). Transformational Leadership (2nd ed.). Psychology Press.

Berns, M., Townend, A., Khayat, Z., Balagopal, B., Reeves, M., Hopkins, M. S., & Kruschwitz, N. (2009). The business of sustainability. MIT Sloan Management Review, 51(1), 20-26.

Boiral, O. (2009). Greening the corporation through organizational citizenship behaviors. Journal of Business Ethics, 87(2), 221-236. https://doi.org/10.1007/s10551-008-9881-2

Bos-Brouwers, H. E. J. (2010). Corporate sustainability and innovation in SMEs: Evidence of themes and activities in practice. Business Strategy and the Environment, 19(7), 417-435. https://doi.org/10.1002/bse.652

Bocken, N. M. P., Rana, P., & Short, S. W. (2015). Value mapping for sustainable business thinking. Journal of Industrial and Production Engineering, 32(1), 67-81. https://doi.org/10.1080/21681015.2014.1000399

Bonilla, D., et al. (2018). The Impacts of Digital Technologies on Innovating for Sustainability. Journal of Sustainable Technology, 35(2), 103-120. https://doi.org/10.3390/su10103740

Cantor, D. E., Morrow, P. C., & Montabon, F. L. (2012). Engagement in environmental behaviors among supply chain management employees: An organizational support theoretical perspective. Journal of Supply Chain Management, 48(3), 33-51. https://doi.org/10.1111/j.1745-493X.2012.03270.x

Chen, Y., Lai, S., & Wen, C. (2006). The Influence of green innovation performance on corporate advantage in Taiwan. Journal of Business Ethics, 67(4), 331-339. https://doi.org/10.1007/s10551-006-9023-5

Chen, S., & Zhang, X. (2024). Leadership styles, creative self-efficacy, and green innovative work behavior: A moderated mediation model. Journal of Environmental Management, 319, 115830. https://doi.org/10.1016/j.jenvman.2022.115830

Daily, B. F., Bishop, J. W., & Massoud, J. A. (2012). The role of training and empowerment in environmental performance: A study of the Mexican maquiladora industry. International Journal of Operations & Production Management, 32(5), 631-647. https://doi.org/10.1108/01443571211226524

De Jong, J. P. J., & Den Hartog, D. N. (2010). Measuring innovative work behavior. Creativity and Innovation Management, 19(1), 23-36. https://doi.org/10.1111/j.1467-8691.2010.00547.x

Delmas, M. A., & Toffel, M. W. (2008). Organizational responses to environmental demands: Opening the black box. Strategic Management Journal, 29(10), 1027-1055. https://doi.org/10.1002/smj.701

Denyer, D., & Tranfield, D. (2009). Producing a systematic review. In D. A. Buchanan & A. Bryman (Eds.), The SAGE Handbook of Organizational Research Methods (pp. 671-689). SAGE Publications.

Edwards, J. R., & Cable, D. M. (2009). The value of value congruence. Journal of Applied Psychology, 94(3), 654-677. https://doi.org/10.1037/a0014891

Fahlevi, M., Poór, J., Wulandari, D., Suharyati, E., & Setiawan, I. (2023). Green transformational leadership and green human resource management on green innovation: The role of green knowledge sharing. Journal of Cleaner Production, 380, 135071. https://doi.org/10.1016/j.jclepro.2022.135071

Gadenne, D. L., Kennedy, J., & McKeiver, C. (2009). An empirical study of environmental awareness and practices in SMEs. Journal of Business Ethics, 84(1), 45-63. https://doi.org/10.1007/s10551-008-9672-9

Geissdoerfer, M., Savaget, P., Bocken, N. M. P., & Hultink, E. J. (2017). The Circular Economy–A New Sustainability Paradigm? Journal of Cleaner Production, 143, 757-768. https://doi.org/10.1016/j.jclepro.2016.12.048

Govindarajulu, N. and Daily, B.F. (2004). Motivating employees for environmental improvement. *Industrial Management & Data Systems*, 104(4), 364-372. https://doi.org/10.1108/02635570410530775

Greaves, M., Zibarras, L. D., & Stride, C. (2013). Using the Theory of Planned Behavior to Explore Environmental Behavioral Intentions in the Workplace. Journal of Environmental Psychology, 34, 109-120.

Graves, L. M., Sarkis, J., & Zhu, Q. (2013). How transformational leadership and employee motivation combine to predict employee pro-environmental behaviors in China. *Journal of Environmental Psychology*, 35, 81-91. https://doi.org/10.1016/j.jenvp.2013.05.002

Hanna, M. D., Newman, W. R., & Johnson, P. (2000). Linking operational and environmental improvement through employee involvement. International Journal of Operations & Production Management, 20(2), 148-165

Hart, S. L., & Dowell, G. (2011). A natural-resource-based view of the firm: Fifteen years after. Journal of Management, 37(5), 1464-1479. https://doi.org/10.1177/0149206310390219

Janssen, O. (2000). Job demands, perceptions of effort-reward fairness and innovative work behavior. Journal of Occupational and Organizational Psychology, 73(3), 287-302. https://doi.org/10.1348/096317900167038

Kay, J., & Newman, R. (2023). Adapting to Climate Change through Green Innovation: The Role of GIWB in Enhancing Corporate Sustainability. Journal of Environmental Management and Policy, 45(4), 310-328

Kristof-Brown, A. L., Zimmerman, R. D., & Johnson, E. C. (2005). Consequences of individuals' fit at work: A meta-analysis of person–job, person–organization, person–group, and person–supervisor fit. Personnel Psychology, 58(2), 281-342. https://doi.org/10.1111/j.1744-6570.2005.00672.x

Legault, L., et al. (2016). The Role of Employee Engagement in Promoting Innovative Work Behavior: Implications for Organizational Agility. Journal of Organizational Psychology, 12(3), 150-162.

Li, X., Zhang, Y., & Zhang, X. (2023). Employee green innovation and corporate sustainability: A moderated mediation model. Journal of Environmental Management, 320, 115820. https://doi.org/10.1016/j.jenvman.2022.115820

Lo, S. H., Peters, G. J., & Kok, G. (2012). A Review of Determinants of and Interventions for Proenvironmental Behaviors in Organizations. *Journal of Applied Social Psychology*, *42*(12), 2933-2967. https://doi.org/10.1111/j.1559-1816.2012.00969.x

Lülfs, R., & Hahn, R. (2013). Corporate greening beyond formal programs, initiatives, and systems: A conceptual model for voluntary pro-environmental behavior of employees. European Management Review, 10(2), 83-98. https://doi.org/10.1111/emre.12008

Lukes, M., & Stephan, U. (2017). Measuring employee innovation. Journal of Organizational Behavior, 38(2), 266-287. https://doi.org/10.1002/job.2041

Ma Prieto, I., & Pérez-Santana, P. (2014). Managing innovative work behavior: The role of human resource practices. Personnel Review, 43(2), 184-208. https://doi.org/10.1108/PR-11-2012-0199

Moher, D., Liberati, A., Tetzlaff, J., Altman, D. G., & The PRISMA Group. (2009). Preferred reporting items for systematic reviews and meta-analyses: The PRISMA statement. PLoS Medicine, 6(7), e1000097. https://doi.org/10.1371/journal.pmed.1000097

Newman, A., Nielsen, I., & Miao, Q. (2015). The impact of employee perceptions of organizational corporate social responsibility practices on job performance and organizational citizenship behavior: Evidence from the Chinese private sector. International Journal of Human Resource Management, 26(9), 1226-1242. https://doi.org/10.1080/09585192.2014.934892

Norton, T. A., Zacher, H., & Ashkanasy, N. M. (2014). Organizational sustainability policies and employee green behavior: The mediating role of work climate perceptions. Journal of Environmental Psychology, 38, 49-54. https://doi.org/10.1016/j.jenvp.2013.12.008

Ones, D. S., & Dilchert, S. (2012). Environmental sustainability at work: A call to action. Industrial and Organizational Psychology, 5(4), 444-466. https://doi.org/10.1111/j.1754-9434.2012.01478.x

Parker, C. M., Redmond, J., & Simpson, M. (2009). A review of interventions to encourage SMEs to make environmental improvements. Environment and Planning C: Government and Policy, 27(2), 279-301. https://doi.org/10.1068/c0859b

Petticrew, M., & Roberts, H. (2006). Systematic Reviews in the Social Sciences: A Practical Guide. Blackwell Publishing.

Qadir, A., & Chaudhry, A. A. (2024). The impact of green entrepreneurial self-efficacy on innovative work behavior: The moderating role of entrepreneurial attitudes. Journal of Business Research, 143, 537-546. https://doi.org/10.1016/j.jbusres.2022.10.035

Ramus, C. A., & Steger, U. (2000). The roles of supervisory support behaviors and environmental policy in employee "eco-initiatives" at leading-edge European companies. Academy of Management Journal, 43(4), 605-626. https://doi.org/10.2307/1556357

Rennings, K. (2000). "Redefining innovation—eco-innovation research and the contribution from ecological economics." Ecological Economics, 32(2), 319-332.

Renwick, D. W. S., Redman, T., & Maguire, S. (2013). Green human resource management: A review and research agenda. International Journal of Management Reviews, 15(1), 1-14. https://doi.org/10.1111/j.1468-2370.2011.00328.x

Robertson, J. L., & Barling, J. (2013). Greening organizations through leaders' influence on employees' pro-environmental behaviors. Journal of Organizational Behavior, 34(2), 176-194. https://doi.org/10.1002/job.1820

Samat, N., Abdullah, M., & Rahman, S. A. (2019). Leadership styles and innovative work behavior: The mediating role of innovative climate. Journal of Business Research, 104, 199-206. https://doi.org/10.1016/j.jbusres.2019.06.007

Stern, P. C. (2000). New environmental theories: Toward a coherent theory of environmentally significant behavior. Journal of Social Issues, 56(3), 407-424. https://doi.org/10.1111/0022-4537.00175

Tierney, P., & Farmer, S. M. (2002). Creative self-efficacy: Its potential antecedents and relationship to creative performance. Academy of Management Journal, 45(6), 1137-1148. https://doi.org/10.2307/3069429

Unilever. (2014). Unilever sustainable living plan: Progress report 2014. Unilever. Retrieved from https://www.unilever.com/sustainable-living/our-strategy/unilever-sustainable-living-plan/

Walker, H., Di Sisto, L., & McBain, D. (2008). Drivers and barriers to environmental supply chain management practices: Lessons from the public and private sectors. Journal of Purchasing and Supply Management, 14(1), 69-85. https://doi.org/10.1016/j.pursup.2008.01.007

Widodo, T., & Mawarto, M. (2020). The role of innovative work behavior in green supply chain practices and its impact on environmental performance. Journal of Cleaner Production, 255, 120284. https://doi.org/10.1016/j.jclepro.2020.120284

Whelan, T., & Fink, C. (2016). The comprehensive business case for sustainability. Harvard Business Review, 94(10), 78-85.

Young, W., Hwang, K., McDonald, S., & Oates, C. J. (2015). Sustainable consumption: Green consumer behavior when purchasing products. Sustainable Development, 18(1), 20-31. https://doi.org/10.1002/sd.394

Zientara, P., & Zamojska, A. (2018). Green Organizational climates and Employee Pro-environmental behavior in the hotel industry. Journal of Sustainable Tourism, 26(7), 1142-1159. https://doi.org/10.1080/09669582.2017.1368396

Zhang, X., Jiang, Y., & Qu, W. (2020). The role of corporate social responsibility in enhancing employee creative self-efficacy and promoting green innovation. Journal of Cleaner Production, 253, 119927. https://doi.org/10.1016/j.jclepro.2020.119927

Information Management and Business Review (IMBR)
Vol. 16, No. 4, Dec 2024 (ISSN 2220-3796)

Navigating Emotional Intelligence: A Comprehensive Review of Theories, Models and Applications

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Abstract: This study aims to examine the foundational theories, models, and assessment tools of emotional intelligence (EI), focusing on their practical applications in organizational settings. The research conducts a thorough narrative review, analyzing existing literature from key academic databases to identify the strengths and limitations of different EI models. The findings highlight ExzI's significant role in enhancing leadership, teamwork, and employee well-being. By critically evaluating various measurement tools, the study underscores the importance of selecting appropriate EI assessments to inform academic and professional frameworks. The outcomes of this research offer valuable insights for improving EI training programs and integrating emotional competencies into leadership development and organizational strategies.

Keywords: *Emotional Competence, Emotional Intelligence, Evolution of Emotional Intelligence, Emotional Intelligence Models and Theories, Emotional Intelligence Measures*

1. Introduction

Emotional intelligence (EI) has become a critical factor in personal and organizational success, particularly in areas such as leadership, team collaboration, and employee well-being. Initially popularized by Goleman (1995), EI is now recognized as an essential skill for navigating complex interpersonal dynamics and enhancing decision-making in both professional and educational settings. As organizations continue to evolve, the demand for emotionally intelligent leaders has intensified, driven by the need for adaptive leadership in increasingly diverse and remote workplaces (Sehgal, 2023).

Despite the growing recognition of EI's value, its integration into leadership development and organizational practices remains inconsistent. Various EI models, such as the ability-based model (Mayer and Salovey, 1997) and the trait-based model (Petrides and Furnham, 2001), offer different perspectives on how to assess and apply EI in real-world contexts. However, these models often lead to confusion in their practical application, and there remains a gap in understanding how organizations can effectively combine different EI frameworks to enhance both individual and team performance. Mancini et al. (2022), argue that different measurement approaches can lead to varying results, making it challenging to theorize what EI truly is or what it predicts.

This review aims to bridge these gaps by synthesizing the major EI theories, models, and assessment tools, and providing actionable insights into their application in leadership development, team dynamics, and overall organizational well-being. By addressing the challenges in selecting appropriate EI measurement tools and exploring the broader implications of EI in contemporary settings, this study offers a comprehensive framework for integrating EI into leadership and training programs. The findings of this review are especially timely as organizations seek to rebuild and adapt to the changing demands of a post-pandemic world, where EI is more crucial than ever for fostering collaboration, resilience, and innovation.

2. Literature Review

The Development of the Concept of Emotional Intelligence

The concept of emotional intelligence (EI) traces its origins back nearly a century, beginning with Edward Thorndike's work in 1920, which introduced the idea of "social intelligence" as a distinct dimension of intelligence. Thorndike defined social intelligence as the ability to "understand and manage men and women, boys and girls, to act wisely in human relations" (Thorndike, 1920, p. 228). This framework highlighted skills related to understanding and managing people. However, Thorndike's model of social intelligence did not gain significant traction at the time, with limited subsequent research in the area (Landy, 2005). In the 1940s, Wechsler expanded the understanding of intelligence by suggesting that factors influencing intelligent behavior needed further exploration to create comprehensive intelligence models (Bar-On, 2006).

In 1983, Howard Gardner's theory of multiple intelligences introduced seven forms of intelligence, including interpersonal and intrapersonal intelligence. These two types focused on understanding and managing others' emotions and one's own emotions, respectively, highlighting their importance alongside cognitive intelligence (Petrides, 2011). Building on this foundation, Wayne Leon Payne 1985 conceptualized EI in his doctoral dissertation, viewing it as a creative relationship with emotions such as fear, pain, and desire (Payne, 1985, cited in Petrides and Furnham, 2001).

Further contributions came from Reuven Bar-On, who, in 1987, developed the Emotional Quotient Inventory (EQ-i), a multidimensional tool to measure emotional intelligence. The concept was later formalized by Peter Salovey and John Mayer in a series of publications from 1990 to 1995, which distinguished emotional intelligence from general intelligence. They described EI as the ability to perceive, assess, and express emotions accurately, use emotions to facilitate thinking, understand emotional nuances, and regulate emotions for personal and intellectual growth (Mayer and Salovey, 1997).

Emotional intelligence entered mainstream awareness in 1995 with the publication of Daniel Goleman's book, Emotional Intelligence: Why It Matters More Than IQ. Goleman's theory focused on recognizing and managing one's own emotions and those of others, motivating oneself, and fostering effective interpersonal relationships (Goleman, 1998). He argued that emotional competencies often surpass cognitive intelligence in predicting success and happiness, particularly in the workplace and relational contexts (Goleman, 1995).

In 2000, Petrides and Furnham developed the trait EI model, which combined self-perceived emotional abilities and behavioral tendencies. They differentiated this construct from ability EI, which focuses on measurable emotional abilities assessed through performance tasks. While trait EI aligns with personality hierarchies, ability EI is more closely related to cognitive ability frameworks, illustrating the conceptual, methodological, and empirical distinctions between the two (Petrides and Furnham, 2000, 2001).

Emotional Intelligence Models

EI is a research area marked by ongoing debates and competing concepts, lacking a unified theory. While various models and theories of EI exist, the following sections focus on the four most prominent and widely used ones.

- Ability model of EI (Mayer and Salovey, 1997)
- Emotional competencies model (Goleman, 1995)
- Bar-On's emotional-social intelligence model (Bar-On, 1997b)
- Trait model of EI (Petrides and Furnham, 2000)

These four models can be grouped into three well-established scientific concepts of EI: (a) the ability model, (b) the mixed model, and (c) the trait model. The ability model of EI sees it as a traditional intelligence, focusing on cognitive-emotional abilities separate from personality traits (Petrides and Furnham, 2001). Mixed models add non-cognitive aspects like motivations and empathy, often using self-report or 360-degree assessments (Bar-On, 1997b, 2006). The trait model highlights the subjective nature of emotional experiences, allowing flexibility in interpreting various EI assessments and extending to social intelligence (Petrides, 2010).

The Ability Model of Emotional Intelligence (Mayer and Salovey, 1997)

Initially proposed by Salovey and Mayer in 1990 and revised in 1997, the ability model defines EI as a set of mental abilities that involve processing emotional information. The revised model introduced the Four-Branch Model, which organizes EI into four key components:

- Perceiving Emotions: The ability to accurately identify emotions in oneself and others, including subtle emotional expressions.
- Using Emotions to Facilitate Thought: Emotions play a role in prioritizing thinking, allowing individuals to use emotions to enhance reasoning and problem-solving.
- Understanding Emotions: The capacity to comprehend emotional language and transitions between different emotions.

- Regulating Emotions: The ability to manage and control emotions in oneself and others to achieve specific goals, such as maintaining a positive mood or reducing negative emotions.

This model treats EI as a cognitive ability separate from personality traits, and it is often measured using tasks that require individuals to solve emotion-related problems (Mayer, Caruso, and Salovey, 2016). This model has gained significant attention in research due to its solid theoretical foundation and empirical support. In education, the ability model of EI is especially beneficial for students who find it challenging to build strong relationships with their teachers. For these students, EI plays a crucial role in enhancing their well-being and academic performance (Sánchez-Alvarez, Berrios Martos, and Extremera, 2020). Chamizo-Nieto, Arrivillaga, Rey, and Extremera (2021) found that students with higher EI reported better academic performance through increased flourishing (a sense of personal well-being and life satisfaction). EI enables students to cope with stress, adapt to academic pressures, and remain motivated in their studies.

The Emotional Competencies Mixed Model (Goleman, 1995)

Daniel Goleman's mixed model combines cognitive abilities and personality traits, proposing that EI consists of emotional and social competencies that contribute to personal and professional success. Goleman initially identified five dimensions of EI:

- Self-awareness: Recognizing one's own emotions.
- Self-management: Controlling emotions and adapting to changing circumstances.
- Motivation: Harnessing emotions to drive toward goals.
- Empathy: Understanding the emotions of others.
- Social skills: Managing relationships and handling interactions.

In 1998, Goleman refined his model, grouping these competencies into personal competencies (self-awareness, self-management) and social competencies (social awareness, relationship management). His framework emphasizes that emotional competencies can be learned and developed over time, making it practical for workplace applications. This model is widely used in organizational settings due to its focus on performance and leadership.

In alignment with Goleman's (1998) emphasis on the learnability of emotional competencies, recent research by Hsieh, Li, Liang, and Chiu (2024) demonstrates the significant role of principals' EI in empowering teachers. Principals with high EI foster trust and encourage organizational citizenship behavior among teachers, which leads to enhanced performance and collaboration within the school environment. This highlights the real-world application of Goleman's model in educational leadership, showing how emotional competencies drive organizational success.

Similarly, Namugumya, Munene, Mafabi, and Kagaari (2023) apply Goleman's model of EI to explain how tertiary institutional managers, such as deans and HR managers, handle talent management. It emphasizes that self-awareness is crucial for managers in critical roles, as it helps them regulate emotions, relate well to others, and make sound decisions. These leaders are mindful of their impact on others, remain composed in difficult situations, learn from feedback, and create positive working environments that support effective talent management and organizational success.

The Emotional-Social Intelligence Mixed Model (Bar-On, 1997)

In 1997, Reuven Bar-On introduced the EQ-i, the first self-report tool designed to measure emotional and social intelligence. Drawing inspiration from Darwin's theories on emotional expression and adaptation, Bar-On's model conceptualizes EI as a blend of emotional and social competencies that enable individuals to effectively manage environmental challenges (Bar-On, 2004; Bar-On, 2007). The model includes five main components:

- Intrapersonal Skills: Understanding and expressing one's own emotions.
- Interpersonal Skills: Understanding and interacting with others.
- Stress Management: Handling stress and controlling emotions.
- Adaptability: Being flexible and realistic when solving problems.
- General Mood: Maintaining a positive outlook and emotional well-being.

Bar-On's model of EI emphasizes the importance of psychological well-being and adaptability across various aspects of life, from personal relationships to professional success. While it shares similarities with Goleman's model, which focuses more on workplace performance, Bar-On's framework places a greater emphasis on emotional and social adaptation as key to overall life success. This holistic approach makes it relevant for both personal development and professional achievements (Bar-On, 2006).

In line with Bar-On's emphasis on emotional and social adaptation, a study assessing the development of EI among pharmacy students demonstrates how EI evolves through different stages of education. Using the EQ-i, the study found that fourth-year students displayed significantly higher EI scores compared to their second and third-year counterparts (Biju, Wanat, El-Desoky, Vu, and Varkey, 2023). This indicates that as students gain more clinical experience, take on leadership responsibilities, and interact with patients, their emotional skills such as empathy, stress management, and interpersonal communication improve. The findings underscore the importance of EI not only for workplace performance but also for adapting to complex social and emotional challenges in healthcare settings, reflecting Bar-On's broader view of EI as a key to life success.

Trait Model of Emotional Intelligence (Petrides and Furnham, 2001)

Petrides and Furnham introduced the trait EI model, which focuses on self-perceived emotional abilities and behavioral dispositions, categorizing EI as a personality trait rather than a cognitive ability. Trait EI encompasses four key factors:

- Self-control: Managing stress, controlling impulses, and emotional regulation.
- Well-being: Maintaining self-esteem, happiness, and optimism.
- Emotionality: Perceiving and expressing emotions, building relationships, and empathy.
- Sociability: Managing social interactions, assertiveness, and adaptability.

Trait EI is measured through self-report instruments like the Trait Emotional Intelligence Questionnaire (TEIQue) and is considered to be independent of cognitive intelligence (Petrides, 2009). This model posits that different profiles of trait EI will be advantageous in different contexts, and it has been associated with various organizational behaviors, including work engagement, leadership, job stress and work performance (Dåderman, Kajonius, Hallberg, Skog, and Hellström, 2023; Hjalmarsson and Dåderman, 2022; Gong et al., 2020; Lea, Davis, Mahoney, and Qualter, 2019).

However, the benefits of TEIQue go beyond promoting positive outcomes as it also plays a critical role in mitigating negative impacts like burnout. For instance, studies such as the one conducted by Taylor et al. (2024) in healthcare settings show that high scores on the TEIQue are linked to lower levels of burnout. This suggests that individuals with higher EI are better equipped to handle stress and emotional demands, thereby reducing the risk of burnout. As such, the TEIQue not only fosters positive work behaviors but also serves as a protective factor against the emotional strain and fatigue common in high-pressure environments.

Each of the EI models employs different methods for measuring EI. Detailed explanations of each model's measurement approaches will be provided below.

Measures of Emotional Intelligence

Assessing EI involves using diverse models and tools that shed light on how emotions impact thoughts and behaviors. Measurement approaches can be categorized into three main streams: ability-based assessments, self-report ability tests, and mixed models. Each stream offers a unique perspective on EI, ranging from evaluating cognitive-emotional abilities to capturing self-perceived emotional skills and integrating personality traits.

Stream 1: The Ability Model

Stream 1 is based on the ability model of EI (Bucich and MacCann, 2019), which defines EI as a set of cognitive-emotional abilities. In this approach, EI is measured using performance-based tests, where individuals are asked to solve emotion-related tasks, similar to how intelligence quotient (IQ) tests assess cognitive abilities.

The Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) is a widely recognized ability-based assessment of EI, grounded in the Four-Branch Model of EI (Mayer, Salovey, and Caruso, 2002; Mayer, Salovey, Caruso, and Sitarenios, 2003). It evaluates how individuals perceive, use, understand, and manage emotions through a series of objective, performance-based tasks. One major advantage of the MSCEIT is that it avoids the biases inherent in self-report methods, as it measures actual emotional abilities rather than self-perceptions. This makes it more reliable in providing a true assessment of emotional competencies, particularly in areas like decision-making, interpersonal relationships, and emotional regulation (Fiori et al., 2014).

Research by Nguyen, Nham, and Takahashi (2019) supports the robustness of the MSCEIT in objectively measuring EI. Their study investigates the relationship between ability-based EI, cognitive intelligence, and job performance, highlighting the MSCEIT's utility in providing an unbiased assessment of emotional abilities, which is crucial for accurately understanding EI's role in various psychological and organizational outcomes.

However, the MSCEIT also has some disadvantages. One common criticism is that it can be time-consuming and expensive, which may limit its practicality in large-scale or everyday applications (O'Connor et al., 2019). Moreover, the cultural bias in its items has been pointed out, with some researchers arguing that the test may not be equally effective across different cultural contexts, especially outside of Western societies (Maul, 2012). Additionally, while it is a robust tool for assessing ability EI, it does not account for the broader traits associated with EI that are included in other models, such as the mixed model of EI.

Stream 2: Self-Report Ability Test

Stream 2 also embraces the ability model, but the distinction lies in the measurement technique (Bucich and MacCann, 2019). Instead of relying on performance-based assessments, stream 2 employs self-report ability tests. In these tests, individuals evaluate their emotional abilities based on their perception of how well they can handle emotions. This approach assesses self-perceived EI rather than objective performance.

The Wong and Law Emotional Intelligence Scale (WLEIS) (Wong and Law, 2002) is a notable example used in Stream 2. This scale measures individuals' self-reported abilities in understanding and managing their emotions and the emotions of others. It is commonly used due to its ease of application and relevance in workplace contexts. The WLEIS is short, consisting of only 16 items, making it easy and quick to administer compared to more extensive tools like the MSCEIT. The WLEIS has been validated across various cultural contexts, including Asian countries, which makes it more adaptable than tools like the MSCEIT that have been criticized for cultural biases. Since it is a self-report instrument, it is relatively inexpensive compared to ability-based EI tests that require more resources for administration and scoring (Law, Wong, and Song, 2004).

Recent research by Pong and Leung (2023) further supports the adaptability of the WLEIS across different cultural contexts. Their study explored the relationship between trait EI and career adaptability among Chinese youths, using the WLEIS as a primary assessment tool. The findings indicated a positive association between all domains of trait EI measured by the WLEIS and career adaptability, highlighting the instrument's relevance and reliability in non-Western settings. This validation underscores the scale's utility in diverse cultural contexts and reinforces its practicality in both academic and workplace environments.

One major limitation of the WLEIS is that it relies on self-reporting, which can introduce bias (Joseph and Newman, 2010). Individuals may overestimate or underestimate their emotional abilities, leading to inaccurate results. Unlike the MSCEIT, which assesses EI through performance-based tasks, the WLEIS evaluates self-perceived emotional abilities, which may not always reflect actual emotional competence.

Stream 3: The Mixed Model

The mixed model of emotional intelligence (EI), as outlined in Stream 3, combines emotional abilities with personality traits (Bucich & MacCann, 2019). This model includes elements such as motivation, social competence, and various attributes linked to emotional functioning. A prominent tool based on this model is the Bar-On Emotional Quotient Inventory (EQ-i) (Bar-On, 1997). The EQ-i evaluates EI across five key domains: intrapersonal skills, interpersonal skills, stress management, adaptability, and general mood.

This makes it more comprehensive than ability-based models, offering insights into broader personality traits and how individuals manage emotions in everyday life. One major criticism of the EQ-i is that it blurs the lines between EI and personality traits. Researchers like Matthews, Zeidner, and Roberts (2002) have raised concerns that the EQ-i measures general personality factors rather than EI itself, which can lead to confusion about what is being assessed. The inclusion of traits such as optimism, independence, and self-actualization within the EQ-i framework stretches the definition of EI beyond its emotional core, mixing it with personal characteristics unrelated to emotional skills.

The Emotional Competence Inventory (ECI) is a comprehensive 360-degree assessment tool created by Daniel Goleman and Richard Boyatzis, rooted in Goleman's mixed model of emotional intelligence (Boyatzis & Goleman, 2007). This tool assesses emotional and social competencies essential for effective leadership and workplace performance. Drawing on Goleman's framework, the ECI evaluates key areas such as self-awareness, self-management, social awareness, and relationship management. It highlights emotional competencies as skills that can be cultivated and enhanced, reinforcing the idea that emotional intelligence is not fixed but can be developed over time.

A key strength of the ECI is its use of 360-degree feedback, which gathers evaluations from multiple perspectives, such as supervisors, peers, and subordinates (Haricharan, 2022). This comprehensive approach offers a more well-rounded and accurate view of an individual's emotional competencies, helping to minimize the biases often present in self-assessments. However, the process of collecting and analyzing feedback from multiple sources can be time-intensive, especially in larger organizations, potentially affecting the efficiency of its implementation.

One of the practical applications of EI models, as highlighted by Karimi et al. (2021), is their role in enhancing employee well-being and organizational outcomes. Their study found that EI not only predicts employee well-being and psychological empowerment but also contributes to higher quality of patient care in healthcare settings. This suggests that models like the EQ-i and ECI, despite their criticisms, can play a crucial role in fostering better performance and well-being, making them valuable tools for both personal and professional development in various sectors.

As shown in Table 1, the various EI models differ in their key features, measurement tools, strengths, and limitations, providing a comprehensive overview of the theoretical approaches to understanding EI.

Table 1: Comparison of Key Emotional Intelligence Models, Features, and Measurement Tools

Model	Authors	Key Features	Measurement Tools	Strengths	Limitations
Ability Model	Mayer and Salovey (1997)	Cognitive-emotional abilities (e.g., perceiving, understanding, regulating emotions)	MSCEIT	Performance-based and objective	Time-consuming; cultural biases
Emotional Competencies Model	Goleman (1995)	Combines cognitive and social competencies	ECI	Practical focus on leadership	Overlaps with personality traits
Emotional-Social Intelligence	Bar-On (1997)	Emotional and social adaptation, stress management	EQ-i	Comprehensive self-report tool	Blurs EI and personality traits
Trait Model	Petrides and Furnham (2000)	Self-perceived emotional abilities and behavioral dispositions	TEIQue	Integration with personality	Lacks connection to cognitive abilities

3. Methodology

This study adopts a narrative review methodology to evaluate and synthesize the prevailing theories, models, and assessment tools within the field of emotional intelligence (EI). The primary objective is to systematically examine and compare significant theoretical frameworks and measurement approaches, with a particular focus on their application in organizational settings. The literature review utilized key academic databases, including Scopus, Google Scholar, PsycINFO, and Web of Science, targeting peer-reviewed journal articles, books, and conference proceedings published between 1990 and 2023. Keywords such as Emotional Intelligence, Emotional Intelligence Models, Ability EI Model, Trait Emotional Intelligence, and Emotional Competence guided the search strategy. Foundational works, notably by Goleman (1995), Mayer and Salovey (1997), and Bar-On (1997), were prioritized due to their significant contributions to the discipline. The selection criteria emphasized literature relevant to the practical and organizational applications of EI. The collected materials were critically reviewed to elucidate key theoretical constructs, explore their practical relevance, and identify existing gaps for future research.

4. Results and Discussion

The measurement of the emotional intelligence (EI) construct has been a topic of ongoing discussion and debate (Mortillaro and Schlegel, 2023). Some researchers suggest that the method of measurement, rather than the theoretical framework, should guide the choice of the EI model being evaluated. In contrast, Nafukho, Muyia, Farnia, Kacirek, and Lynham (2016) emphasize that the selection of an EI model for training purposes in human resource development should be guided by the specific skills targeted, the methodology and duration of the training, and the type of assessment used. This highlights the importance of aligning the model choice with the practical requirements and objectives of the training context.

A critical decision for researchers and practitioners when integrating EI measures into their work is selecting the most suitable approach, whether to use an ability-based, mixed, or trait-based measure of EI (O'Connor et al., 2019). Goleman's Emotional Competencies Model offers practical insights into personal and professional effectiveness but is often termed "mixed models" due to their inclusion of constructs overlapping with personality traits (e.g., conscientiousness and optimism), emotion regulation skills (e.g., empathy, emotional control), and various performance outcomes (e.g., teamwork and leadership). Critics argue that this lack of theoretical clarity reduces the validity of these models. They note that such models fail to provide precise definitions, clear content, and well-defined boundaries, making the constructs overly flexible (Hughes and Evans, 2018).

Bar-On's Emotional-Social Intelligence Model emphasizes well-being and adaptability by combining emotional and social skills, but blurred distinctions between components and biases from self-report measures limit its clarity. The Trait Model by Petrides and Furnham integrates EI with personality traits, offering a broad perspective, but excluding cognitive elements may limit its empirical validation. Despite their unique focuses, each model's limitations highlight the need for a more comprehensive approach to fully understand EI.
Recent research by Mancini et al. (2022) supports this need for a more comprehensive understanding of EI. Their paper, titled "Emotional Intelligence: Current Research and Future Perspectives on Mental Health and Individual Differences," provides a detailed overview of the state of EI research. The authors discuss the confusion created by multiple EI models and measures, highlighting the inconsistencies and conflicting results that emerge from these varied approaches. They contrast the ability model, which focuses on measurable emotional abilities, with the trait model which assesses emotional perceptions through questionnaires.

Despite some researchers questioning the validity or usefulness of EI theory, its practical applications and benefits in the workplace have led to its widespread adoption in business settings. Many other researchers support and validate the importance of EI in individual and working environment success. The study by Urquijo, Extremera, and Azanza (2019) underscores the vital role of EI in the workplace. It reveals that EI significantly enhances job satisfaction, which is crucial for employee retention and overall workplace morale. By demonstrating that EI contributes to career success beyond traditional personality traits, the study highlights the added value of emotional competencies in professional development. Furthermore, the ability of employees with high EI to navigate workplace challenges effectively and maintain positive relationships fosters

a collaborative and productive work environment. The study also links EI to improved psychological well-being, suggesting that emotionally intelligent employees are better equipped to manage stress and maintain a positive outlook, thereby boosting performance and effectiveness at work.

Nguyen, Nham, and Takahashi (2019), highlight the importance of EI in the workplace and suggest that organizations should consider EI when hiring and developing employees. The study supports the idea that EI can enhance job performance by improving interpersonal relationships, decision-making, and stress management. Furthermore, EI contributes to essential workplace dynamics, including improved morale, teamwork, cooperation, motivation, and the creation of a positive organizational culture (Arfara and Samanta, 2016; Makkar and Basu, 2017; Perry and Clough, 2017; Rezvani, Barrett, and Khosravi, 2019; Trigueros et al., 2019). The capacity to effectively collaborate with colleagues and manage personal emotions has become a critical factor for individual and organizational success. Therefore, EI turns into an acceptable and appropriate theory in the organization. Selecting the right EI measurement tool requires balancing theoretical rigor, practical use, and the specific needs of the assessment.

To address these concerns, the authors recommend clearly defining the EI construct being studied and aligning it with appropriate measurement tools. They suggest using multiple methods, such as combining ability-based and self-report measures, to improve accuracy and focus on enhancing psychometric properties for better reliability and validity. For practitioners, caution is advised when interpreting EI assessments, especially self-reports, and they should avoid over-relying on EI for outcomes like job performance without considering other factors. The choice of EI measurement tools should align with the assessment's context and objectives.

5. Conclusion and Recommendations

It is important for researchers and practitioners to carefully select EI measurement tools that align with their specific objectives, whether they aim to assess emotional abilities, emotional traits, or both. To enhance the accuracy of EI assessments, it is recommended to combine different methods, particularly ability-based and self-report measures. Ability-based tools provide an objective assessment of how individuals handle emotional tasks, while self-report measures offer insights into personal perceptions of emotional traits, though these may be biased. By integrating both approaches, a balance can be achieved between objective performance and subjective emotional tendencies, thereby improving the reliability and validity of EI assessments. This comprehensive method provides a fuller understanding of EI, which is particularly useful in practical applications such as organizational training and leadership development where emotional skills and traits contribute to success.

In contemporary organizational psychology, a common approach is to integrate the ability EI model, which emphasizes emotional reasoning and cognitive processing, with the trait EI model, which evaluates emotional dispositions and self-perceived competencies. This combined approach is particularly useful in workplace assessments, as it addresses both emotional processing skills and self-regulation. For instance, a manager may be evaluated on their ability to regulate emotions during decision-making (ability EI) while also reflecting on their perceived emotional resilience and stress tolerance in high-pressure situations (trait EI). By combining these models, organizations can gain insights into both the cognitive and behavioral aspects of EI, leading to more informed assessments and interventions.

The 2022 study by Çağlar Doğru, titled “A Meta-Analysis of the Relationships Between Emotional Intelligence and Employee Outcomes” provides compelling evidence supporting this integrated approach. The study highlights that both ability EI and trait EI are positively associated with crucial employee outcomes, such as job satisfaction, job performance, organizational commitment, and organizational citizenship behavior while being negatively associated with job stress. By combining ability and trait EI models, organizations can achieve a more holistic understanding of an employee's EI, thereby leading to more effective assessments and interventions in the workplace (Doğru, 2022).

The Emotional Competencies model (Goleman) is frequently applied in leadership development programs, focusing on essential emotional and social skills such as empathy, motivation, and relationship management, which are critical traits for effective leadership. For example, Livesey (2017) emphasizes that project managers

who possess strong EI are better equipped to manage complex stakeholder relationships, foster team cohesion, and navigate the uncertainties of large projects. This reinforces the idea that Goleman's model not only contributes to general leadership development but also plays a critical role in more specific leadership contexts, such as managing large-scale projects with high complexity. On the other hand, the Emotional-Social model (Bar-On) is more suited for assessing team dynamics, as it emphasizes adaptability and interpersonal skills, which are key to collaboration and team performance. By combining these two models, organizations can develop comprehensive EI assessments that address both leadership development and team cohesion. This integrated approach enables organizations to use multiple EI frameworks, offering actionable insights into both individual and group emotional functioning, ultimately improving overall organizational performance.

Building on this integrated approach to EI, a recommended method for assessment is to first administer an ability-based test like the MSCEIT, which evaluates an individual's capacity to process and reason with emotional information objectively. Following this, participants could complete a self-report questionnaire, such as the TEIQue, to gather subjective data on their emotional experiences and self-perceived abilities. This combination of methods allows organizations to capture both actual emotional competencies and individuals' perceptions of their emotional abilities, ensuring a more holistic view of EI that supports both leadership development and team collaboration.

Promoting EI through evidence-based training modules and integrating it into educational and organizational strategies is essential for cultivating emotionally competent individuals and fostering resilient workforces. Policymakers should advocate for EI training programs grounded in empirical research and validated methods, focusing on key competencies such as emotional awareness, regulation, and interpersonal skills. Tailoring these modules to industry-specific needs ensures relevance and effectiveness. For example, healthcare workers can learn to manage emotional stress during patient care, educators can enhance teacher-student relationships, and corporate leaders can improve team dynamics and leadership. Embedding EI in organizational health and safety policies further aids in reducing workplace stress, improving collaboration, and preventing burnout, particularly in high-demand sectors like healthcare, education, and public services. These initiatives ultimately contribute to healthier, more adaptable workplaces that enhance employee well-being, job satisfaction, and organizational effectiveness.

Positioning EI as a core component of organizational strategies can foster resilience, innovation, and adaptability, especially in dynamic work environments. Incorporating EI assessments during recruitment and employee evaluations provides valuable insights into interpersonal and emotional skills, ensuring a better alignment between employees' competencies and organizational needs. Additionally, embedding EI in workplace health policies is crucial for mitigating stress and fostering psychological resilience. This becomes particularly important in high-pressure environments such as healthcare and education. As remote and hybrid work models gain prominence, EI training should address unique challenges like virtual team management, cross-cultural communication, and employee engagement. Furthermore, integrating EI development into educational curricula ensures students develop foundational emotional skills from an early age, preparing them for leadership roles and enabling them to navigate complex interpersonal relationships. By aligning organizational and educational policies with these recommendations, stakeholders can harness the transformative power of EI to drive innovation, enhance performance, and promote well-being across diverse workplaces and educational settings.

Conclusion and Future Research

This study provides significant insights into EI by thoroughly reviewing its theories, models, and assessment tools, with a particular focus on their applications in organizational settings. By synthesizing various EI models, the research clarifies the critical role that EI plays in leadership, team dynamics, and employee well-being. One of the key contributions of the study is its identification of practical strategies for selecting appropriate EI measurement tools to foster both personal and professional development. The findings offer valuable guidance for organizations and educators looking to incorporate EI into training and leadership programs. By implementing effective EI assessments, organizations can enhance essential emotional competencies, which are crucial for improving communication, conflict resolution, and productivity.

This study synthesizes various EI theories and models, such as the ability, trait, and mixed models, providing a unified framework for understanding EI's conceptual and practical aspects. It critically evaluates the strengths and limitations of popular assessment tools like the MSCEIT, TEIQue, and EQ-i, offering valuable guidance for researchers and practitioners on selecting appropriate measurement tools. The study emphasizes the importance of integrating EI assessments into workplace recruitment, training, and evaluation processes. It also proposes the inclusion of EI development in educational curricula, preparing future leaders to navigate complex interpersonal relationships and organizational challenges. By providing a comprehensive review of EI theories and applications, this study bridges the gap between theoretical frameworks and real-world organizational needs, aligning academic insights with practical applications.

From a policy standpoint, the study recommends integrating EI assessments into leadership development programs and educational curricula to cultivate emotional competencies in future leaders. Policymakers should consider developing frameworks that promote the use of evidence-based EI assessments for organizational training, leadership development, and employee well-being. Aligning EI training with organizational objectives can help create a healthier, more collaborative work environment, ultimately improving organizational performance.

By focusing on these contributions, the study highlights the importance of EI not just as a theoretical concept, but as a practical tool for enhancing workplace dynamics and leadership effectiveness. Future research should explore innovative methods for measuring EI across diverse settings, providing a broader understanding of its impact in various industries. Additionally, as artificial intelligence and digital technologies increasingly shape the workplace, there is a growing need to investigate how EI can be integrated into technology-driven environments. Future studies could examine how emotional competencies are utilized in virtual teams, remote work contexts, and AI-human interactions, and explore the development of technology-based EI assessments.

References

Arfara, C., and Samanta, I. (2016). The impact of emotional intelligence on improving team-working: The case of Public Sector. *Procedia - Social and Behavioral Sciences*, *230*, 167–175.

Bar-On, R. (1997). *Bar-On Emotional Quotient Inventory: Technical manual (EQ-i)*. Toronto, Canada: Multi-Health Systems.

Bar-On, R. (1997b). *The Emotional Quotient Inventory (EQ-i): A Test of Emotional Intelligence.* Toronto, Canada: Multi-Health Systems.

Bar-On, R. (2004). The Bar-On Emotional Quotient Inventory (EQ-i): Rationale, description, and summary of psychometric properties. In G. Geher (Ed.), *Measuring emotional intelligence: Common ground and controversy* (pp. 115–145). Hauppauge, NY: Nova Science Publishers.

Bar-On, R. (2006). The Bar-On model of emotional-social intelligence (ESI). *Psicothema*, *18*, 13–25.

Bar-On, R. (2007). The Bar-On model of emotional intelligence: A valid, robust and applicable EI model. *Organizations and People, 14*(2), 27–34.

Biju, A., Wanat, M. A., El-Desoky, R., Vu, C., and Varkey, D. (2023). Evaluation of student emotional intelligence at various points in a pharmacy curriculum. *Currents in Pharmacy Teaching and Learning, 15*(6), 573–580. https://doi.org/10.1016/j.cptl.2023.06.005

Boyatzis, R. E., and Goleman, D. (2007). *Emotional and social competency inventory*. The Hay Group (now Korn Ferry Hay Group).

Bucich, M., and MacCann, C. (2019). Emotional intelligence research in Australia: Past contributions and future directions. *Australian Journal of Psychology, 71(*1*),* 59–67. https://doi.org/10.1111/ajpy.12231

Chamizo-Nieto, M. T., Arrivillaga, C., Rey, L., and Extremera, N. (2021). The role of emotional intelligence, the teacher-student relationship, and flourishing on academic performance in adolescents: A moderated mediation study. *Frontiers in Psychology, 12*, Article 695067.

Cherniss, C., and Goleman, D. (2001). *The emotionally intelligent workplace: How to select for, measure, and improve emotional intelligence in individuals, groups, and organizations*. San Francisco, CA: Jossey-Bass.

Dåderman, A. M., Kajonius, P. J., Hallberg, A., Skog, S., and Hellström, Å. (2023). Leading with a cool head and a warm heart: Trait-based leadership resources linked to task performance, perceived stress, and work engagement. *Current Psychology, 42*, 29559–29580. https://doi.org/10.1007/s12144-022-03767-8

Doğru, Ç. (2022). A meta-analysis of the relationships between emotional intelligence and employee outcomes.

Frontiers in Psychology, 13, 611348. https://doi.org/10.3389/fpsyg.2022.611348

Fiori, M., Antonietti, J.-P., Mikolajczak, M., Luminet, O., Hansenne, M., and Rossier, J. (2014). What is the Ability Emotional Intelligence Test (MSCEIT) good for? An evaluation using item response theory. *PLoS ONE, 9*(6), e98827. https://doi.org/10.1371/journal.pone.0098827

Gardner, H. (1983). *Frames of mind: The theory of multiple intelligences*. New York, NY: Basic Books.

Goleman, D. (1995). *Emotional Intelligence: Why It Can Matter More Than IQ*. New York: Bantam Books.

Goleman, D. (1998). *Working with Emotional Intelligence*. New York, NY: Bantam Books.

Gong, Y., Wu, Y., Huang, P., Yan, and., and Luo, Z. (2020). Psychological empowerment and work engagement as mediating roles between trait emotional intelligence and job satisfaction. *Frontiers in Psychology, 11*, 232. https://doi.org/10.3389/fpsyg.2020.00232

Haricharan, S. J. (2022). Is the leadership performance of public service executive managers related to their emotional intelligence? *SA Journal of Human Resource Management/SA Tydskrif vir Menslikehulpbronbestuur, 20*(0), Article a1773. https://doi.org/10.4102/sajhrm.v20i0.1773

Hjalmarsson, A. K. V., and Dåderman, A. M. (2022). Relationship between emotional intelligence, personality, and self-perceived individual work performance: A cross-sectional study on the Swedish version of TEIQue-SF. *Current Psychology, 41*(5), 2558–2573. https://doi.org/10.1007/s12144-020-00753-w

Hsieh, C.-C., Li, H.-C., Liang, J.-K., and Chiu, Y.-C. (2024). Empowering teachers through principals' emotional intelligence: Unlocking the potential of organizational citizenship behavior in Taiwan's elementary schools. *Acta Psychologica, 243*, 104142. https://doi.org/10.1016/j.actpsy.2023.104142

Hughes, D. J., and Evans, T. R. (2018). Putting 'emotional intelligence' in their place: Introducing the integrated model of affect-related individual differences. *Frontiers in Psychology, 9*, 2155. https://doi.org/10.3389/fpsyg.2018.02155

Joseph, D. L., and Newman, D. A. (2010). Emotional Intelligence: An Integrative Meta-Analysis and Cascading Model. *Journal of Applied Psychology*, *95*(1), 54–78.

Karimi, L., Leggat, S. G., Bartram, T., Afshari, L., Sarkeshik, S., and Verulava, T. (2021). Emotional intelligence: Predictor of employees' wellbeing, quality of patient care, and psychological empowerment. *BMC Psychology, 9*(1), 93. https://doi.org/10.1186/s40359-021-00593-8

Landy, F. J. (2005). Some historical and scientific issues related to research on emotional intelligence. *Journal of Organizational Behavior*, *26*, 411.

Law, K. S., Wong, C. S., and Song, L. J. (2004). The construct and criterion validity of emotional intelligence and its potential utility for management studies. *Journal of Applied Psychology, 89*(3), 483-496.

Lea, R. G., Davis, S. K., Mahoney, B., and Qualter, P. (2019). Does emotional intelligence buffer the effects of acute stress? A systematic review. *Frontiers in Psychology, 1*, 810.

Livesey, P. V. (2017). Goleman-Boyatzis model of emotional intelligence for dealing with problems in project management. *Construction Economics and Building, 17*(1), 20-45. https://doi.org/10.5130/AJCEB.v17i1.5101

Nafukho, F. M., Muyia, M. H., Farnia, F., Kacirek, K., and Lynham, S. A. (2016). Developing emotional intelligence skills among practicing leaders: Reality or myth? *Performance Improvement Quarterly, 29*(1), 71–87. https://doi.org/10.1002/piq.21215

Makkar, S., and Basu, S. (2017). The Impact of Emotional Intelligence on Workplace Behaviour: A Study of Bank Employees. *Global Business Review*, *20*(2), 1–21.

Mancini, G., Biolcati, R., Joseph, D., Trombini, E., and Andrei, F. (2022). Emotional intelligence: Current research and future perspectives on mental health and individual differences. *Frontiers in Psychology, 13,* 1049431. https://doi.org/10.3389/fpsyg.2022.1049431

Matthews, G., Zeidner, M., and Roberts, R.D. (2002). *Emotional intelligence: Science and myth*. Cambridge, MA: The MIT Press.

Maul, A. (2012). The validity of the Mayer–Salovey–Caruso Emotional Intelligence Test (MSCEIT) as a measure of emotional intelligence. *Emotion Review, 4*(4), 394–402. https://doi.org/10.1177/1754073912445811

Mayer, J. D., Caruso, D. R., and Salovey, P. (2016). The Ability Model of Emotional Intelligence: Principles and Updates. *Emotion Review*, *8*(4), 290–300.

Mayer, J.D., Salovey, P., and Caruso, D.R. (2002). *Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT).* Toronto, Canada: Multi-Health Systems, Inc.

Mayer, J. D., Salovey, P., Caruso, D. R., and Sitarenios, G. (2003). Measuring emotional intelligence with the MSCEIT V2.0. *Emotion, 3*(1), 97–105. doi:10.1037/1528–3542.3.1.97

Mayer, J. D., and Salovey, P. (1997). What is Emotional Intelligence? In P. Salovey & D. J. Sluyter (Eds.), *Emotional development and emotional intelligence* (pp. 3–34). New York, NY: Basic Books.

Mortillaro, M., and Schlegel, K. (2023). Embracing the emotion in emotional intelligence measurement: Insights from emotion theory and research. *Journal of Intelligence, 11*(11), 210. https://doi.org/10.3390/jintelligence11110210

Namugumya, J., Munene, J. C., Mafabi, S. S., and Kagaari, J. (2023). Mediation role of systems adaptability between emotional intelligence and talent management in tertiary institutions. *Industrial and Commercial Training, 55*(2), 172-198. https://doi.org/10.1108/ICT-09-2022-0068

Nguyen, N. T., Nham, P. T., and Takahashi, Y. (2019). Relationship between ability-based emotional intelligence, cognitive intelligence, and job performance. *Sustainability, 11*(8), 2299. https://doi.org/10.3390/su11082299

O'Connor, P. J., Hill, A., Kaya, M., and Martin, B. (2019). The measurement of emotional intelligence: A critical review of the literature and recommendations for researchers and practitioners. *Frontiers in Psychology*, *10*(1116).

Payne, W. L. (1985). *A Study of Emotion: Developing Emotional Intelligence; Self-Integration; Relating to Fear, Pain and Desire*. The Union for Experimenting Colleges and Universities.

Perry, J. L., and Clough, P. J. (2017). Predicting cooperation in competitive conditions: The role of sportspersonship, moral competence, and emotional intelligence. *Psychology of Sport and Exercise*, *31*, 88–92.

Petrides, K. V. (2009). *Technical manual for the Trait Emotional Intelligence Questionnaires (TEIQue)*. London, England: London Psychometric Laboratory.

Petrides, K. V. (2010). Trait emotional intelligence theory. *Industrial and Organizational Psychology, 3*(2), 136–139. doi: 10.1111/j.1754-9434.2010.01213.x.

Petrides, K. V. (2011). Ability and trait emotional intelligence. In T. Chamorro-Premuzic, S. von Stumm, & A. Furnham (Eds.), *The Wiley-Blackwell Handbook of Individual Differences* (pp. 656-678). Wiley Blackwell.

Petrides, K.V. and Furnham, A. (2000). On the dimensional structure of emotional intelligence. Personality and Individual Differences, 29(2), 313–320.

Petrides, K. V., and Furnham, A. (2001). Trait Emotional Intelligence : Psychometric Investigation concerning Established Trait Taxonomies. *European Journal of Personality*, *15*, 425–448.

Pong, H.-K., and Leung, C.-H. (2023). Cross-sectional study of the relationship between trait emotional intelligence and career adaptability of Chinese youths. *BMC Public Health, 23*, 514. https://doi.org/10.1186/s12889-023-15372-w

Rezvani, A., Barrett, R., and Khosravi, P. (2019). Investigating the relationships among team emotional intelligence, trust, conflict and team performance. *Team Performance Management*, *25*(1/2), 120–137.

Salovey, P., and Mayer, J. D. (1990). Emotional Intelligence. *Imagination, Cognition & Personality*, *9*(3), 185–211.

Sánchez-Alvarez, N., Berrios Martos, M. P., and Extremera, N. (2020). A meta-analysis of the relationship between emotional intelligence and academic performance in secondary education: A multi-stream comparison. Frontiers in Psychology, 11, Article 1517.

Sehgal, S. (2023). Why emotional intelligence is crucial for effective leadership. *Forbes*. https://www.forbes.com/councils/forbesbusinesscouncil/2023/07/25/why-emotional-intelligence-is-crucial-for-effective-leadership/

Taylor, M. J., Andreatta, R., Woltenberg, L., Cormier, M., and Hoch, J. M. (2024). The relationship of emotional intelligence to burnout and related factors in healthcare profession students. *Nurse Education Today, 143*, 106387. https://doi.org/10.1016/j.nedt.2024.106387

Thorndike, E. L. (1920). Intelligence and its uses. *Harper's Magazine*, *140*, 227–235.

Trigueros, R., Aguilar-Parra, J. M., Cangas, A. J., Bermejo, R., Ferrandiz, C., and López-Liria, R. (2019). Influence of emotional intelligence, motivation and resilience on academic performance and the adoption of healthy lifestyle habits among adolescents. *International Journal of Environmental Research and Public Health*, *16*(2810), 1–12.

Urquijo, I., Extremera, N., and Azanza, G. (2019). The contribution of emotional intelligence to career success: Beyond personality traits. *International Journal of Environmental Research and Public Health*, *16*, 1–13.

Wechsler, D. (1939). *The measurement of adult intelligence*. Baltimore: Williams & Wilkins.

Wong, C. S., and Law, K. S. (2002). The effects of leader and follower emotional intelligence on performance and attitude: An exploratory study. *The Leadership Quarterly*, *13*(3), 243–274.

Information Management and Business Review (IMBR)
Vol. 16, No. 4, Dec 2024 (ISSN 2220-3796)

Rationale for Selecting Taiping, Perak as a Study Location for Ageing: A Conceptual Framework for Age-Friendly Cities

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Abstract: This conceptual paper explores the rationale for selecting Taiping, Perak, Malaysia, as a study location for ageing research within the framework of the World Health Organization's (WHO) Age-Friendly Cities and Communities (AFCC). Taiping's rich historical and demographic context and designation as the pilot site for Malaysia's Age-Friendly City initiative in 2019 highlight its potential as a model for studying ageing in place. This research aims to analyse Taiping's unique characteristics, such as its ageing population, urban design, and social structures, to evaluate its readiness to meet the needs of older adults. The study highlights key factors influencing Taiping's selection, including community support systems, social participation opportunities, accessible infrastructure, and alignment with WHO's eight AFCC domains. Preliminary findings suggest that while Taiping exhibits promising features, such as strong community engagement and a well-preserved historical environment, gaps remain in integrating age-friendly practices and policies. This paper addresses these gaps by proposing a conceptual framework tailored to Taiping's context, aiming to enhance urban planning and policy development for ageing populations. By doing so, it contributes to the global discourse on age-friendly urban environments and offers practical implications for policymakers in Malaysia and beyond.

Keywords: *Ageing, Age-friendly city, Ageing in place, Taiping*

1. Introduction

The global population is ageing at an unprecedented pace, presenting significant challenges and opportunities for urban planning and community development. According to the United Nations (2020), the number of individuals aged 60 years and older is expected to double from 1 billion in 2019 to 2.1 billion by 2050. This demographic shift highlights the urgent need for age-friendly cities that promote the well-being of older adults, allowing them to age in place while maintaining their independence and quality of life (World Health Organization, 2020). The Global Age-Friendly Cities guidelines defined ageing in place as a home located close to services and facilities (World Health Organization, 2007), such that an affordable service is provided for older people to enable them to remain at home. As cities worldwide address these issues, establishing effective frameworks that can adapt to local contexts is crucial for enhancing the lives of older adults.

In Malaysia, Perak has the highest proportion of older adults among the states, with 14.9% of its population aged 60 and above (Department of Statistics Malaysia, 2024). Malaysia's elderly population is projected to reach 15% by 2030, marking its transition into an ageing society. Within Perak, Larut dan Matang, where Taiping is situated, stands out, with 11.2% of its population aged 65 and above, surpassing the state average of 9.9% (Department of Statistics Malaysia, 2024). Additionally, a recent survey revealed that over 60% of Taiping's elderly residents rely on community services for their daily needs (Taiping Municipal Council, 2023). These statistics underscore the pressing need to develop targeted frameworks to enhance their well-being. This demographic trend also raises important questions about how the unique characteristics of Taiping can contribute to the development of effective age-friendly initiatives.

This increase also raises critical questions regarding how the unique characteristics of Taiping can inform age-friendly initiatives. However, despite the growing body of literature on ageing in place, there is limited research that specifically investigates the rationale for selecting Taiping as a study location for ageing. Understanding these reasons is essential for developing context-specific frameworks that address the needs and challenges of Taiping's ageing population.

The primary objective of this research is to identify the reasons behind the selection of Taiping as a location for ageing studies. This investigation will explore the historical, cultural, and social factors that contribute to Taiping's suitability as a focal point for research on ageing. By addressing this objective, the study aims to provide valuable insights that can inform future ageing-related research and policy decisions, ultimately supporting the development of age-friendly initiatives tailored to local needs.

Despite the increased attention to age-friendly cities, a significant research gap exists concerning the justification for choosing specific locations, such as Taiping, for ageing studies. Much of the existing literature focuses on age-friendly practices and policies in urban areas without thoroughly examining the unique contextual factors that make particular locations ideal for such studies. This gap in the literature highlights the need for a focused exploration of Taiping's characteristics, resources, and community dynamics that contribute to its selection as a relevant site for ageing research.

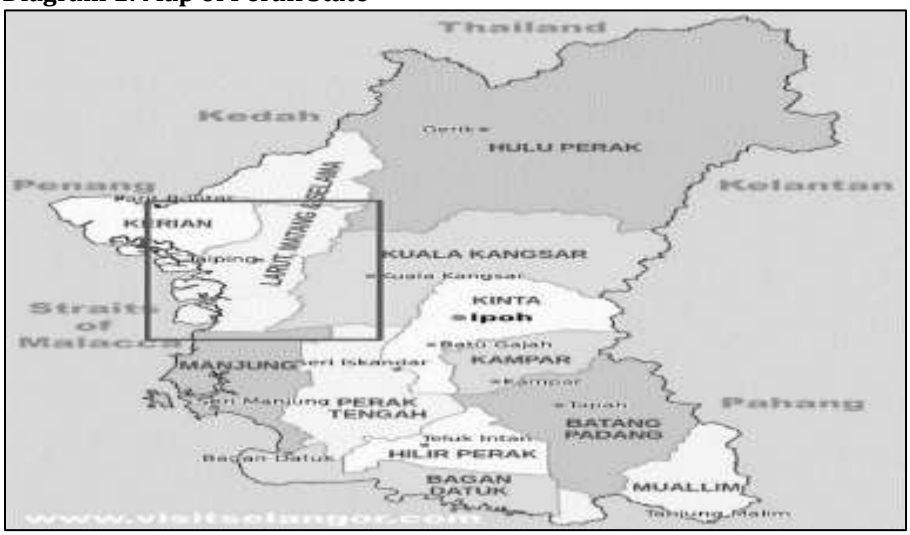
2. Research Methodology

This conceptual paper employs a qualitative approach, focusing on secondary data analysis to explore the rationale for selecting Taiping as a study location for ageing research. The study draws on existing literature, official reports, and demographic statistics, particularly those from the Department of Statistics Malaysia and the Taiping Municipal Council. By examining historical, cultural, and social factors, the research aligns Taiping's characteristics with the World Health Organization's Age-Friendly Cities and Communities framework. This method provides a comprehensive understanding of the contextual factors contributing to Taiping's relevance in ageing research and policy development.

3. Literature Review

Taiping Background: Taiping, a historical town located in Perak, Malaysia, has long been recognized for its rich cultural heritage and natural beauty. Established during the tin mining boom in the 19th century, Taiping is home to a variety of colonial-era architecture and lush landscapes, including one of the country's oldest public parks, Taiping Lake Gardens. The town's strategic location and unique climatic conditions have contributed to its development, making it a significant cultural and economic hub in the region.

Diagram 1: Map of Perak State



Sources: Google images

By referring to Diagram 1, Perak is divided into twelve districts, and Taiping is a city located in the Larut, Matang, and Selama districts of Perak, Malaysia. The district of Larut, Matang, and Selama is the largest in the state of Perak, covering a land area of 151,104.03 hectares or 170 square kilometres, comprising three sub-districts: Larut, Matang, and Selama. The district borders the district of Kerian to the northwest, Kuala Kangsar

to the east, Manjung to the south, and Hulu Perak to the northeast. The administrative centre of this district is located in Taiping, which is among the earliest towns in Malaysia and the second-largest city in Perak after Ipoh, the state capital (Taiping Municipal Council, 2021).

Table 1: Population of Perak, 2024

Administrative District	Total Population ('000)	Population aged 65 years and over
Perak	2,569.6	9.9%
Batang Padang	126.7	10.3%
Manjung	255.0	7.8%
Kinta	923.3	10.4%
Kerian	169.6	9.6%
Kuala Kangsar	180.0	9.7%
Larut dan Matang	278.2	11.2%
Hilir Perak	141.9	11.4%
Hulu Perak	98.3	8.3%
Perak Tengah	98.7	7.8

Sources: Department of Statistics Malaysia, 2024

Additionally, Taiping's population has shown a consistent growth trend, particularly among older adults, positioning it as an important site for examining ageing-related issues. Table 2 presents the population data of Perak in 2024, highlighting the percentage of individuals aged 65 years and over across various districts. With a total population of approximately 2.57 million, 9.9% of the population in Perak falls into the ageing category. This makes Perak an "ageing society," where 7% or more of the population is aged 65 or older (Department of Statistics Malaysia, 2024). Other than Hilir Perak (11.4%), Larut dan Matang, where Taiping is located, has 11.2% of its population aged 65 years and over, which is higher than the state average. This indicates that Larut dan Matang, and consequently Taiping, has a significant ageing population.

Overall, this data highlights a prominent trend of ageing within Perak, with Larut and Matang demonstrating a particularly high concentration of older adults. Understanding Taiping's historical context and demographic shifts is crucial for addressing the needs of its ageing population and creating effective age-friendly initiatives.

Selection of Taiping as the First Phase of the Age-Friendly City Pilot Project in 2019: The state of Perak has shown its commitment to fostering age-friendly environments, with two of its cities, Taiping and Ipoh, taking the initiative by submitting commitment letters to the WHO in 2019 and actively preparing their communities to be age-friendly. As a matter of fact, in Taiping, several local initiatives such as age-friendly neighborhoods, community voluntary projects, and age-friendly buses have been developed to enhance urban living conditions in line with age-friendly principles (World Health Organization, n.d.).

In 2019, Taiping was chosen to implement the first phase of Malaysia's Age-Friendly Cities pilot project (The Star, 31 October 2019), and Taiping City was selected after the Taiping Municipal Council fulfilled various World Health Organization's criteria to achieve the status within five years. Furthermore, the UNDP drafted a pilot project to establish Age- age-friendly city status (World Health Organization, n.d.). In the same year, the government also received an injection of funds from the UNDP to start a comprehensive study on Taiping's current status as an age-friendly city by the international guidelines issued by the World Health Organization (The Star, 31 October 2019).

The pilot project aims to create environments that enable older adults to live independently and actively participate in their communities. Taiping's selection reflects its commitment to improving the quality of life for seniors, addressing key factors such as accessibility, mobility, and social engagement. The project is aligned with global initiatives, including the World Health Organization's Age-Friendly Cities framework, which emphasizes the importance of local adaptations to meet the unique needs of older populations. The successful implementation of this pilot project in Taiping could provide valuable insights and frameworks that can be replicated in other Malaysian towns facing similar challenges.

Ageing in Place in Taiping: In Malaysia, the percentage of the ageing population in Perak is the highest at 14.9% compared to the other states (Department of Statistics Malaysia, 2024). Ageing in place is a crucial aspect of creating supportive environments for older adults in Taiping. Many retirees choose to reside in Perak because it does not appear to be overcrowded, despite being a large state (The Star, 4 November 2018).

Several factors contribute to the suitability of Taiping as a location for ageing in place, including its strong sense of community, existing social networks, and availability of essential services. Research indicates that older adults who can remain in their communities experience better mental health and overall well-being, emphasizing the importance of supportive environments. The role of the state government and local authorities in prioritizing a variety of initiatives should, therefore, include the construction of new structures and facilities as well as upgrading and repairing existing ones (The Star, 17 February 2022). Furthermore, Taiping's rich cultural heritage and natural resources offer opportunities for older adults to engage in recreational activities, fostering social connections that are vital for their quality of life.

Previous studies on ageing in Taiping

Table 2: Previous studies on ageing

Author(s)	Year	Title	Methodology	Key Findings
Ismail, S., Abdulkaareem Salih, S., Zainal Abidin, I., et al.	2022	Observing the factors affecting the development of age-friendly cities in Malaysia	Mixed methods: surveys and interviews with stakeholders in urban planning	Identified key factors such as accessibility, healthcare, and social inclusion crucial for the success of age-friendly cities.
Rashid, K., Mohamed, T., Azyze, S. N. A. E., & Ismail, H.	2022	Determining elderly-friendly features based on an age-friendly city approach: Empirical analysis	Survey and empirical analysis in Taiping and Ipoh, Malaysia	Identified essential features like public transportation and healthcare services that need enhancement for elderly residents.
Ali, W. N. A. W., Hussain, N. H. M., Nayan, N. M., et al.	2022	The Preferences and Requirements of Green Garden Retirement Care of the Elderly: Case Study at RSK Taiping	A case study focusing on the retirement care facility at RSK Taiping	Highlighted preferences for green space and community interaction in elderly care facilities.
Marzuki, A. A., Nor, N. N. F. M., & Rashid, S. M. R. A.	2021	Aging Population Trend in the State of Perak, Malaysia	Quantitative analysis of demographic data from Perak, focusing on ageing population trends	Taiping is a significant location for ageing studies due to its growing elderly population, which requires better planning.
Armugam, T. C., & Vellymalay, S. K. N.	2017	Dorongan penempatan dan keselesaan diri warga tua di Rumah Seri Kenangan (RSK), Taiping, Perak	Qualitative interviews with residents of Rumah Seri Kenangan (RSK)	Elderly residents felt comfortable in RSK due to the support system, but improvements in facilities were necessary.

Table 2 summarizes past studies on ageing in Taiping, Malaysia, highlighting various aspects of the elderly's needs and the development of age-friendly cities. Ismail et al. (2022) conducted mixed-methods research, combining surveys and interviews with urban planning stakeholders, to reveal that accessibility, healthcare, and social inclusion are crucial factors in creating successful age-friendly cities. Similarly, Rashid, Mohamed, Azyze, and Ismail (2022) performed surveys and empirical analyses in Taiping and Ipoh, identifying essential

features such as public transportation and healthcare services that require improvement to better serve the elderly population. Ali et al. (2022) focused on the preferences and requirements of green garden retirement care at the RSK Taiping facility through a case study, emphasizing the importance of green spaces and fostering community interaction for elderly well-being.

Marzuki, Nor, and Rashid (2021) provided a quantitative analysis of Perak's demographic data, showcasing Taiping as a critical location for ageing studies due to its increasing elderly population, which necessitates comprehensive urban and social planning. Lastly, Armugam and Vellymalay (2017) conducted qualitative interviews with residents of Rumah Seri Kenangan (RSK) in Taiping, discovering that while the residents appreciated the supportive environment, there was a need for enhanced facilities to improve their quality of life. These studies collectively highlight the importance of tailored strategies to foster age-friendly and supportive environments for the elderly in Taiping (Ismail et al., 2022; Rashid et al., 2022; Ali et al., 2022; Marzuki et al., 2021; Armugam & Vellymalay, 2017).

Linking WHO's age-friendly city framework to the selection of Taiping as an ageing study location: The concept of age-friendly cities and communities, as championed by the World Health Organization, underscores the importance of creating environments that cater to the well-being, active participation, and dignity of older adults (World Health Organization, 2007). These environments are designed based on eight key domains—such as transportation, housing, and community support—that collectively work to promote inclusivity and support the ability of older individuals to age in place (Buffel et al., 2022).

The selection of Taiping as a study location for ageing is deeply connected to these principles due to its distinct demographic profile and historical significance. Taiping's relatively high proportion of older residents and its involvement in age-friendly pilot projects make it an ideal case study for assessing the implementation of age-friendly strategies (Awang et al., 2024). Furthermore, Taiping's cultural and historical landscape provides a valuable context for exploring how traditional elements can coexist with modern urban planning to meet the needs of ageing populations. This blend of old and new highlights the town's capacity to serve as a practical model for localizing the WHO's age-friendly city framework (Yusof & Yasin, 2023).

Research in Taiping can provide insight into the effectiveness of age-friendly measures by evaluating which of the WHO's domains have been successfully integrated and which require further development. For instance, studies can examine how accessible public spaces and healthcare services are for older adults, as well as the adequacy of community programs that encourage social participation (Rashid et al., 2022). The practical assessments and outcomes in Taiping can inform broader regional and national strategies for developing age-friendly environments in other cities, especially in similar middle-income contexts (Chang et al., 2022).

Therefore, Taiping's relevance as a study location highlights how WHO's guidelines can be adapted and tested at a local level, illustrating the successes and challenges in building age-friendly cities. This localized approach offers valuable lessons for shaping policies, improving elder support services, and fostering inclusive practices aimed at enhancing the quality of life for older adults (Ismail et al., 2022).

4. Conceptual Framework

Figure 2: A Conceptual Framework of Selecting Taiping as a Study Location for Ageing

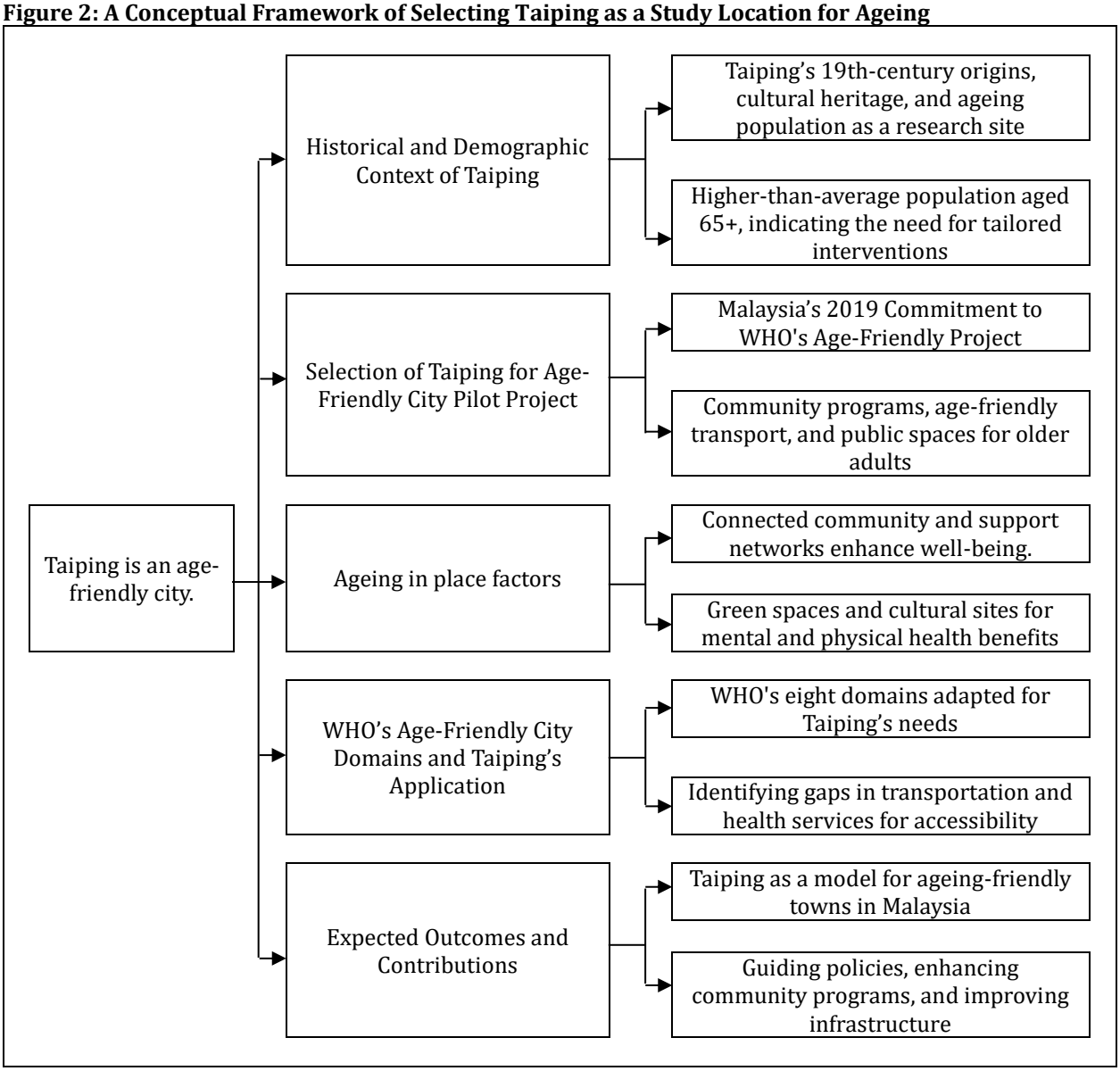


Figure 4 highlights several interconnected components that align the city's unique historical and demographic context with age-friendly principles. Taiping's origins in the 19th century and its rich cultural heritage establish it as an influential research site, particularly as the town now has a significantly high proportion of residents aged 65 and older (Department of Statistics Malaysia, 2023). This demographic shift calls for tailored ageing interventions to address older adults' unique needs and challenges. Recognizing this, Malaysia joined the WHO's Age-Friendly City initiative in 2019, designating Taiping as a pilot city where age-friendly infrastructure and services, such as community programs, accessible transport, and public spaces, have been progressively implemented.

The concept of ageing in place in Taiping is strongly supported by robust community networks that promote well-being and provide access to essential social structures. These networks, combined with Taiping's abundant green spaces and cultural heritage, offer significant mental and physical health benefits, underscoring the importance of accessible environments in fostering effective community-based care. Ismail et al. (2020)

highlight that social engagement plays a vital role in enhancing the quality of life for older adults. Regular interactions within the community help reduce social isolation, improve overall well-being, and reinforce the ageing-in-place approach.

The age-friendly framework in Taiping incorporates WHO's eight domains, including housing, transportation, and health services, which have been tailored to address the town's specific needs. While some domains, such as housing and community engagement, are well-developed, challenges remain in areas like public transportation and healthcare accessibility. According to Ismail et al. (2020), limited facilities, long waiting times, and affordability issues pose significant barriers for older adults seeking healthcare services in Malaysia. Additionally, universal design concepts, such as accessible housing and environments, have gained traction in Malaysia, offering promising strategies to meet the needs of the ageing population. Tobi et al. (2017) suggest that integrating these concepts into urban planning has yielded positive outcomes, although further improvements are needed. Taiping's age-friendly initiatives present a scalable model for other towns in Malaysia with ageing populations, providing valuable insights for policymakers. These insights can inform the development of community programs, infrastructure improvements, and inclusive urban environments that better support the well-being of older adults.

5. Conclusion

This study has highlighted the critical role of Taiping's historical and demographic context, its selection for the Age-Friendly City Pilot Project, ageing-in-place factors, WHO's age-friendly city domains, and Taiping's application and expected contributions in shaping the well-being of its ageing population. Key findings reveal that Taiping is highly relevant as a location for ageing studies in Malaysia, offering a unique landscape for exploring ageing-in-place dynamics as Malaysia's first age-friendly city. These insights contribute to the age-friendly model by providing a nuanced understanding of how environmental factors impact the quality of life for elderly individuals. Theoretically, this study enriches the existing framework by validating the implementation of WHO's age-friendly city domains within the local context of Taiping.

Practically, the findings suggest actionable strategies for policymakers, such as enhancing social infrastructure and designing community programs tailored to ageing populations, promoting healthier, more connected lives for elderly individuals and potentially reducing strain on healthcare systems. This alignment with WHO's domains not only demonstrates the adaptability of global frameworks but also reinforces the argument for integrating age-friendly concepts into nationwide urban planning. While these findings offer valuable guidance, further research is needed to examine the long-term impacts of these interventions on the elderly's wellbeing and to explore similar applications in other Malaysian regions, enhancing the robustness of the age-friendly city model within diverse socio-cultural landscapes.

This study offers significant theoretical and practical contributions by contextualising the WHO's Age-Friendly Cities framework within the Malaysian context, specifically in Taiping. It provides valuable insights for urban planners and policymakers to address gaps in infrastructure, healthcare, and social services. The findings support the development of sustainable, scalable age-friendly models that can guide national policies and future research. Policymakers are encouraged to leverage this study to design integrated, community-focused strategies that enhance the quality of life for older adults while ensuring the inclusivity and sustainability of urban environments.

References

Ali, W. N. A. W., Hussain, N. H. M., Nayan, N. M., Abdullah, M., & Teh, M. Z. (2022). The preferences and requirements of green garden retirement care of the elderly: A case study at RSK Taiping, Perak, Malaysia. *Planning Malaysia*, *20*.

Armugam, T. C., & Vellymalay, S. K. N. (2017). Dorongan penempatan dan keselesaan diri warga tua di Rumah Seri Kenangan (RSK), Taiping, Perak. *e-BANGI*, *12*(1), 90-110.

Awang, H., Lung, T. C., Rashid, N. F. A., Mansor, N., Yoong, T. L., & Subbahi, K. F. (2024). Preparedness to age in place among older adults in Malaysia. *Ageing International*, 1–16.

Buffel, T., Handler, S., & Phillipson, C. (2018). *Age-friendly cities and communities*. Policy Press: Bristol, UK.

Chang, C. T., Lim, X. J., Supramaniam, P., Chew, C. C., Ding, L. M., & Rajan, P. (2022). Perceived gap of age-friendliness among community-dwelling older adults: Findings from Malaysia, a middle-income country. *International Journal of Environmental Research and Public Health, 19*(12), 7171. https://doi.org/10.3390/ijerph19127171

Department of Statistics Malaysia. (2023). *Demographic statistics of Malaysia 2023*. Department of Statistics Malaysia.

Department of Statistics Malaysia. 2024. *Perak: Principal Statistics of Population, Administrative District.* https://www.dosm.gov.my/portal-main/release-content/current-population-estimates-by-administrative-district-

Department of Statistics Malaysia. 2024. *Selamat Menyambut Hari Warga Emas Kebangsaan 2024*. https://www.facebook.com/photo?fbid=945958757564129&set=a.228653445961334

Ismail, H., Halil, F. M., Abidin, A. W. Z., & Hasim, M. S. (2020). Ageing in Place or Late Life Move? The Malaysian elderly generation housing options. *Asian Journal of Behavioural Studies*, *5*(18), 1-17.

Ismail, S., Abdulkaareem Salih, S., Zainal Abidin, I., Hamid, T. A., Syed Abdul Rashid, S. N., Ahmad, S. A., & Ibrahim, R. (2022). Observing the factors affecting the development of age-friendly cities in Malaysia. In *1st International e-Conference on Green and Safe Cities 2022* (pp. 582–596).

Marzuki, A. A., Nor, N. N. F. M., & Rashid, S. M. R. A. (2021). Aging Population Trend in the State of Perak, Malaysia. *Quantum Journal of Social Sciences and Humanities*, *2*(5), 1-9.

Rashid, K., Mohamed, T., Azyze, S. N. A. E., & Ismail, H. (2022). Determining elderly-friendly features based on an age-friendly city approach: An empirical analysis on local perspective in Taiping and Ipoh, Malaysia. *Planning Malaysia, 20*, 1–15.

Taiping Municipal Council. n.d. *Info Taiping*. https://www.mptaiping.gov.my/index.php/en/

Taiping Municipal Council. (2023). *Community services report: Elderly care and support in Taiping*. https://www.mptaiping.gov.my/index.php/en/

The Star. 17 February 2022. Perak is at the forefront of elderly welfare. https://www.thestar.com.my/news/nation/2022/02/17/perak-at-the-forefront-of-elderly-welfare

The Star. 31 October 2019. Taiping was picked for the Age-Friendly City pilot project. https://www.thestar.com.my/news/nation/2019/10/31/taiping-picked-for-age-friendly-city-pilot-project

The Star. 4 November 2018. Retirees flock to Perak, making it the nation's 'oldest state'. https://www.thestar.com.my/news/nation/2018/11/04/retirees-flock-to-perak-making-it-nations-oldest-state

Tobi, S. U., Fathi, M. S., & Amaratunga, D. (2017, October). Ageing in place, an overview for the elderly in Malaysia. In *AIP conference proceedings* (Vol. 1891, No. 1). AIP Publishing.

United Nations. (2020). *World population ageing 2020: Highlights*. United Nations Department of Economic and Social Affairs.

World Health Organization, n.d, *Taiping*, https://extranet.who.int/agefriendlyworld/network/taiping/

World Health Organization. (2007). Global age-friendly cities: A guide. In World Health Organization. http://www.who.int/ageing/publications/Global_age_friendly_cities_Guide_English.pdf

World Health Organization. (2020). Decade of healthy ageing: Baseline report. World Health Organization. https://www.who.int/publications/i/item/9789240017900

Yusof, N. M., & Yasin, S. M. (2023). Enablers and barriers to the realization of an age-friendly environment in Malaysia: A thematic review. *Malaysian Journal of Sustainable Environment, 10*(2), 231–254. https://doi.org/10.24191/myse.v10i2.21103

Information Management and Business Review (IMBR)
Vol. 16, No. 4, Dec 2024 (ISSN 2220-3796)

Examining the Intersection of Civil Society and Democratization: A Bibliometric Analysis

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Abstract: This study critically examines the dynamic interplay between civil society and democratization using a bibliometric analysis. The analysis is based on 461 scholarly articles published between 1977 and 2024 in the Scopus database. The data analysis was performed using Harzing Publish or Perish and VOSviewer to identify publication trends, key contributors, research impact, and emerging clusters in the field. The findings reveal that research on civil society and democratization has shown an increasing trajectory over the past decade, with the United States of America as a prominent contributor to the study. Through keyword analysis, several avenues for future exploration in civil society and democratization have been proposed. These avenues include comparative research on civil society, exploring digital transformation and civil society, investigating civil society's involvement in climate change governance and global migration, and integrating interdisciplinary approaches to better understand the challenges and opportunities for civil society in contemporary political environments.

Keywords: *Civil society, Social movements, Democracy, Democratization, Bibliometric Analysis.*

1. Introduction

The role of civil society in democratization is increasingly critical in a world where political systems are undergoing rapid changes. Civil society consists of a variety of organizations, groups, and associations that function autonomously from the government and are voluntarily formed by citizens to achieve shared goals (Phatharathananunth, 2006). These entities include non-governmental organizations (NGOs), labor unions, advocacy groups, and professional associations, all of which contribute to shaping public discourse and policy. They can influence political power by advocating for democratic governance, holding authorities accountable, and fostering public participation in political processes (White, 1994; Boutros-Ghali, 1996).

Understanding the role of civil society in democratic transitions is essential, as it highlights how grassroots organizations contribute to shaping the political landscape. Acting as intermediaries, civil society organizations (CSOs) facilitate communication between citizens and the state, advocate for public interests, and monitor government actions to ensure transparency and accountability (Criado et al., 2018; Schrama & Zhelyazkova, 2018). This mediating role is crucial for fostering democratic engagement and ensuring that the voices of citizens are heard in the political process. Given the importance of civil society in driving democratic transitions, it is crucial to review existing research in this area and identify key directions for future studies.

Hence, this study aims to perform a bibliometric analysis of the literature on civil society and democratization. Through this approach, the study provides a comprehensive understanding of the current state of knowledge, identifies key gaps in the literature, and suggests avenues for future research (Ahmi & Mohamad, 2019; Ahmi & Mohd Nasir, 2019). Specifically, the study will address the following research questions (RQs): (1) What are the publication trends in civil society and democratization research? (2) Who are the leading contributors to this field of study? (3) What are the emerging themes in literature?

The remainder of this paper is organized as follows. Section 2 presents the literature review, followed by the

methodology outlined in Section 3. Section 4 presents the results and corresponding discussions, and Section 5 offers concluding remarks and recommendations.

2. Literature Review

The role of civil society in democratization is multifaceted and complex, garnering substantial scholarly attention over the years. At the core of this discourse is the argument that civil society fosters political participation and civic engagement, thereby strengthening democratic practices. Moura et al. (2022) emphasize the empowering potential of public consultation processes, which enhance citizens' voices in political decision-making and deepen their understanding of public priorities. In this context, civil society serves as both a beneficiary of and a support structure for democratic institutions (Uhlin, 2009). Similarly, Saab et al. (2019) highlight social participation as a cornerstone of democracy, enabling citizens to influence political decisions and engage with governance systems. As a result, a vibrant civil society contributes to democratic resilience (Lewis, 2002).

However, according to Simsa (2019), the effectiveness of civil society in promoting democracy is contingent upon the political environment in which it operates. Civil society organizations are more resilient and impactful when they function within favorable political frameworks that encourage cooperation with the state. This perspective underscores the importance of contextual factors in determining the success of civil society initiatives. In environments where political repression is prevalent, civil society may struggle to fulfill its democratic role, as evidenced by the challenges faced by civil society in transitional democracies like Kenya (Okowa, 2015).

Besides that, a study done by Jaysawal (2013) reveals that civil society can serve as an arena for leadership development, particularly among youth who may be disenchanted with traditional political parties. This aspect of civil society is vital for nurturing a new generation of civic leaders who can contribute to democratic governance. Furthermore, Çakmak & Taşkiran (2020) explored the roles of civil literacy and highlighted the importance of civil society in enhancing democratic engagement by equipping citizens with the knowledge and skills necessary for active participation. Beyond participation, civil society advocates for social justice and equity. For example, Hearn's (2001) study highlights how civil society in Africa is often portrayed as a site of resistance and progressive politics, where individuals organize to improve their lives and challenge oppressive structures. Moreover, the ability of civil society to address social inequalities and advocate for marginalized groups is essential for achieving inclusive democratic governance (Tusalem, 2007).

The interplay between civil society and political parties is another important dimension of this discourse. While civil society organizations can complement the work of political parties by mobilizing citizens and advocating for policy changes, they may also face challenges in establishing productive relationships with these entities. Udzhmadzhuridze et al. (2019) argue that a well-developed civil society indicates a robust political culture, where civic engagement and volunteerism flourish, contributing to overall political participation. However, the relationship is not always harmonious, as civil society organizations may struggle to maintain their independence while engaging with political parties (Mexhuani & Rrahmani, 2017).

Additionally, digital technologies have dramatically transformed both the concept of civil society and how it contributes to democratization processes (Beissinger, 2017). Additionally, digital technologies have dramatically transformed both the concept of civil society and how it contributes to democratization processes. To Howard and Hussain (2011) social media played a substantial role in shaping communication and organization among activists, enabling them to spread their messages and gain recognition not only nationally but also internationally. For instance, social media became the primary driver of the #EndSARS movement in Nigeria, which demanded police reforms and accountability, eventually spreading across the country and beyond (Omeni, 2022). Similarly, during the 2021 military coup in Myanmar, pro-democracy activists relied on digital platforms to organize civil disobedience, raise awareness, and secure international support (Faxon et.al, 2023). These examples illustrate the capacity of digital technology to amplify civil society's efforts to challenge repressive regimes in real time.

Recent studies offer fresh perspectives on civil society's evolving role in democratization. For instance, Davis and Zhang (2023) argue that when political parties are incapacitated and authoritarian mobilization is prevalent, the positive impacts of civil society on democracy are significantly diminished. This finding aligns with Simsa's (2019) argument that civil society's effectiveness is heavily contingent on the political environment in which it operates, highlighting the need for robust institutional support to counteract the influence of authoritarian regimes. In contrast, Baxter et al. (2024) examine civil society leaders' perspectives on democratic processes. The study reveals a paradox, despite robust civil society frameworks in the countries studied, leaders express concerns about the efficacy of democracy in representing their interests.

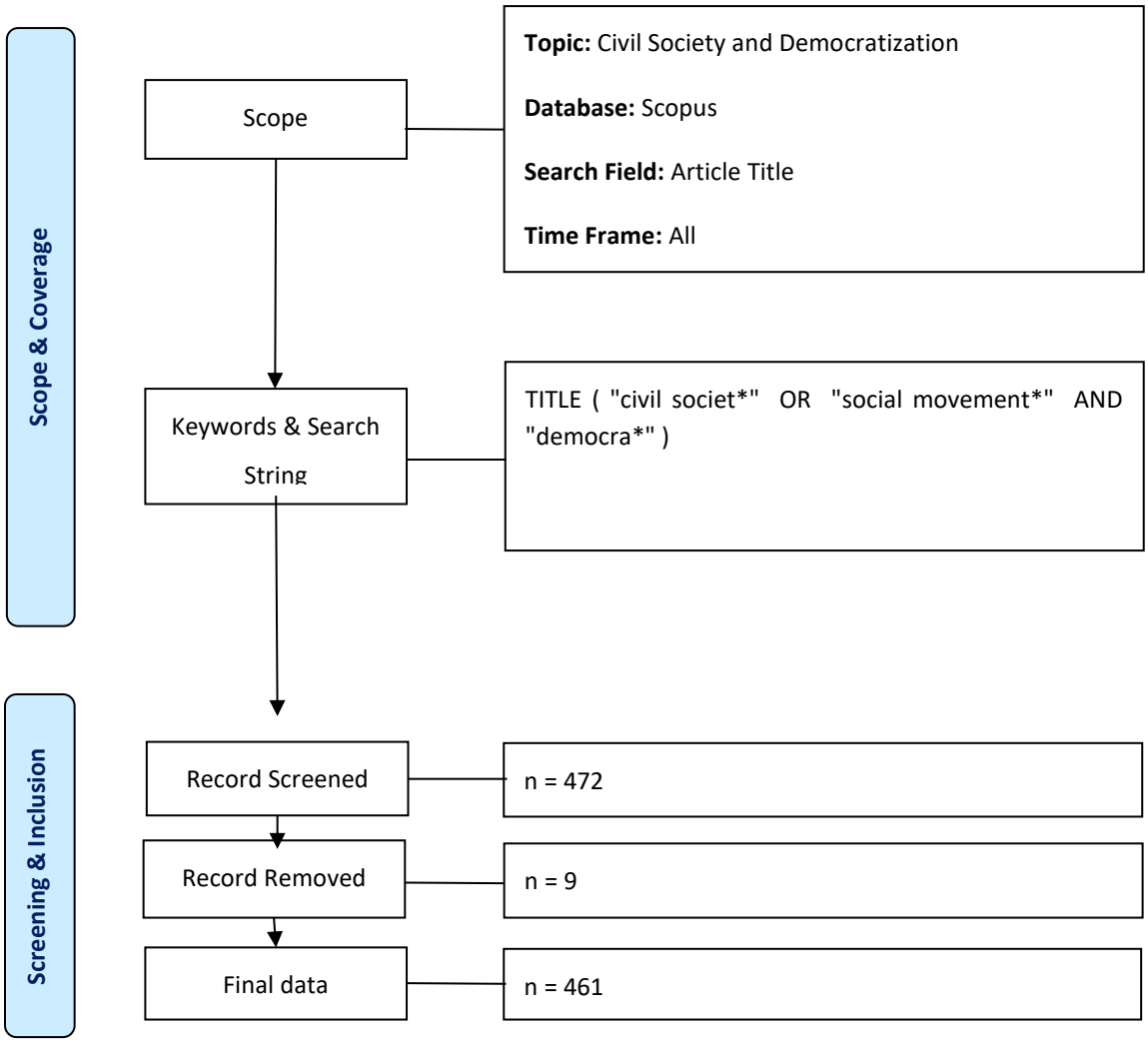
Mace (2023) investigates the role of transnational civil society in regional governance frameworks. The study argues that while platforms like the Southern Common Market (MERCOSUR) and the Organization of American States (OAS) provide opportunities for civil society engagement, the actual space for meaningful participation remains limited. The study suggests that transnational civil society organizations can influence regional policies, but their impact is often constrained by institutional barriers and political resistance, underscoring the need for advocacy and reform. Lastly, Ramcilovic-Suominen (2024) critically examines the implications of state control over civil society organizations. The study argues that in some contexts, civil society is redefined as an extension of state mechanisms, undermining its independent role in promoting democracy. It warns of the risks of co-optation, where civil society organizations risk becoming instruments of state policy rather than independent advocates for democratic values and social justice.

In conclusion, civil society remains an indispensable actor in democratization, catalyzing political participation, civic engagement, and social equity. However, its effectiveness is deeply shaped by contextual factors such as political frameworks, technological advancements, and institutional barriers. While civil society demonstrates resilience and adaptability, particularly through digital platforms that amplify grassroots efforts and challenge authoritarian regimes, it also faces significant constraints, including political repression, state co-optation, and limited spaces for meaningful participation. The evolving interplay between civil society, political parties, and transnational frameworks underscores the need for robust institutional support, interdisciplinary research, and innovative strategies to strengthen its role as an independent advocate for democratic values. Future scholarship should address these complexities to provide deeper insights into civil society's potential to drive sustainable and inclusive democratization.

3. Methodology

This study employs bibliometric analysis to examine the academic literature on civil society and democratization. Bibliometric analysis enables a quantitative evaluation of publication patterns, key contributors, and thematic trends. Data for this study were sourced from the Scopus database, a leading repository of academic publications. The search focused on articles relevant to civil society and democratization, using the keywords ("civil society*" OR "social movement*" AND "democracy*") within article titles. The Scopus database, recognized as a premier source of peer-reviewed literature, was selected for this research (Schotten et al., 2017; Sharif et al., 2020). A summary of the search strategy is presented in Figure 1. To ensure inclusivity and comprehensiveness, the search covered all years and was restricted to journal articles published in English. The initial query yielded 472 records, which were screened for relevance, resulting in the removal of nine duplicate or irrelevant entries. The final dataset comprised 461 articles, which were used for bibliometric analysis. Key bibliometric metrics included publication trends, key contributors, citation metrics, and keyword analysis to identify emerging themes. This integrative approach provides a comprehensive understanding of academic discourse on civil society and democratization while offering critical insights into the development of the field.

Figure 1: Flow diagram of the search strategy



Source: Author's elucidation using the PRISMA flow diagram

4. Results and Discussion

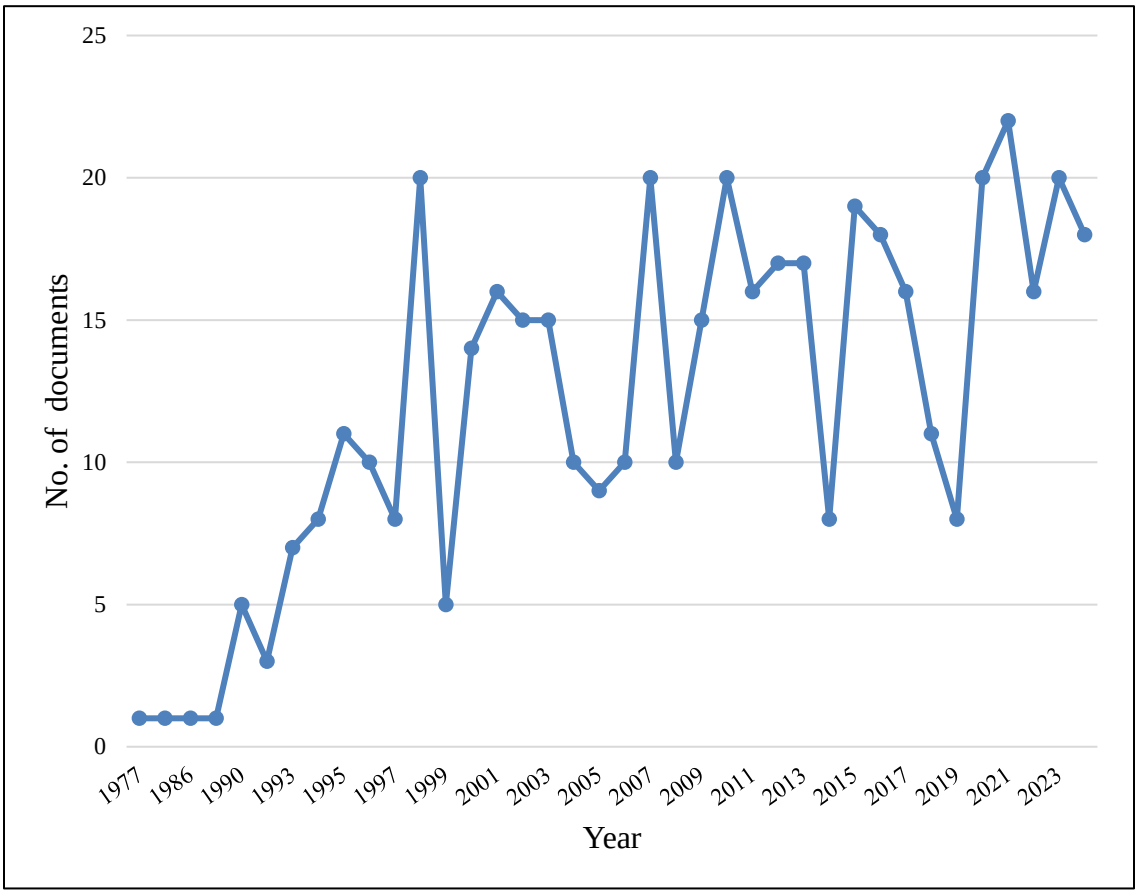
This section presents the findings from the analysis of publication trends and performance metrics in the field of civil society and democratization. These findings underscore the growing scholarly engagement and provide a roadmap for identifying research gaps and future directions in the field.

Publication trend

The publication trends on civil society and democratization, illustrated in Figure 2, show a fluctuating yet overall increasing trajectory over the observed period from 1977 to 2024. Beginning in the late 1970s with minimal output, the number of publications began to increase in the 1990s and peaked in the early 2000s. This growth aligns with the global wave of democratization, as countries in Eastern Europe, Latin America, and Africa transitioned toward democratic systems during this period, sparking academic discourse on civil society's role in these processes. Following this initial peak, the field exhibits intermittent periods of growth and decline, reflecting the dynamic nature of democratization and global political shifts. For example, the increase in publications around 2010 corresponds with events such as the Arab Spring, where civil society played a significant role. Recent data, particularly post-2020, reveals a resurgence in interest, possibly driven by global challenges such as democratic backsliding,

authoritarianism, and the increasing use of digital platforms in the mobilization of civil society. Overall, the publication trends highlight the evolving relevance of civil society in addressing contemporary democratic challenges and adapting to new contexts.

Figure 2: Publication trend



Source: Author's work using MS Excel

Performance analysis

This section examines the countries and institutions that have demonstrated the greatest productivity as well as the most significant research impact in the fields of civil society and democratization. In addition, a keyword analysis was performed to identify emerging themes in the field.

Most productive countries and institutions

Tables 1 and 2 present the most productive countries and institutions contributing to the publication of research on civil society and democratization. Table 1 indicates that the United States is the most productive country, contributing 27.5% of the total publications, significantly outpacing other nations. The United Kingdom follows with 12.6%, while other countries, such as Canada (4.3%), Germany (3.9%), and Sweden (3.5%), exhibit modest contributions. The prominence of the United States and the United Kingdom reflects their strong academic infrastructure and policy focus on democracy and governance issues. Additionally, the participation of countries like South Africa (3.3%) indicates engagement from nations in the Global South, suggesting growing attention to democratization challenges in diverse contexts.

Table 2 demonstrates the influence of key academic institutions in this research field. The London School of Economics and Political Science leads with 7 publications (1.5%), followed closely by Göteborgs Universitet (1.3%) and Lunds Universitet (1.1%). Institutions such as Université Libre de Bruxelles,

American University, KU Leuven, and the University of Oxford, each contributing 4 publications (0.9%), highlight the collaborative nature of research in this domain, spanning Europe and North America. This distribution underscores the role of globally recognized universities in advancing scholarship on civil society and democratization, particularly those with expertise in political science, governance, and international development.

Collectively, these institutions and countries have shaped the discourse and provided foundational insights into the dynamics of civil society in democratic processes.

Table 1: Most productive countries

Countries	Total publications	Percentage
United States	127	27.5
United Kingdom	58	12.6
Canada	20	4.3
Germany	18	3.9
Sweden	16	3.5
South Africa	15	3.3
Australia	11	2.4
Spain	9	2.0
Belgium	8	1.7
Hungary	8	1.7

Source: Authors' analysis using MS Excel.

Table 2: Most influential institutions

Institutions	Total publications	Percentage
London School of Economics and Political Science	7	1.5
Göteborgs Universitet	6	1.3
Lunds Universitet	5	1.1
Université Libre de Bruxelles	4	0.9
American University	4	0.9
KU Leuven	4	0.9
University of Oxford	4	0.9

Source: Authors' analysis using MS Excel

Most active source title

Table 3 Table 3 displays the source titles contributing to research on civil society and democratization, showcasing the primary academic outlets extensively publishing in this domain. The journal Democratization emerges as the leading source, with 26 publications (5.6%), indicating its centrality to the field. This reflects its focus on key topics related to democratic transitions, governance, and the role of civil society, making it a vital platform for scholars examining these intersections. The second most active source, the Journal of Civil Society, accounts for 15 publications (3.3%), underscoring its specialization in civil society studies and its relevance to researchers focusing on grassroots activism, NGO roles, and civic engagement in democratic processes. Other prominent sources include Voluntas (2.4%), which likely emphasizes the voluntary and nonprofit dimensions of civil society, and Development Dialogue, International Political Science Review, Journal of Asian and African Studies, Media Asia, Social Movement Studies, and Third World Quarterly, each contributing 5 publications (1.1%). These journals reflect a diverse range of regional, thematic, and disciplinary perspectives, covering areas such as political development, media's role in democratization, and social movements in varied geopolitical contexts. This distribution highlights the interdisciplinary nature of civil society and democratization research, drawing on political science, sociology, development studies, and regional studies. It also suggests that the discourse is not confined to specialized outlets but spans broader platforms, engaging a wide scholarly audience. The representation of journals focusing on regions like Asia and Africa, as well as on themes such as social movements and media, underscores the global and multifaceted character of the scholarship in this field.

Table 3: Most active source title

Source titles	Total publications	Percentage
Democratization	26	5.6
Journal Of Civil Society	15	3.3
Voluntas	11	2.4
Development Dialogue	5	1.1
International Political Science Review	5	1.1
Journal Of Asian And African Studies	5	1.1
Media Asia	5	1.1
Social Movement Studies	5	1.1
Third World Quarterly	5	1.1

Source: Authors' analysis using MS Excel

Research Impact

The application of Harzing's Publish or Perish software for citation analysis provides valuable insights into the research impact within the domain of civil society and democratization. The citation metrics in Table 4 demonstrate a substantial research impact in this field over 47 years (1977–2024). With 541 papers and a total of 10,030 citations, the field averages 213.4 citations per year and 21.76 citations per paper, indicating significant scholarly attention and relevance.

The h-index of 51 reflects that at least 51 papers have received 51 or more citations, highlighting the quality and influence of the research. Similarly, the g-index of 84 suggests that a core set of highly cited papers drives much of the field's impact. The average of 1.34 authors per paper indicates a balance between individual and collaborative research efforts. Overall, these metrics reveal that research in this domain is both influential and enduring, providing a critical foundation for ongoing scholarly work.

Table 4: Citation metrics

Metrics	Data
Citation years	47(1977-2024)
Papers	541
Total citations	10030
Citations/year	213.40
Citations/paper	21.76
Authors/paper	1.34
h-index	51
g-index	84

Source: Authors' analysis using Harzing's Publish or Perish

Highly cited articles

Table 5 highlights highly cited articles that represent foundational contributions to the study of civil society and democratization, demonstrating their substantial influence on scholarly discourse. Newton's (2001) article, with 721 citations, leads the field by exploring the critical interconnections between trust, social capital, civil society, and democracy, providing a cornerstone for subsequent research. Mercer's (2002) critical review of NGOs and democratization, cited 399 times, examines the nuanced roles of civil society actors in political transitions. Hendriks's (2006) work, with 277 citations, advances the discussion by reconciling civil society's dual role in deliberative democracy and addressing its theoretical complexities.

Scholte's (2002) works on civil society in global governance, with 263 citations, underscores the role of civil society in shaping transnational democratic processes. Contributions such as Gibson's (2001) focus on social networks in Russia's democratic transition (212 citations) and Tang & Zhan's (2008) analysis of

environmental NGOs in China (171 citations) exemplify how civil society operates under diverse political and geographic contexts.

Additionally, classic studies like White (1994) and Fatton (1995), cited 163 and 152 times respectively, provide enduring frameworks on civil society's contributions and limitations in democratization. Lastly, Hadenius and Uggla's (1996) exploration of the critical role of civil society in fostering democratic development (147 citations) highlights the importance of both state policies and international donor support in strengthening civil society organizations. In summary, these highly cited works establish a rich intellectual foundation, emphasizing the multifaceted roles of civil society in advancing democratic governance across varied settings.

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Table 5 Highly cited articles

No.	Authors	Year	Title	Source	Cites
1.	Newton	2001	Trust, social capital, civil society, and democracy	International Political Science Review	721
2.	Mercer	2002	NGOs, civil society and democratization: A critical review of the literature	Progress in Development Studies	399
3.	Hendriks	2006	Integrated deliberation: Reconciling civil society's dual role in deliberative democracy	Political Studies	277
4.	Scholte	2002	Civil society and democracy in global governance	Global Governance	263
5.	Gibson	2001	Social networks, civil society, and the prospects for consolidating Russia's democratic transition	American Journal of Political Science	212
6.	Tang & Zhan	2008	Civic environmental NGOs, civil society, and democratization in China	Journal of Development Studies	171
7.	HedstrÃm, Sandell & Stern	2000	Mesolevel networks and the diffusion of social movements: The case of the Swedish Social Democratic Party	American Journal of Sociology	163
8.	White	1994	Civil Society, Democratization and Development (I): Clearing the Analytical Ground	Democratization	163
9.	Fatton	1995	Africa in the Age of Democratization: The Civic Limitations of Civil Society	African Studies Review	152
10.	Hadenius & Uggla	1996	Making civil society work, promoting democratic development: What can state and donors do?	World Development	147

Source: Authors' analysis using Harzing's Publish or Perish

Keyword analysis

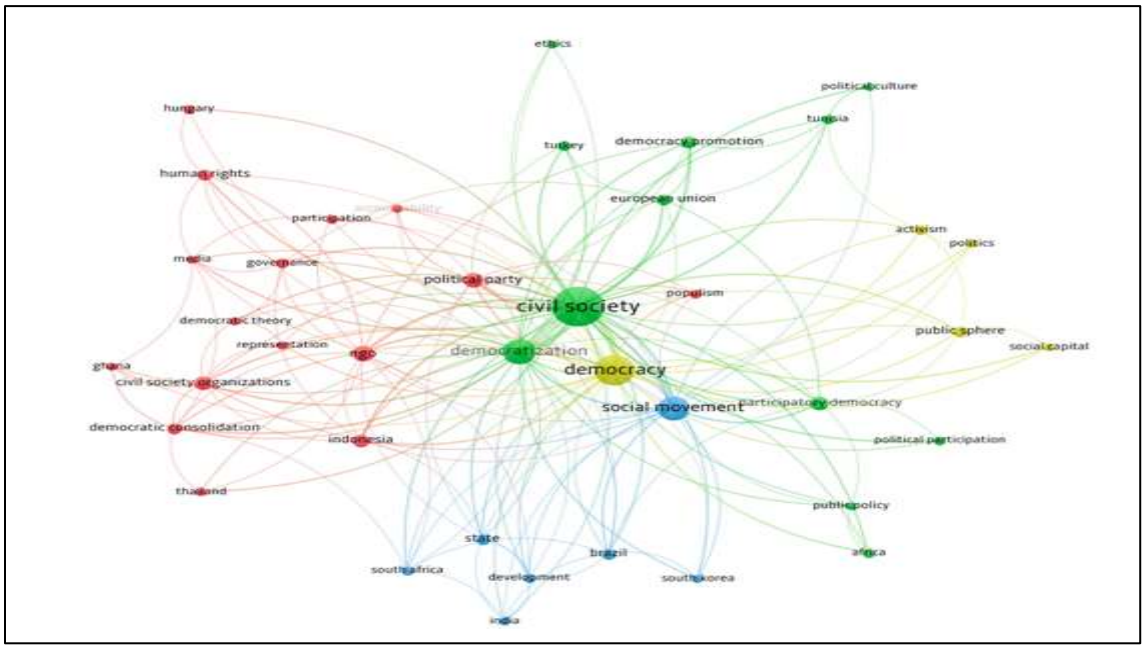
The keyword analysis in Figure 3 provides valuable insights into the interconnected themes and concepts that shape the field of civil society and democratization. The visualization reveals several clusters of related terms, each reflecting different aspects of civil society's role in the democratic process. These clusters not only indicate prominent areas of scholarly focus but also highlight emerging topics and geographic trends in the field. The green cluster focuses on terms such as democracy promotion, democratization, populism, political culture, and the European Union. This cluster suggests a focus on the role of civil society in promoting democracy, with an emphasis on external actors (e.g., the EU) and

political dynamics (e.g., populism, political culture).

In contrast, the red cluster encompasses keywords such as NGOs, media, governance, and civil society organizations, indicating a focus on the contributions of non-governmental organizations and the media to governance and democratic processes. The blue cluster, featuring terms like state, development, and India, likely represents research examining the relationship between civil society, state structures, and development practices in various contexts. Meanwhile, the yellow cluster emphasizes keywords such as social capital, activism, and participatory democracy. This group reflects research on the social dimensions of civil society, particularly its role in fostering active citizen participation and community-based democracy.

Geographically, several country names, including Ghana, South Africa, Brazil, South Korea, and India, are featured, suggesting case studies exploring the role of civil society in democratization processes in these nations. Ghana, Thailand, and Indonesia are linked to democratic consolidation, indicating research on the stability and deepening of democratic processes in these countries, particularly through civil society involvement. In terms of political themes, keywords such as political party, accountability, representation, and participation are closely connected with civil society, highlighting significant research on how civil society organizations (CSOs) engage with political parties to promote political accountability, representation, and broader participation in democratic processes. Overall, the visualization reveals emerging topics such as populism and political participation, signaling a growing interest in how civil society interacts with populist movements and enhances political engagement. Terms like human rights and ethics reflect a normative focus on the role of civil society in promoting justice and human dignity.

Figure 3: Word clouds of author keywords



Source: Author's work using WordArt

Future research avenues

Future research on civil society and democratization can benefit from addressing the geographic and thematic disparities evident in the data. The publication trends reveal a significant concentration of research originating from Western nations, particularly the United States, the United Kingdom, and Canada, while contributions from the Global South, including Africa, Asia, and Latin America, remain underrepresented. This geographic imbalance highlights the need for studies examining how civil society operates in diverse political and cultural contexts, especially in regions experiencing authoritarianism, political instability, or rapid democratization. Comparative research exploring how civil society adapts to

challenges such as resource scarcity or state repression in these regions could provide valuable insights. Furthermore, region-specific studies could shed light on how grassroots movements, traditional community structures, and local governance interact with democratization processes in non-Western settings.

Thematically, the citation analysis and journal outputs highlight a strong focus on broad concepts such as trust, social capital, and governance, while emerging and contemporary topics remain underexplored. For instance, the intersection of civil society with digital transformation, climate governance, and global migration presents significant opportunities for further investigation. Research could explore how digital tools shape civil society's capacity to mobilize, influence policy, and respond to state repression, particularly in authoritarian contexts. Similarly, examining the role of civil society in addressing global challenges such as climate change and inequality could offer new perspectives on its evolving relevance in governance. Additionally, interdisciplinary approaches that integrate technological, environmental, and economic perspectives into civil society studies could enrich the field and highlight its adaptability to 21st-century challenges. These avenues, focusing on both underrepresented regions and emerging themes, can deepen our understanding of civil society's complex role in democratization.

5. Concluding Remarks

In conclusion, the literature review and future research directions collectively highlight the evolving role of civil society in democratization, emphasizing its transformative potential while acknowledging persistent challenges. Civil society has emerged as a critical agent in shaping democratic landscapes by fostering public participation, holding authorities accountable, and acting as a bridge between citizens and state institutions. However, the analysis also underscores the variability in its effectiveness, which is significantly influenced by political opportunity structures, institutional contexts, and socio-economic environments.

Looking ahead, the gaps identified in the existing body of knowledge suggest an urgent need for more geographically diverse studies, particularly focusing on regions with limited representation in the literature. Furthermore, the interplay between digitalization and civil society's functions demands deeper investigation to understand both opportunities and risks in the modern era. By pursuing these research avenues, scholars can provide actionable insights into optimizing civil society's role in democratization, ensuring its adaptability and impact in addressing contemporary democratic challenges. These conclusions reaffirm the necessity of a multidimensional and context-sensitive approach to studying civil society, enriching both academic inquiry and practical applications.

Acknowledgment: The authors would like to express their sincere gratitude to the Kedah State Research Committee, UiTM Kedah Branch, for the funding provided under the Tabung Penyelidikan Am. This support was crucial in facilitating the research and ensuring the successful publication of this article.

References

Ahmi, A., & Mohamad, R. (2019). Bibliometric analysis of global scientific literature on web accessibility. *International Journal of Recent Technology and Engineering*, 7(6), 250–258.

Ahmi, A., & Mohd Nasir, M. H. (2019). Examining the trend of the research on extensible Business Reporting Language (XBRL): A bibliometric review. *International Journal of Innovation, Creativity and Change,* 5(2), 1145–1167.

Baxter, M. K., Lee, J., & Odai, M. (2024). The paradox of elites in civil society: A comparative study on civil society leaders' satisfaction with democracy in the UK and Sweden. *Voluntas*, 35, 994–1005. https://doi.org/10.1007/s11266-024-00669-0

Beissinger, M. R. (2017). " Conventional" and" Virtual" civil societies in autocratic regimes. *Comparative Politics*, 49(3), 351-371. https://doi.org/10.5129/001041517820934267

Boutros-Ghali, B. (1996). An agenda for democratization. New York, NY: United Nations. https://digitallibrary.un.org/record/230086?ln=en&v=pdf

Çakmak, Z. and Taşkiran, C. (2020). Development of civil literacy scale: a study of validity and reliability.

Review of International Geographical Education Online. https://doi.org/10.33403/rigeo.713522

Criado, J. I., Ruvalcaba-Gómez, E. A., & Mendoza, R. E. V. (2018). Revisiting the open government phenomenon: A meta-analysis of the international literature. JeDEM - *eJournal of eDemocracy and Open Government,* 10(1), 50–81. https://doi.org/10.29379/jedem.v10i1.454

Davis, A. P., & Zhang, Y. (2023). Civil society and democracy under pressure: does authoritarian mobilization and party incapacity diminish the positive effect of civil society? The Sociological Quarterly, 65(2), 225–245. https://doi.org/10.1080/00380253.2023.2289500

Fatton, R. (1995). Africa in the age of democratization: The civic limitations of civil society. *African Studies Review*, 38(2), 67-99. https://doi.org/10.2307/525318

Faxon, H. O., Kintzi, K., Tran, V., Wine, K. Z., & Htut, S. Y. (2023). Organic online politics: Farmers, Facebook, and Myanmar's military coup. *Big Data & Society*, 10(1), 1-16. https://doi.org/ 10.1177/20539517231168101

Gibson, J. L. (2001). Social networks, civil society, and the prospects for consolidating Russia's democratic transition. Social capital and the transition to democracy. *American Journal of Political Science*, 45(1), https://doi.org/51-69. 10.2307/2669359

Hadenius, A., & Uggla, F. (1996). Making civil society work, promoting democratic development: What can states and donors do? *World Development*, 24(10), 1621-1639. https://doi.org/10.1016/0305-750X(96)00062-9

Hearn, J. (2001). The 'uses and abuses' of civil society in Africa. *Review of African Political Economy*, 28(87). https://doi.org/10.1080/03056240108704502

Hendriks, C. M. (2006). Integrated deliberation: Reconciling civil society's dual role in deliberative democracy. *Political Studies*, 54(3), 486-508. https://doi.org/10.1111/j.1467-9248.2006.00612.x

Howard, P. N., & Hussain, M. M. (2013). Democracy's fourth wave?: digital media and the Arab Spring. Oxford University Press.

Jaysawal, N. (2013). Civil society, democratic space, and social work. *Sage Open*, 3(4). https://doi.org/10.1177/2158244013504934

Lewis, D. (2002). Civil society in African contexts: reflections on the usefulness of a concept. *Development and Change*, 33(4), 569-586. https://doi.org/10.1111/1467-7660.00270

Mace, G. (2023). Democratic Practices in MERCOSUR and the OAS: What Space for Transnational Civil Society? Global Society, 38(3), 351–373. https://doi.org/10.1080/13600826.2023.2237044

Mercer, C. (2002). NGOs, civil society and democratization: a critical review of the literature. *Progress in Development Studies,* 2(1), 5-22. https://doi.org/10.1191/1464993402ps027ra

Mexhuani, B. and Rrahmani, F. (2017). The relationship between political parties and civil society. *Journal of Political Sciences & Public Affairs*, 05(04). https://doi.org/10.4172/2332-0761.1000295

Moura, R. A. d., Bastos, H. A. D., Brandt, K. C. d. O., Ronca, D. B., & Ginani, V. C. (2022). Public consultation in the construction of the district food and nutrition policy. *Saúde em Debate*, 46(134), 803–818. https://doi.org/10.1590/0103-1104202213415i

Newton, K. (2001). Trust, social capital, civil society, and democracy. *International Political Science Review,* 22(2), 201-214. https://doi.org/10.1177/0192512101222004

Okowa, M. (2015). The fallacy behind the role of civil society in transitional democracies: the case of Kenyan ethno-political conflicts. *African Journal of Political Science and International Relations*, 9(3), 86-89. https://doi.org/10.5897/ajpsir2013.0640

Omeni, A. (2022). Framing injustice: special anti-robbery squads (SARS) in Nigeria and the #EndSARS protest response from a social movement theory perspective. *Modern Africa*, 10(2), 9–32. https://doi.org/10.26806/modafr.v10i2.409

Phatharathananunth, S. (2006). Civil society and democratization: social movements in northeast Thailand. Copenhagen: Nordic Institute of Asian Studies.

Ramcilovic-Suominen, S. (2024). Democracy through technocracy? Reinventing civil society as a state-monitored and unpaid service provider in the EU FLEGT VPA in Laos. Global Environmental Change, 85, 102809. https://doi.org/10.1016/j.gloenvcha.2024.102809

Saab, F., Bermejo, P. H. d. S., Garcia, G. C., Pereira, J. S., & Silva, S. d. A. M. e. (2018). Does public consultation encourage social participation? *Journal of Enterprise Information Management*, 31(5), 796-814. https://doi.org/10.1108/jeim-11-2017-0169

Schrama, R., & Zhelyazkova, A. (2018). "You can't have one without the other": The differential impact of

civil society strength on the implementation of EU policy. *Journal of European Public Policy*, 25(7), 1029–1048. https://doi.org/10.1080/13501763.2018.1433709

Scholte, J. A. (2002). Civil society and democracy in global governance. *Global Governance*, 8(3), 281-304. https://doi.org/10.2307/27800346

Schotten, M., Meester, W. J., Steiginga, S., & Ross, C. A. (2017). A brief history of Scopus: The world's largest abstract and citation database of scientific literature. In Research analytics (pp. 31-58). Auerbach Publications.

Sharif, M. H. M., Ahmi, A., & Rosli, K. (2020). Measuring the trend of the research on social media in SMEs: a bibliometric evaluation. Test Engineering and Management, 82, 6437-6446.

Simsa, R. (2019). Civil society is captured by early-stage autocrats in well-developed democracies – the case of Austria. *Nonprofit Policy Forum*, 10(3), 20190029. https://doi.org/10.1515/npf-2019-0029

Tang, S. Y., & Zhan, X. (2008). Civic environmental NGOs, civil society, and democratization in China. *The Journal of Development Studies*, 44(3), 425-448. https://doi.org/ 10.1080/00220380701848541

Tusalem, R. F. (2007). A boon or a bane? The role of civil society in third- and fourth-wave democracies. *International Political Science Review*, 28(3), 361-386. https://doi.org/10.1177/0192512107077097

Udzhmadzhuridze, H., Bilan, S., & Kryvoshein, V. V. (2019). Individual significance of political participation in today's Ukrainian society: the case of Dnipro city. *Economics & Sociology*, 12(1), 193-207. https://doi.org/10.14254/2071-789x.2019/12-1/11

Uhlin, A. (2009). Which characteristics of civil society organizations support what aspects of democracy? Evidence from post-communist Latvia. *International Political Science Review*, 30(3), 271-295. https://doi.org/10.1177/0192512109105639

White, G. (1994). Civil society, democratization and development (I): Clearing the analytical ground. *Democratization*, 1(2), 375-390. https://doi.org/10.1080/13510349408403399

Information Management and Business Review (IMBR)
Vol. 16, No. 4, Dec 2024 (ISSN 2220-3796)

The Impact of Intrinsic and Extrinsic Job Satisfaction on Turnover Intentions: A Moderating Effect of Public and Private Sector Employees

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Abstract: The operational efficiency in China's private and public sectors presents significant differences that managers are unaware of, leading to increased turnover intentions. The current research covers the impacts of intrinsic and extrinsic job satisfaction on turnover intentions within the Chinese public sector. This research investigates the correlation between job satisfaction and employee turnover intentions in the Chinese public and private sectors. Data were gathered via questionnaires distributed to employees from multiple public and private enterprises and institutions. The findings indicate clear differences between employees in the public and private sectors regarding the influence of job satisfaction on intentions to turnover. Specifically, Chinese public employees show less extrinsic job satisfaction and less desire to quit than employees employed in the private sector. Moreover, compared to employees in the private sector, those working in the public sector have a direct but insignificant negative relationship between extrinsic job satisfaction and turnover intentions. To improve employee motivation, it is recommended that public-sector managers prioritize enhancing extrinsic job factors and consider reallocating dissatisfied employees to more suitable roles. Furthermore, managers should evaluate whether their organization's turnover rate is overly high, as it will deteriorate productivity and efficiency.

Keywords: *Intrinsic Job Satisfaction, Extrinsic Job Satisfaction, Turnover Intention, Public Sector, Private Sector.*

1. Introduction

In organizational management, understanding employees' job satisfaction and its relationship with turnover intentions is critical to improving organizational efficiency and performance. This is especially true for the public and private sectors, which play integral roles in economic and social development. Economic studies have shown that the public sector is often lower than the private sector regarding operational efficiency and productivity (Taylor, 1911), which is also the case in many economies (Krugman, 2009). There are restructuring and innovation strategies to address inefficiencies in the public sector (Porter, 2015). However, public areas like public education and government agencies cannot be privatized, so other methods must be explored.

Job satisfaction is significant to organizational productivity. Although job satisfaction at the individual level is not necessarily linked to productivity, lower job satisfaction is often accompanied by higher rates of absenteeism and turnover, affecting organizational productivity (Mayo, 1933). Conversely, high job satisfaction helps to reduce absenteeism and turnover rates, increase organizational citizenship behavior and enhance overall organizational performance. It has been shown that public sector employees have lower job satisfaction compared to private sector employees, possibly because public sector roles require more motivational potential (Maslow, 1943).

In addition, one reason for lower overall productivity in the public sector is that public-sector employees value job security more than private-sector workers (Friedman, 1962). While low turnover rates can reduce costs associated with recruitment, selection, and training and increase employee loyalty and job commitment (Drucker, 1999), excessively low turnover rates can disrupt established patterns of interaction, affect coordination, and lead to distraction from non-executive behaviors, which can inhibit organizational performance (Christensen, 2013). Meanwhile, turnover intention is negatively related to job satisfaction (Schumpeter, 2018).

However, previous studies have not yet analyzed in-depth the turnover intentions of employees in the public and private sectors, especially the situation where the link between job satisfaction and turnover is influenced

by the strong need for job security among civil servants. Therefore, this study aims to comprehensively examine the intrinsic and extrinsic job satisfaction elements affecting employees in these two sectors and to compare the differences between the public and private sectors in this regard, which will help to gain insights into the characteristics of the two sectors in terms of human resource management and to provide targeted recommendations for improving organizational effectiveness.

From a theoretical basis, Maslow's hierarchy of needs theory suggests that job satisfaction is related to the degree to which employees satisfy a variety of needs and that intrinsic job satisfaction may be related to the need for self - self-actualization, and extrinsic job satisfaction may be related to physiological and safety needs, among other things, and that job satisfaction decreases when the needs are not met, which in turn affects the intention to leave the job. Herzberg's two-factor theory also provides support, that health factors are similar to extrinsic job satisfaction factors, and motivational factors are similar to intrinsic job satisfaction factors, lack of health factors leads to employee dissatisfaction, and satisfaction of motivational factors increases job satisfaction (Herzberg, 1959), and this study analyzes the correlations between public and private sector employees based on these theories.

China is a large developing country with unique national conditions, and its public sector and private sector development patterns are different from those of other countries. The public sector plays a dominant and leading role in economic and social development, such as public education and governmental organizations that are irreplaceable in promoting social equity and safeguarding people's livelihood. China's private sector is growing rapidly and its share in the national economy is increasing. Studying China's public and private sectors can reflect the characteristics of employees' job satisfaction and turnover intention during rapid development and transformation, which is of sample significance for understanding human resource management in emerging economies. At the same time, traditional Chinese culture, such as the concept of collectivism, may influence employees' attitudes toward job satisfaction and turnover intentions, and the study of the Chinese context can help to further enrich the exploration of the role of related factors in the relationship between job satisfaction and turnover intentions.

2. Literature Review

Job Satisfaction Levels in Public and Private Sector Employees: In the field of Organizational Behavior, an in-depth exploration of the relationship between employees' job satisfaction and turnover intentions, especially the differences in different sectors (public and private sectors) as well as the moderating effects, is important for understanding employee behavior and organizational management. This review will describe the studies related to intrinsic and extrinsic job satisfaction and their links with turnover intentions in the public and private sectors, respectively, and formulate corresponding hypotheses based on these studies.

Intrinsic job satisfaction focuses primarily on the satisfaction derived from the characteristics of the job itself. Factors such as job challenge, autonomy, opportunities for personal growth, and task variety are widely recognized as key factors influencing intrinsic job satisfaction (Hackman & Oldham, 1976). When employees can fully utilize their abilities at work and feel the meaning and value of their work, intrinsic job satisfaction will increase accordingly.

In terms of job tasks and responsibilities, public sector jobs often have a relatively clear and stable task framework. For example, in the field of public education, teachers' teaching tasks are standardized to a certain extent and remain relatively stable over a long period. This stability allows employees to delve deeper into the business and gain satisfaction from the work itself by improving their expertise in a particular field as they gain experience (Buelens & Van den Broeck, 2007). In the public sector, the work is mostly related to public services, and employees can contribute directly or indirectly to the public interest (Rainey, 1983). In terms of organizational culture and work environment, the public sector usually promotes an organizational culture of teamwork, fairness, and service to the public. In this culture, employees work closely with each other, and interpersonal relationships are relatively harmonious. For example, in the project cooperation of government departments, employees from different departments work together to complete the public affairs. This positive atmosphere of cooperation and fair organizational environment is conducive to the development of employees' talents, which in turn enhances intrinsic job satisfaction (Perry & Wise, 1990). The private sector is in a highly

competitive market environment, where innovation becomes the key to business survival and growth. This leads to more opportunities for employees to be involved in innovative projects. For employees who are creative and seek challenges, such innovative work can lead to higher levels of intrinsic job satisfaction (Amabile, 1996). However, market competition also leads to the need for private firms to constantly adapt their business orientation and work tasks to market changes. This may expose employees to frequent job adjustments and intense work demands. For firms to capture market share, employees may need to complete multiple projects in a short period and work under high pressure, which may reduce intrinsic job satisfaction to some extent (Karasek, 1979). Factors such as stable work assignments in the public sector, a sense of mission in public service, and a harmonious organizational culture provide good conditions for employees to derive satisfaction from the work itself, whereas in the private sector, although there are opportunities for innovation, job adjustments and high stress brought about by competitive pressures may weaken intrinsic job satisfaction.
Based on the above synthesis of research on intrinsic job satisfaction in the public and private sectors, the hypothesis can be formulated：
H1: Employees in the public sector experience higher levels of intrinsic job satisfaction compared to employees in the private sector.

Extrinsic job satisfaction is mainly related to the external conditions of the job, including compensation package, working environment, and career development opportunities (Locke, 1976). These external factors have a direct impact on how employees feel about their jobs as a whole.

Compensation systems in the public sector are usually stable, with pay adjustments based on fixed grades and seniority. Although benefits, such as pensions and health insurance, are relatively well-developed, overall pay levels tend to be uncompetitive in comparison with the private sector (Baldwin, 1990). In the case of civil servants, for example, salary increases are relatively fixed and subject to strict policy constraints, which may lead to lower extrinsic job satisfaction among employees in terms of pay (Perry, 1997). Promotion channels in the public sector generally follow a strict hierarchy and seniority requirements. Employees are often promoted over a long period and under specific conditions, with relatively limited opportunities for career development. For example, in the government sector, promotion from junior staff to management requires years of accumulation and strict appraisal, and this single mode of promotion may affect employees' extrinsic job satisfaction (Light, 1995). The private sector usually adopts a more flexible compensation system to attract and retain talent. In addition to basic salary, there are incentives such as performance bonuses and stock options. For example, in financial firms, employees' performance bonuses may account for a large percentage of their total income, and this kind of pay incentive based on employees' performance can effectively increase employees' extrinsic job satisfaction (Lawler, 1971). However, pay gaps in the private sector can be large, and different employees in the same department may have very different pay due to performance differences. This pay gap may create a sense of unfairness among some employees, thus reducing extrinsic job satisfaction to some extent (Adams, 1965). Private companies can offer more diverse career development opportunities due to their flexible business model. Employees can expand their careers through cross-functional promotions and participation in internationalization projects. For example, large multinational organizations provide employees with opportunities to work and advance overseas, which can help increase employees' extrinsic job satisfaction (Sonnenfeld & Peiperl, 1988). While the public sector has uncompetitive salaries and a single promotion channel, the private sector's flexible compensation system and diverse career development opportunities provide employees with more possibilities to enhance extrinsic job satisfaction. Based on the analysis of extrinsic job satisfaction in the public sector and private sector, the hypothesis can be formulated:
H2: Public sector employees have lower levels of extrinsic job satisfaction compared to private sector employees.

Comparison of Turnover Intentions between Public and Private Employees: Turnover intention refers to an individual's tendency to leave their current organization for more favorable employment opportunities. (Adams & White, 2021). Many empirical studies show that public sector employees have a higher need and stronger desire for job security than private sector employees (Miller & Johnson, 1978; Brown & Green, 2022)). Such increased attention on job security generally translates to decreased turnover within the public sector, as public workers often seek employment for the long haul. Therefore, they more often develop relational contracts, which are based on mutual trust and commitment, with their respective employers, further developing stability in the employment relationship, and leading to lower turnover intentions (Smith &

Thompson, 2023). Previous research suggests that public-sector employees, on average, have lower turnover intentions than private-sector workers, such as financial officers and lawyers, whose occupational groups experience more significant employee turnover (Jones & Davis, 1965). This difference is due to the substantial difference in these sectors' job security and career paths. For example, private-sector financial officers and lawyers often operate in competitive environments where moving from one job to another is essential for career advancement, meaning they can change organizations more frequently.

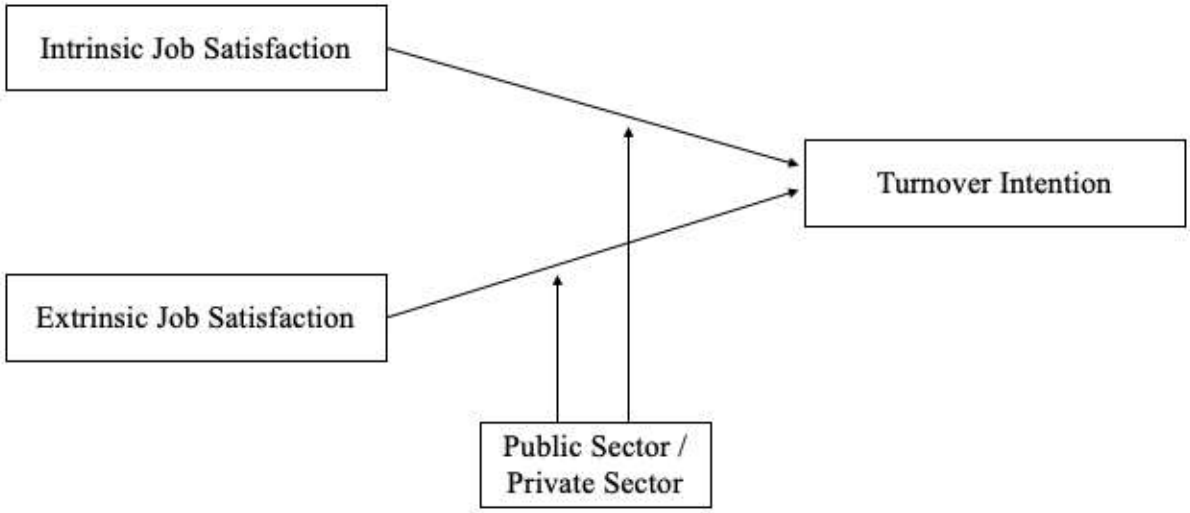
Additionally, work based on the public and private sectors in Jordan demonstrated that workers in the private sector were significantly more likely to search for alternative job opportunities and were less committed to their employers than public sector workers (Wilson & Taylor, 2023). The private sector offers comparatively lower job security. Therefore, workers are exploring better careers and pay deals, reflected in this trend. Likewise, public-sector workers, who generally possess better job security and permanence, exhibit a higher degree of loyalty and organizational commitment than their private counterparts, which leads to lower turnover intentions. Hence, based on the results of our findings about the psychological needs and job security of public sector employees, the hypothesis is presented as:
H3: Public sector employees have a lower turnover intention compared to those in the private sector.

The public sector is oriented to the public interest, and the results of its work are mainly reflected in the provision of public services and the improvement of social welfare. The private sector, on the other hand, is profit-oriented and is more concerned with market share, economic efficiency, and so on. This difference in goal orientation affects employees' expectations and evaluations of their work. For example, public sector employees may be more focused on the impact of their work on society, whereas private sector employees are more focused on the impact of their work on their personal financial gain and career development, which in turn affects the relationship between job satisfaction and intention to leave (Rainey, 1983). The management model in the public sector is usually more hierarchical and standardized, with a relatively complex decision-making process that focuses on the legitimacy and fairness of procedures. The private sector, on the other hand, has a more flexible management model, with faster decision-making and a greater focus on market response. Different management styles will bring different work experiences to employees. In the public sector, employees may need to follow more rules and regulations, while in the private sector, employees may have more autonomy but also face greater risks. This difference moderates the relationship between job satisfaction and turnover intentions (Light, 1995). In the public sector, the effect of intrinsic job satisfaction on turnover intentions may be relatively weak due to factors such as job stability and a sense of social value. For example, even if a public sector employee is less satisfied with the challenge and autonomy of his job, he may not readily develop an intention to leave considering the stability of his job and his contribution to society. In the private sector, on the other hand, employees rely more on intrinsic job satisfaction in deciding whether to leave their jobs, as they look more to the job itself for value and development opportunities. Based on this, the hypothesis can be formulated:
H4: Employees in the public sector show a weaker negative relationship between intrinsic job satisfaction and the tendency to leave the job compared to employees in the private sector.

Similarly, in the public sector, factors such as job stability have a strong inhibitory effect on turnover intention, and extrinsic job satisfaction (e.g., pay, promotion opportunities, etc.) has a relatively small effect on turnover intention. For example, public sector employees may not leave their jobs easily due to job stability even if they are not satisfied with their pay. In the private sector, on the other hand, the effect of extrinsic job satisfaction on turnover intention is more significant, and employees may choose to leave their jobs because of better pay or career development opportunities. Therefore, the hypothesis can be formulated:
H5: Employees in the public sector show a weaker negative relationship between extrinsic job satisfaction and the propensity to leave their jobs than employees in the private sector.

Conceptual Framework
Figure 1 shows the conceptual framework of the study.

Figure 1: Proposed Conceptual Framework



3. Method

Research Design: This study's sample comprised employees from various organizations in China in the two sectors. Given the country's substantial number of public and private sector employees, random sampling was not feasible. Data were gathered from employees across a range of public and private organizations to enhance the sample's representativeness. In China, public enterprises span several sectors, including energy, telecommunications, and transportation (Porter, 2015). Meanwhile, private sector employees predominantly work in manufacturing, services, technology, and construction industries. Consequently, the sample was drawn from these critical industries. Participants' demographic information was collected, followed by the intrinsic and extrinsic job satisfaction and turnover intention of employees from each sector.

Participants/Sample: This study's sample comprised employees from various public and private organizations in China. Given the country's substantial number of public and private sector employees, random sampling was not feasible. Data were gathered from employees across a range of public and private organizations to enhance the sample's representativeness. In China, public enterprises span several sectors, including energy, telecommunications, and transportation (Christensen, 2023). Meanwhile, private sector employees predominantly work in manufacturing, services, technology, and construction industries. Consequently, the sample was drawn from these critical industries.

Instruments: Intrinsic and extrinsic job satisfaction was assessed via 5-point Likert and turnover intentions similarly, while control variables were measured, including age, gender, education, career tenure, and level of position. The reliability of the obtained data was checked using factor analysis. Hypotheses were then tested using T-tests and hierarchical regression analyses, which were carried out using IBM SPSS Statistics software.

Procedure: A factor analysis was conducted to evaluate the construct validity of the variables on work satisfaction and intention to leave. The first three hypotheses were examined with a T-test, while the fourth and fifth hypotheses were assessed using a hierarchical regression analysis. To examine Hypotheses 4 and 5, we utilized a theoretical model which used moderation analysis. This model also proves the relationship between two variables (intrinsic job satisfaction and turnover intention for Hypothesis 4 and extrinsic job satisfaction and turnover intention for Hypothesis 5) through a third variable, which in the case of this article is either public or private sector employees.

Ethical Considerations: Before participants filled in the questionnaires, participants were given a consent form to confirm their willingness to participate in the study, and the purpose and processes involved in the data analysis were clearly stated within the consent form. To ensure the anonymity and privacy of participants, the names and personal information were not collected, and participants held the right to withdraw from the questionnaire. Each participant had signed the consent form before starting the questionnaire.

4. Results

Demographic Information of Participants: 500 questionnaires were distributed to public-sector employees and 500 to private-sector employees. Of these, 395 responses were collected from the public sector, yielding a response rate of 79%. However, 26 incomplete questionnaires were excluded from the analysis. Three hundred ten responses were collected from the private sector, yielding a response rate of 62%, but 35 incomplete questionnaires were also excluded. This resulted in 644 valid responses, reflecting an overall response rate of 64.4%.

The survey revealed an approximately equal gender distribution among respondents from both private and public sectors. Among private-sector employees, the largest age group was 31–35 years, representing 42.9% of the respondents, whereas public-sector employees were predominantly in the 46–50 age bracket, accounting for 34.1%. Regarding marital status, over half (53.6%) of private-sector respondents were single, while most public-sector employees (87.5%) were married. Regarding educational attainment, 66.3% of public-sector employees held a university degree or higher, compared to 54.2% of private-sector respondents. Career tenure also varied significantly: 35.2% of public-sector employees had more than 30 years of service, while in the private sector, the highest proportion (21.6%) had worked for 4–5 years. The distribution of job levels within the public sector showed that 40.2% were in low-level positions, 52.1% in mid-level, and 7.7% in high-level roles. In contrast, private-sector respondents were distributed as follows: 32.4% in low-level positions, 48% in mid-level, and 19.6% in high-level roles.

Validity and Reliability of Variables: Intrinsic and extrinsic satisfaction were identified as the two distinct components of job satisfaction. The turnover intention was discovered to be dependent on just one component. The reliability analysis revealed an adequate internal consistency for every measurement, with extrinsic satisfaction having the highest Cronbach's α coefficient at 0.89, intrinsic satisfaction at 0.87, and turnover intention at 0.88.

Hypothesis Testing: A T-test was used to examine Hypotheses 1, 2, and 3. Age, gender, education level, job tenure, and position rank were all considered in the regression model, and the moderating variable was the employment sector (public vs. private). On the other hand, Hypotheses 4 and 5 were investigated using a moderation analysis.

The analysis first evaluated whether intrinsic work satisfaction significantly influenced turnover intention to support Hypothesis 4, which asserts that the negative association between intrinsic job satisfaction and intention to turnover is less pronounced in the public sector. Assuming that this relationship was significant, the next test will be conducted to assess whether the interaction between intrinsic job satisfaction and the employment sector was statistically significant. A positive interaction between intrinsic job satisfaction and the employment sector would support Hypothesis 4, which indicates that the inverse association of intrinsic satisfaction on turnover intention is more minor in magnitude for public sector workers.

The mean, standard deviation, and correlations for each measured variable are shown in Tables 1 and 2. Only statistically significant correlations were included in the final analysis to ensure the precision and reliability of the results. As seen in Table 1 and Table 2 data, it is clear that age can predict intrinsic and extrinsic job satisfaction for private employees but only differentially affect employees of public sectors with their extrinsic job satisfaction. Among private employees, only intrinsic and extrinsic satisfaction each correlated positively with gender. Education level was negatively associated with extrinsic satisfaction for public employees, but for private workers, it was positively associated with both intrinsic and extrinsic satisfaction. In public employees, job tenure was significantly and positively related to intrinsic and extrinsic satisfaction. In addition, position level was positively associated with extrinsic satisfaction for public employees and intrinsic satisfaction for private employees. As predicted, employee turnover intention in both sectors was inversely connected with intrinsic and extrinsic satisfaction.

Table 1: Means, Standard Deviations, and Correlation for Public Employees

Variable	Mean	S.D.	1	2	3	4	5	6	7
Age	4.98	1.71	-						
Gender	0.52	0.46	0.22***	-					
Education	2.64	1.26	-0.05	-0.04	-				
Job Tenure	5.22	2.03	0.73**	0.19*	-0.61***	-			
Position Level	1.89	0.96	-0.05	0.17*	0.08	0.13	-		
Intrinsic Job Satisfaction	3.65	0.52	0.06	0.04	0.28***	-0.16*	0.15+	-	
Extrinsic Job Satisfaction	3.05	0.71	0.12**	0.10	-0.11*	0.19**	0.19*	0.51*	
Turnover Intention	1.69	0.77	-0.08	-0.05	-0.19***	0.11	-0.14+	-0.46**	-0.17*

n = 369.
p<0.10; *p<0.05; **p<0.01; ***p<0.001

Table 2: Means, Standard Deviations, and Correlation for Private Employees

Variable	Mean	S.D.	1	2	3	4	5	6	7
1. Age	2.59	1.23	-						
2. Gender	0.47	0.47	0.29**	-					
3. Education	2.01	1.13	0.06	0.38**	-				
4. Job Tenure	3.29	2.03	0.81**	-0.06	-0.31***	-			
5. Position Level	2.76	0.92	0.51***	0.59***	0.41***	0.27**	-		
6. Intrinsic Job Satisfaction	3.41	0.64	0.24**	0.24***	0.16**	0.12+	0.31***	-	
7. Extrinsic Job Satisfaction	3.37	0.72	0.10+	0.21**	0.14*	0.03	0.09	0.79**	
8. Turnover Intention	2.28	1.01	-0.07	-0.07	-0.08	-0.07	-0.08	-0.58***	-0.56***

n = 275.
p<0.10; *p<0.05; **p<0.01; ***p<0.001

Differences in Intrinsic and Extrinsic Job Satisfaction and Turnover Intention between Public and Private Sectors: According to an investigation of their turnover intentions, public employees also showed far lower intentions of leaving their positions than private employees ($t = -6.50$, $p < 0.001$). This significant difference corroborates Hypothesis 3, which suggested that turnover intention would be lower among public-sector employees. Taken together, the results reinforce the hypothesized relationships and underscore the variations in job satisfaction and turnover intention across sectors.

Table 3: T-Test on the Means of Job Satisfaction and Turnover Intention between Public and Private Employees

Variable	Public Employee Mean	Private Employee Mean	t
Intrinsic Job Satisfaction	3.65	3.41	3.87***
Extrinsic Job Satisfaction	3.05	3.37	-3.41***
Turnover Intention	1.69	2.28	-6.50***

public employees n = 369, private employees n = 275
***p<0.001

The Moderating Impact of Sector on the Relationship between Satisfaction and Turnover: With turnover intention as the dependent variable, a hierarchical regression analysis was performed to assess Hypotheses 4 and 5. This analysis proceeded in three stages. Age, gender, education, job tenure, and position level were the control variables that were first added to the regression model to create Model A. In the second stage, sector (public vs. private), along with intrinsic and extrinsic job satisfaction, were added to the model, yielding Model B. Finally, in the third stage, interaction terms between sector and intrinsic satisfaction, as well as between industry and extrinsic satisfaction, were incorporated, resulting in Model C.

According to Table 4, Model A shows that the control variables explained 6% of the variance in the intention to leave a job, with older employees having a reduced tendency to do so (b = -0.24, p < 0.01). In Model B, the inclusion of sector, intrinsic satisfaction, and extrinsic satisfaction increased the model's explanatory power to 26%. The results demonstrate that both industry and levels of job satisfaction significantly influenced turnover intention. Employees who were employed in the public sector (b = -0.35, p < 0.01) and those who had higher intrinsic satisfaction (b = -0.41, p < 0.05) or extrinsic satisfaction (b = -0.18, p < 0.001) showed a lower desire to leave. These findings confirm Hypothesis 3, which posited that turnover intention would be lower among public-sector employees.

The predictive power of Model C was further increased to 28% through the inclusion of interaction terms between the sector and the satisfaction variables. The correlation between turnover intention and intrinsic satisfaction remained negative (b = -0.30, p < 0.01), but there was no statistically significant difference in the interaction between intrinsic satisfaction and sector (b = -0.18, p > 0.05). This result shows that employee discontent with intrinsic elements of the job increased the desire to leave the company for both public and private employees, contradicting Hypothesis 4.

In contrast, the study revealed a negative correlation between turnover intention and extrinsic satisfaction (b = -0.41, p < 0.001), with a significantly positive interaction identified with the sector (b = 0.45, p < 0.05). It indicates that when employees in the public sector were dissatisfied with irrelevant aspects of their positions, they were less inclined to leave than those in the private sector. As a result, Hypothesis 5, which proposed that the sector moderates the correlation between turnover intention and extrinsic satisfaction, was validated.

Table 4: Regression Analysis Predicting Turnover Intention (n = 644)

Independent Variable	Model A	Model B	Model C
Control Variables			
Age	-0.24***	-0.02	-0.02
Gender	0.08	0.09	0.10
Education	-0.09	-0.03	-0.02
Job Tenure	0.08	0.05	0.03
Position Level	0.02	0.04	0.03
Main Effect			
Sector		-0.35**	-0.37***
Intrinsic Job Satisfaction		-0.41*	-0.30**
Extrinsic Job Satisfaction		-0.18***	-0.41***
Interaction Effect			
Sector & Intrinsic Job Satisfaction > Turnover Intention			-0.18
Sector*Extrinsic Job Satisfaction > Turnover Intention			0.45*
Model F	4.89***	16.72***	14.82***
Adjusted R^2	0.06	0.26	0.28
ΔR^2		0.20	0.02
F change		36.23***	5.82**

n = 644
*p<0.05; **p<0.01; ***p<0.001

5. Discussion and Conclusion

Discussion of Main Result: Based on the research results, compared to employees in the private sector, public sector employees have significantly higher levels of intrinsic job satisfaction but considerably lower levels of extrinsic job satisfaction in the Chinese context. Such discontent with extrinsic factors stems from many problems like low wages, poor quality of work life, poor supervision, or relatedness (Clark & Oswald, 1996).

The intrinsic factors of public employment attract more favorable opinions from Chinese public employees, perhaps because they are more motivated to engage in public service provision (Rainey & Steinbauer, 1999). Nevertheless, the discrepancy in extrinsic satisfaction among public employees suggests that their motivation might be more enhanced with changes made to the extrinsic factors that encompass their work environments.

Such strong results provide good empirical evidence for greater job security among public-sector staff. At the same time, public employees differ from private sector employees in terms of extrinsic job satisfaction and turnover intention correlation strength. Turnover intentions among public employees are also significantly lower than those for private sector employees. This result is consistent with the idea that even when unhappy about non-pay-related job characteristics, public employees may feel they can avoid employment turnover because of the stability offered by public-sector jobs.

The only departure from the security argument relates to intrinsic and extrinsic job satisfaction. The results indicated that the type of employment sector needed to moderate the relationship between inherent satisfaction and intention to turnover. Not only does this lack of moderation indicate that public or private sector workers dissatisfied with the nature of their work are as likely to think about leaving. These findings imply that intrinsic aspects of work are valued just as much by public employees as by private sector ones.
In conclusion, the food security literature has critical gaps that limit our understanding of the complex nature of food security issues and hinder effective policy and practice. These gaps include inadequate attention to certain issues, insufficient exploration of intersections with other global issues, limited focus on the perspectives and experiences of marginalized groups, a lack of attention to policy implications, and a lack of standardized methods for measuring and assessing food security. Addressing these gaps is crucial for sustainable development, as food security is a fundamental component of global development and has far-reaching implications for social, economic, and environmental well-being. To address these gaps, researchers, policymakers, and practitioners must work together to incorporate diverse perspectives and voices into food security research, prioritize research on understudied issues and intersections with other global issues, strengthen partnerships and collaborations, and improve data collection and analysis methods to better capture the complexity of food security issues? By addressing these critical gaps, we can gain a more comprehensive understanding of food security and develop more effective policies and practices that promote food security for all. It is essential to recognize that food security is a complex and multifaceted issue that requires collaborative efforts from various sectors to achieve sustainable solutions. Therefore, it is a call to action for researchers, policymakers, and practitioners to work together and prioritize efforts to address these gaps and improve food security globally.

Limitations: This study has some limitations that should be considered. The small sample size should be noted as a significant limitation that would hinder the survey from being generalizable since it was only conducted in one area in China. Such restriction could restrict the generalizability of results in the country in different areas/sectors. Moreover, it does not consider other relevant external factors that have affected employees' employability and turnover decisions, such as social capital, networking, or labor market conditions. Hence, to better understand the intent to leave in the two sectors, the studies should include such characteristics.

Thus, this study deepened the understanding of intrinsic and extrinsic job satisfaction and turnover intention. However, more research is needed to explore factors influencing turnover. Future studies, such as those exploring how interpersonal relationships with coworkers, workplace politics, and organizational culture influence employees to leave, can further add to the factors of employee turnover. Understanding the role of supply-demand in job markets, including economic conditions on employee turnover intentions, allows for an improved understanding of response behavior across sectors and regions.

Future studies can explore how learning and development opportunities affect employee commitment or which retention approach works most effectively in different industries. Getting the right people into your organization may reduce turnover and should be scrutinized further. Exploring how businesses can integrate long-term retention goals into their hiring practices would also be essential.

Future research may also find it interesting to examine the impact of some technological innovations on job satisfaction and turnover intentions. As technology permeates the workplace, it is essential to assess whether

changes in job roles and industries positively or negatively influence employee attitudes, such as their satisfaction and retention across the economy.

This study contributed significantly to the field by enhancing our understanding of intrinsic versus extrinsic job satisfaction versus turnover intentions for Chinese employees in public and private sector work contexts. The findings indicate that public employees are less likely than private sector employees to have intentions of turnover. In addition, the external job satisfaction of public employees is negatively related to turnover intentions, and such a relationship shows a weaker relationship than that of employees of the private sector in terms of controlling all the relevant variables. However, even more research is needed to explore these findings in greater depth and provide a fuller explanation of why employees leave.

Implications for Behavioral Science: In addition to these previous findings, this study contributes to the understanding by allowing for better assessments of different hypotheses around lower relative public sector productivity sources. For example, declines in employee job satisfaction and turnover intentions and a weaker link between job satisfaction and turnover intention among public employees could be possible drivers of reduced productivity. The results provide some solutions to help solve these challenges.

We recommend that public sector managers in China study the causes of lower levels of extrinsic satisfaction among their employees. By optimizing the motivation potential of extrinsic factors such as salary, working conditions, and policies, they could have a much higher leverage on overall job satisfaction. By raising these extrinsic motivators, the public sector should then be able to achieve a higher productivity level as its employees will be more engaged and motivated.

Similarly, if excessively low turnover hampers the movement of people within the organization and inhibits the flow of new talent, exploring ways to moderate turnover may be recommended. The rate at which employees come and go from a company is referred to as the turnover rate, which should ideally be in equilibrium, presenting an opportunity for new talent armed with fresh ideas while giving better prospects to existing employees. This means that a certain amount of turnover may increase public sector productivity.

The study also shows that the negative relationship between job satisfaction and turnover intentions is weaker among public employees, some of whom may intentionally stay within the organization despite dissatisfaction with their jobs. It could be that the threat of not having a job elsewhere is so significant that it shows reduced productivity levels. Public sector managers should know about their discontent employees who are still working. These employees can then be assisted to enhance their extrinsic satisfaction or transferred to their place of interest and strength. These methods could further enhance satisfaction and, therefore, efficiency in the public sector.

Theoretical Advancements: Our study makes several significant theoretical contributions to the existing literature. It provides a new look at the cross-relationships among Chinese public and private sector employees' intrinsic and extrinsic job satisfaction, as well as turnover intention. The quantitative nature of the research and the use of new statistical techniques such as descriptive statistics, t-tests, and regression analyses to a richer perspective on the interplay between these factors.

One of the main contributions of this study is analyzing intrinsic and extrinsic job satisfaction as a moderator variable with turnover intention. Unlike previous researchers who explored job satisfaction and turnover intention in isolation, this study examines both types of job satisfaction to determine their impact on employees' decisions to stay or leave jobs across sectors. Reducing turnover intention, the findings show that intrinsic job satisfaction is a part of decreased turnover inclination among the public and private sectors. On the other hand, extrinsic job satisfaction, which captures aspects such as pay, working conditions, and organizational policies, appears to have a more nuanced moderating effect on turnover intention than the public sector.

Through this approach, the study broadens the theoretical perspective of intrinsic and extrinsic satisfaction functioning as essential determinants of turnover intention. It shows that the differences by sector matter for

these relationships. We bridge the gap by showing how different forms of job satisfaction impact employee retention differently in various sectors, providing implications for scholars and practitioners alike.

Conclusion: This research aimed to examine the links between intrinsic and extrinsic job satisfaction and turnover intentions of public-private sector employees in China. The results reveal that employees working in the public sector are less likely to think of quitting their jobs than private sector employees when unsatisfied with extrinsic factors such as salary, working conditions, and organizational policy. However, on many deeply intrinsic aspects of their jobs, like personal fulfillment, sense of accomplishment, and self-worth, public employees were just as likely to consider leaving as private employees.

As intrinsic job satisfaction plays a significant part in turnover intention, its impact on an increase in the sense of achievement and self-worth significantly aids employees in becoming committed to their jobs. Extrinsic satisfaction, which is related mainly to external stimuli like company policy, compensation packages, and the working environment, is also vital to turnover intention. If these external factors are suitable or in sync with employees' expectations, the chances of employees contemplating resignation increase.

The research concludes by suggesting that public-sector managers in China should pay more attention to intrinsic and extrinsic job satisfaction factors to prevent turnover intentions. Public sector organizations can address the problem of increasingly leaner staffing and higher levels of job satisfaction across their workforces by creating conditions that nurture relatively different types of internal motivation and providing cumulative external rewards.

Acknowledgment: The authors would like to thank Universiti Teknologi MARA, Cawangan Melaka for supporting this article.

References

Adams, J., & White, K. (2021). Employee Mobility in the Modern Workplace, Journal of Organizational Behavior, 42(3), 289 - 302.

Brown, A., & Green, C. (2022). Job Security and Employee Motivation in Different Sectors, Human Resource Management Review, 32(4), 1009 - 1023.

Christensen, C. M. (2013). The Innovator's Dilemma: When New Technologies Cause Great Firms to Fail. Harvard Business Review Press.

Clark, A. E., & Oswald, A. J. (1996). Satisfaction and Comparison Income". Journal of Public Economics, 61(3), 359 - 381.

Drucker, P. F. (1999). Management Challenges for the 21st Century. Harper Business.

Friedman, M. (1962). Capitalism and Freedom. University of Chicago Press.

Hackman, J. R., & Oldham, G. R. (1976). Motivation through the design of work: Test of a theory. Organizational Behavior and Human Performance, 16(2), 250-279.

Herzberg, F. (1959). The motivation-hygiene concept and problems of manpower. Personnel, 36(2), 8 - 17.

Jones, E. E., & Davis, K. E. (1965). From Acts to Dispositions: The Attribution Process in Person Perception, Advances in Experimental Social Psychology, 2, 219 - 266.

Karasek, R. A. (1979). Job demands, job decision latitude, and mental strain: Implications for job redesign. Administrative Science Quarterly, 24(2), 285 - 308.

Krugman, P. (2009). The Return of Depression Economics and the Crisis of 2008. W. W. Norton & Company.

Lawler, E. E. (1971). Pay and organizational effectiveness: A psychological view." New York: McGraw-Hill.

Lee, T. W., & Bruvold, N. T. (2003). "Creating effective organizations: Practices and results of employee involvement and quality management in Fortune 1000 companies." Personnel Psychology, 56(1), 121 - 148.

Light, P. C. (1995). Still crazy after all these years: The persistence of bureaucracy in government. Public Administration Review, 55(1), 63 - 72.

Locke, E. A. (1976). The nature and causes of job satisfaction." In M. D. Dunnette (Ed.), Handbook of industrial and organizational psychology (pp. 1297 - 1349). Chicago: Rand McNally.

Maslow, A. H. (1943). A theory of human motivation. Psychological Review, 50(4), 370 - 396.

Mayo, E. (1933). The Human Problems of an Industrial Civilization. Macmillan.

Miller, G. A., & Johnson-Laird, P. N. (1978). Language and Perception", Cognitive Psychology, 10(2), 313 - 376.

Mobley, W. H. (1977). Intermediate linkages in the relationship between job satisfaction and employee turnover. Journal of Applied Psychology, 62(2), 237 - 240.

Perry, J. L. (1997). Antecedents of public service motivation. Journal of Public Administration Research and Theory, 7(2), 181 - 197.

Perry, J. L., & Wise, L. R. (1990). The motivational bases of public service. Public Administration Review, 50(3), 367 - 373.

Porter, M. E. (2015). Competitive Advantage: Creating and Sustaining Superior Performance. Free Press.

Porter, M. E. (2015). Competitive Advantage: Creating and Sustaining Superior Performance. Free Press, 120-150.

Price, J. L., & Mueller, C. W. (1981). Absenteeism and turnover of hospital employees: A longitudinal study. Academy of Management Journal, 24(3), 567-583.

Rainey, H. G. (1983). Shaping and implementing public policy." Journal of Policy Analysis and Management, 2(4), 569 - 589.

Rainey, H. G., & Steinbauer, P. (1999). Galloping Elephants: Developing Elements of a Theory of Effective Government Organizations. Journal of Public Administration Research and Theory, 9(1), 1 - 32.

Schumpeter, J. A. (2018). Capitalism, Socialism and Democracy. Routledge.

Smith, R., & Thompson, P. (2023). Relational Contracts in the Workplace, Journal of Management Studies, 60(1), 22-45.

Sonnenfeld, J. A., & Peiperl, M. A. (1988). Staffing policy as a strategic response: A typology of career systems. Academy of Management Review, 13(4), 588-600.

Taylor, F. W. (1911). The Principles of Scientific Management. Harper & Brothers.

Wilson, J., & Taylor, D. (2023). Employee Commitment in Public and Private Sectors in Jordan", International Journal of Business and Management, 18(3), 1-15.

Information Management and Business Review (IMBR)
Vol. 16, No. 4, Dec 2024 (ISSN 2220-3796)

Religious Non-Profit Organisations' (RNPOs) Financial Management in Malaysia: Key Drivers and Insights from the Literature

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Abstract: This study examines the financial management practices of Religious Non-Profit Organisations (RNPOs) in Malaysia, addressing a critical need for improved governance and transparency across religious-based non-profit organizations. Despite the vital role of RNPOs in supporting socio-economic development, existing research primarily focuses on donor intentions rather than the organizational perspective, leaving a significant gap in understanding financial practices. Employing a thematic analysis of key studies, this research explores drivers of financial sustainability, including standardized reporting, accountability measures, and donor engagement strategies. The findings reveal notable disparities in financial disclosures, particularly between Islamic and non-Islamic RNPOs, and highlight the importance of financial integrity in building donor trust. This study proposes a comprehensive approach to enhance financial practices, advocating for the development of standardized reporting frameworks and improved governance mechanisms tailored to the unique needs of multi-faith RNPOs. The insights strengthen the financial credibility and operational effectiveness of RNPOs, providing a foundation for future research and policy development to sustain this essential community organization.

Keywords: *Religious Non-Profit Organisations; Governance; Religious; Financial Accounting and Reporting*

1. Introduction

Religious Non-Profit Organisations (RNPOs) in Malaysia are vital in providing community services and supporting socio-economic development across different religious groups, including Islamic, Christian, Buddhist, Hindu, and Sikh organizations. The landscape of RNPOs in Malaysia is diverse, reflecting the country's multicultural and multi-faith demographic, with over 12,000 RNPOs registered under the Registry of Societies Malaysia (Jabatan Pendaftaran Pertubuhan Malaysia, 2024). However, RNPOs often face significant challenges in financial management practices, particularly concerning transparency, governance, and donor trust. These issues have been well documented in Islamic RNPOs, where frameworks like zakat and waqf require robust governance to maintain public confidence (Hasbullah & Ab Rahman, 2020; Zainon, Atan, Abu Bakar, & Yeow Theng Nam, 2013). Addressing these challenges, effective financial management is essential for maintaining donor confidence and ensuring the sustainability of these well-serving organizations (Atan, Zainon, Aliman, & Yeow Theng Nam, Analysing disclosure practices of religious non-profit organisations using partial disclosure index, 2012; Sharip, Awang, & Ismail, 2019).

The need for this study stems from significant gaps in the existing literature regarding the governance and financial practices of RNPOs across Malaysia's religious contexts. While Islamic RNPOs have received considerable attention due to their management of zakat and waqf funds, there is limited research on non-Islamic RNPOs, such as those representing Christian, Buddhist, and Hindu communities (Hasbullah & Ab Rahman, 2020; Zainon, Atan, Abu Bakar, & Yeow Theng Nam, 2013).

Besides that, a tendency of existing research to focus on donor behavior, including their intentions and motivations to contribute to RNPOs. While such perspectives are valuable, they often overlook the internal organizational challenges related to financial governance and reporting practices. This gap provides a fresh perspective avenue of research by examining RNPOs' internal financial management frameworks, enabling a more holistic understanding of how these organizations can improve their sustainability and better meet donor expectations (Sharip, Awang, & Ismail, 2019).

This study employs a thematic analysis approach to review nine key articles that examine financial management practices, governance structures, and donor engagement within Malaysian RNPOs. The review reveals significant disparities between Islamic and non-Islamic RNPOs, particularly in the implementation of

structured financial disclosures and accountability mechanisms (Atan, Zainon, Aliman, & Yeow Theng Nam, Analysing disclosure practices of religious non-profit organisations using partial disclosure index, 2012; Sharip, Awang, & Ismail, 2019). The findings highlight the need for standardized reporting and improved governance practices to strengthen donor trust and enhance the credibility of RNPOs.

The primary objective of this research is to explore the critical drivers of financial management practices among RNPOs in Malaysia. It aims to provide actionable insights into governance, transparency, and donor relations, contributing to the broader discourse on sustainable non-profit management. Recommendations will focus on standardizing financial reporting frameworks, improving governance practices fostering stronger accountability measures across RNPOs, and reviewing the role and impacts of social media on RNPOs' engagement with donors (Atan, Zainon, Aliman, & Yeow Theng Nam, Analysing disclosure practices of religious non-profit organisations using partial disclosure index, 2012; Sharip, Awang, & Ismail, 2019).

The remainder of this paper is structured as follows, a comprehensive review of the literature highlights background insights, followed by an analysis of governance and financial reporting practices in RNPOs. The discussion explores identified gaps and presents targeted recommendations for improving financial sustainability. Finally, the conclusion summarises the findings and suggests directions for future research to support RNPOs in Malaysia. This study contributes to non-profit financial management literature by addressing the unique challenges faced by RNPOs in a multi-faith context, emphasizing the importance of standardized governance and financial practices to ensure their effectiveness and sustainability.

2. Literature Review

Religious Non-Profit Organisations (RNPOs) primarily aim to fulfill public religious missions and support their believers through funding from government bodies and the public. The stakeholders involved with RNPOs are highly diverse, comprising governmental authorities, private donors, media outlets, and the general public. Key concerns that are frequently raised center around the governance of RNPOs and the efficiency with which they manage funds (Ab Hasan, Othman, Ibrahim, Md Shah, & Mohd Noor, 2015; Ahmad Ramizi, Romle, & Muhamad Erdris, 2016). Furthermore, there are lingering doubts about whether funds allocated to RNPOs are being utilized as intended, coupled with fears regarding fraud and corruption, often highlighted in contemporary news reports and online articles.

Unlike private corporations, RNPOs in Malaysia are not subject to mandatory financial reporting requirements. Consequently, establishing effective financial control mechanisms is vital for safeguarding funds against misuse and ensuring RNPOs maintain both financial and social integrity. Financial control systems, when integrated with robust corporate governance, are believed to enhance an organization's financial integrity while reducing the likelihood of undetected corruption (Wu, 2005). Effective governance involves monitoring mechanisms, organizational structure (such as boards of directors), corporate ownership frameworks, and performance-based compensation or incentives (Virginia, Eleni, Dimitrios, & Chrysoula, 2009). As a result, examining the financial control practices of RNPOs has become an area of growing public interest, particularly among donors and stakeholders.

Previous studies highlight that deficiencies in financial controls and accountability mechanisms within religious organizations can increase susceptibility to embezzlement and corruption. For example, there was early evidence of the absence of fundamental safeguards against fund mismanagement in churches. (Siino, 2004). Siino (2004) cites cases such as a defrocked priest embezzling over $250,000 to finance personal expenses, including vacation homes in California. Similarly, another example involved a pastor admitting to stealing $1.35 million in donations over 26 years from two churches where he served.

Embezzlement and mismanagement are not issues confined to non-profit organizations; public agencies have also faced such challenges. Several incidents involving government-linked Islamic institutions in Malaysia illustrate these vulnerabilities. For instance, a Muslim official in a Malaysian State Islamic Council was sentenced to four years in prison for misusing donations and zakat funds for personal purposes (Utusan Online, 2011). Similarly, a Chief Executive Officer of another Islamic institution faced corruption charges involving the acceptance of luxurious gifts in 2010 (Berita Harian Online, 2017). In a more recent example, an audit

conducted by the Auditor General of Pakistan uncovered financial irregularities amounting to Rs3.67 billion out of Rs5.96 billion in a similar institution (Nasir, 2020). These cases illustrate that financial misappropriations can occur in both non-profit and public religious organizations, especially when effective governance practices are lacking. Consequently, public interest in the transparency and accountability of RNPOs has intensified.

In addition to weak governance practices, the current legal framework in Malaysia does not encourage the adoption of best financial practices within the statutory disclosures of RNPOs. As highlighted by the Prime Minister's Department, most NPOs in Malaysia are not registered under the Companies Act. This exemption relieves them of obligations such as public financial reporting and external audits. Consequently, financial disclosures among Malaysian NPOs remain low. Few organizations publish annual reports and often lack transparency in areas such as financial management, decision-making processes, and policies. Roslan, Arshad, and Mohd Pauzi (2017) suggest that the absence of adequate monitoring mechanisms leaves RNPOs susceptible to fund mismanagement and fraudulent activities. Given the scarcity of publicly available information, stakeholders are unable to verify whether funds provided to RNPOs are being used effectively. This lack of transparency raises concerns that funds could potentially be misused for activities such as money laundering, fraud, or even terrorism financing (The Star Online, 2017).

Currently, Malaysia lacks stringent legal frameworks or regulations governing the management of trust funds by RNPOs. The perceived shortcomings in financial integrity among RNPOs have fuelled calls for improved financial controls to enhance transparency and accountability. However, the absence of statutory financial disclosure requirements does not necessarily imply that RNPOs lack financial controls altogether. Many organizations have implemented internal mechanisms to monitor and manage their financial activities effectively.

Research in governance and accountability within both government and business sectors has produced an extensive body of literature focusing on efficiency, performance, and accountability [e.g. (Mellett, 1997; Brignall & Modell, 2000; Kaplan & Norton, 2001; Shende & Bennet, 2004; Siddiquee, 2005; Afifuddin & Siti-Nabiha, 2010; Mohd Noor, Abdul Rasool, Md. Yusof, Ali, & Abdul Rahman, 2015). Nevertheless, literature addressing the governance and financial practices of religious organizations, particularly RNPOs in emerging economies like Malaysia, remains relatively underdeveloped. Recent studies highlight the accounting practices employed by mosques in Malaysia (Zain, Samad, Samsudin, & Armia, 2020). Their findings reinforce the notion that accounting and accountability in religious settings, particularly about internal controls, constitute an under-researched domain.

Religious Non-Profit Organisations (RNPOs) in Malaysia face complex challenges in financial management, including transparency, governance, and donor trust. Despite many studies that have investigated the dynamic role of RNPOs in shaping and contributing to the social and economic development in Malaysia, most of those studies on RNPOs have predominantly focused on individual-level dynamics, such as donor behavior, motivations for giving, and the psychological factors influencing charitable contributions. While these studies provide valuable insights into the personal dimensions of religious giving, they fail to address the structural and organizational challenges that RNPOs face, leaving a significant gap in the literature.

Research into individual-level factors often explores donor trust, religious obligations, and altruism as key motivators for contributions to RNPOs (Mohd Noor, Abdul Rasool, Md. Yusof, Ali, & Abdul Rahman, 2015; Sulaiman, Yahya, & Kadir, 2019). These studies by Mohd Noor et al. (2020) and Sulaiman et al. (2019) have highlighted the importance of religious adherence and personal values in shaping donor behaviors. While these findings contribute to understanding donor engagement, they overlook the operational and financial challenges encountered by RNPOs in managing these contributions effectively.

The lack of organizational-level studies creates a gap in understanding the internal governance, financial management, and operational frameworks of RNPOs. Few studies have explored how these organizations maintain accountability, ensure financial transparency, and implement effective governance practices. For instance, Zainon et al. (2013) emphasize the necessity of robust financial reporting frameworks for RNPOs but note that these practices are often inconsistently applied. Moreover, there is limited research comparing

governance practices across different religious contexts, such as Islamic RNPOs that manage zakat and waqf funds versus Christian or Buddhist organizations that operate under distinct regulatory and cultural frameworks.

While much of the existing research has focused on the individual factors influencing financial practices within RNPOs, such as the attitudes and behaviors of donors, there is growing recognition of the need to shift toward examining organizational-level factors. Studies focusing on individual factors provide insights into donor motivations, trust, and expectations, which are essential for understanding fundraising effectiveness and improving donor relations. However, studies that focus on the organizational perspective offer several advantages, including a broader understanding of structural inefficiencies, governance frameworks, and institutional processes that affect financial integrity. Research at this level can help identify systemic vulnerabilities and develop comprehensive solutions to improve accountability, governance, and operational performance. Therefore, while studies on individual factors remain relevant, future research should place greater emphasis on organizational perspectives to establish more robust financial practices and enhance the overall governance of RNPOs.

Moreover, this imbalance in research focus undermines efforts to develop holistic solutions for enhancing the sustainability and effectiveness of RNPOs. For example, while Islamic RNPOs benefit from established principles such as Shariah compliance, non-Islamic RNPOs often lack equivalent structured frameworks. The absence of comparative studies hampers the ability to identify best practices applicable across Malaysia's multi-religious landscape.

To address these gaps, future research should prioritize organizational-level analyses, examining internal controls, financial governance, and accountability mechanisms. This approach would enable a deeper understanding of how RNPOs operate, overcome challenges, and sustain donor trust. Additionally, investigating the role of technology, such as digital platforms for financial transparency and donor engagement, could provide innovative solutions for addressing the operational challenges faced by RNPOs.

3. Methodology

The study began with a comprehensive review of existing academic literature, reports, and case studies related to the financial management of RNPOs. A total of 9 articles were reviewed, covering publications from 2012 to 2023. The decision to limit the review to 9 articles was driven by several factors:

Focused Scope: The aim was to concentrate on high-quality, relevant studies that provided in-depth insights into key aspects of RNPO financial practices, particularly within the Malaysian context. The selective approach ensured that only the most pertinent articles aligned with the study's objectives were included.
Limited Availability of Organisational Perspective: While many articles related to RNPO financial management exist, a significant proportion of these studies focus on the individual perspective, such as donor behavior, personal motivations for giving, and the psychological factors influencing donations. In contrast, fewer recent studies have concentrated on the organizational perspective, specifically examining governance, transparency, and financial practices at the institutional level within RNPOs.
Relevance to Malaysian Context: Given the unique cultural and religious landscape of Malaysia, the selected articles were chosen based on their applicability to the specific challenges faced by RNPOs operating in this environment.

The reviewed articles addressed critical topics such as governance structures, transparency in financial reporting, donor engagement strategies, and the influence of religious values on financial practices. The literature review was conducted using reputable academic databases, including Scopus, Web of Science, and Google Scholar. Keywords used in the search included "RNPO financial management," "religious non-profit governance," and "donor engagement in Malaysia." The criteria for selecting these articles included:

Alignment with Study Objectives: Articles were selected based on their direct relevance to the financial management practices of RNPOs, focusing on the organizational level rather than individual donor perspectives.

Quality of Analysis: Emphasis was placed on selecting articles with strong empirical or conceptual analysis to ensure the credibility and reliability of the findings.
Focus on Key Themes: The chosen articles provided valuable insights into governance, transparency, and donor engagement, which were critical for the thematic analysis.

By limiting the review to these 9 articles, the study was able to maintain a targeted approach, concentrating on the most significant aspects of RNPO financial management from an organizational perspective. This approach helped address the gap in recent literature that predominantly focuses on individual perspectives rather than examining the broader institutional context.

Thematic Analysis Approach
A qualitative thematic analysis was employed to synthesize the data from the 9 reviewed articles. The process involved several stages:

- **Data Familiarisation**: The selected articles were thoroughly read to gain a comprehensive understanding of their content. Key points and insights related to RNPO financial management were highlighted and summarised.
- **Code Generation**: Open coding was used to identify recurring themes, such as governance issues, transparency practices, donor engagement, and alignment with religious values. The initial codes were refined and grouped into broader categories based on their relevance to the study's objectives.
- **Theme Identification**: The coded data were organized into major themes. Three key themes emerged: Financial Transparency and Reporting, Organisational Challenges and Gaps in Governance Across Religious Non-Profit Organisations (RNPOs), and The Role of Social Media in Donor Engagement. Each theme was supported by multiple codes reflecting specific insights from the reviewed literature.
- **Theme Review and Refinement**: The identified themes were reviewed for consistency and coherence. Any redundant or overlapping themes were consolidated, and the final themes were refined to ensure they accurately represented the key findings from the literature.
- **Reporting the Themes**: The themes were synthesized into a coherent narrative, presented in the Findings section. The thematic analysis process helped distill complex insights from the literature, providing a structured understanding of the critical drivers of RNPO financial management.

The following table is a summarisation of the thematic analysis extracted and developed from the 9 reviewed articles. The table shows the study aspects, objectives, methodology, key findings, gap of studies, and contributions of the reviewed articles.

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Table 1 shows the summarisation of the thematic analysis extracted and developed from the 9 reviewed articles. The table shows the study aspects, objectives, methodology, key findings, gap of studies, and contributions of the reviewed articles.

Table 1: Table of Analysis for RNPOs Studies

Author and Year	Study Aspect	Objectives	Methodology	Key Findings	Gaps in Studies	Contributions
Roslan, Arshad, & Mohd Pauzi, 2017	Financial Transparency and Reporting	Examine reporting practices of Malaysian NPOs focusing on financial and non-financial disclosures.	Content analysis of 205 NPO annual reports	Limited reporting practices; and non-financial disclosures were more common than financial.	Lack of structured guidance and regulatory oversight in financial reporting.	Highlighted the need for improved transparency in NPO reporting.

Hasbullah & Ab Rahman, 2020	Organizational Challenges and Gaps in Governance	Analyze the role of stakeholders in safeguarding economic welfare during COVID-19 using Islamic perspectives.	Qualitative analysis of financial and community-based relief	Collaboration between RNPOs and government bodies enhanced aid distribution.	Limited focus on how different religious RNPOs manage financial and other aids.	Suggested integration of Islamic financial practices in national crisis management.
Sapingi, Puat Nelson, & Sheikh Obid, 2023	Financial Transparency and Reporting	Assess the extent of disclosure and information asymmetry in Malaysian zakat institutions.	Interviews with zakat managers, payers, and recipients	Significant variation in reporting practices; transparency affected by political influences.	Inconsistent accessibility of zakat reports, affecting stakeholder trust.	Advocated for standardized reporting practices across zakat institutions.
Yusop, Mahmud, Sabli, & Aziz Awang, 2020	Financial Transparency and Reporting	Investigate the sources of funding for Private Tahfiz Institutions and their financial sustainability.	Qualitative interviews with the management of six institutions	Reliance on unstable funding sources like donations and minimal government support.	Inadequate governmental financial support and lack of diversified funding strategies.	Recommended diversifying funding strategies and increasing governmental support.
Atan, Zainon, Aliman, & Yeow Theng Nam, 2012	Organizational Challenges and Gaps in Governance	Evaluate the impact of organizational attributes on the transparency of RNPOs.	Analysis of 83 RNPOs using a Partial Disclosure Index	Larger boards and external audits promote better transparency; and overall low levels of disclosure.	The absence of mandatory disclosure guidelines leads to under-disclosure, especially financially.	Proposed that regulatory bodies consider implementing standards specific to RNPOs.
Zainon, Atan, Abu Bakar, & Yeow Theng Nam, 2013	Financial Transparency and Reporting	Compare disclosure practices of funded vs. non-funded RNPOs.	Content analysis of disclosure in RNPO annual reports	Funded RNPOs disclose more information, particularly if government-funded.	Financial disclosure remains low across all RNPOs, regardless of funding status.	Highlighted the need for enhanced oversight and standardized reporting requirements.
Sharip, Awang, & Ismail, 2019	Organizational Challenges and Gaps in Governance	Review management effectiveness and accountability practices in Waqf institutions.	Literature review on management practices in Waqf institutions	Management challenges include inefficiencies and lack of accountability affecting public trust.	Lack of standardized financial reporting frameworks and poor financial controls.	Advocated for robust financial practices and transparency to restore public trust in Waqf institutions.
Razak, Nik Wan, San, Tumiran, & Abu Bakar, 2022	Financial Transparency and Reporting	Discuss financial accountability and transparency in Malaysia's Tahfiz institutions.	Conceptual review based on various academic sources	TIs often lack standardized financial reporting frameworks, leading to inconsistencies.	Mismanagement and poor financial controls have damaged public trust.	Advocated for improved financial accounting and reporting practices.
Atan, Zainon, Aliman, & Yeow Theng Nam, 2013	Financial Transparency and Reporting	To evaluate financial performance in RNPOs using mission-based ratio analysis.	Analysis of financial statements from 81 RNPOs	Identified efficiency and operating expense ratios as measures of how well RNPOs fulfill their missions.	Lack of standardization in financial statements and reporting, making analysis challenging.	Proposed a performance model using financial ratios that relate organizational spending to their missions.

4. Findings and Discussions

The thematic analysis of the 9 articles reveals several overarching themes and critical insights into the financial management practices and donor engagement strategies of Religious Non-Profit Organisations (RNPOs) in Malaysia. The analysis also identifies significant gaps in the existing research, highlighting areas for future investigation and policy development.

Financial Transparency and Reporting

One of the primary themes identified across multiple studies is the importance of financial transparency in building donor trust. Articles by Roslan et al. (2017) and Zainon et al. (2013) consistently emphasize that transparent financial reporting is a key factor in enhancing the credibility of RNPOs. Atan et al. (2012) and Atan et al. (2013) also highlight the positive correlation between financial disclosure and donor confidence, emphasizing the necessity of standardized reporting practices across RNPOs to strengthen stakeholder trust. However, significant inconsistencies in financial reporting practices were noted, particularly between Islamic and non-Islamic RNPOs. For example, Islamic RNPOs, adhering to Shariah principles, demonstrate higher standards of financial transparency, especially in the management of zakat and waqf funds that received grants or funds from governmental agencies, as noted by Zainon et al. (2013).

The analysis indicates that there is a lack of standardized financial reporting frameworks for RNPOs, particularly those who have not received direct funds or grants from the government (Zainon et al., 2013). Thus, as highlighted by Atan et al. (2012), there is a need for a uniform financial reporting framework applicable across different religious contexts. Establishing standardized guidelines would improve transparency, facilitate better financial comparisons, and enhance donor trust (Roslan et al., 2017; Razak et al., 2022).

To deepen our understanding of the challenges, problems, and obstacles faced by RNPOs at the organizational level, future research should explore the qualitative aspects of financial management beyond the confines of traditional financial reporting. Investigating the decision-making processes, internal controls, and specific governance mechanisms within RNPOs will provide a more comprehensive view of how financial transparency is implemented and maintained. This approach will enable more studies to focus on identifying the underlying causes of inconsistencies in financial reporting practices observed between different types of RNPOs, especially those not receiving direct government funding.

Additionally, comparative studies could be conducted to assess the effectiveness of existing financial reporting standards across various religious RNPOs, with a focus on uncovering the operational, cultural, and regulatory factors that influence transparency. Such studies would benefit from incorporating case studies and interviews with key stakeholders within these organizations, offering insights into the practical challenges of adhering to standardized financial practices.

Organisational Challenges and Gaps in Governance Across Religious Non-Profit Organisations (RNPOs)

The analysis of existing literature reveals a significant gap in research focused on the organizational perspective of Religious Non-Profit Organisations (RNPOs), particularly in the areas of governance, financial management, and operational frameworks. While several studies, such as those by Sapingi et al. (2023) and Yusop et al. (2020), explore donor behavior and religious influences, these studies primarily address individual-level dynamics rather than the structural and organizational challenges faced by RNPOs.

The literature tends to concentrate on Islamic RNPOs, given the prominence of zakat and waqf as integral components of Islamic charity frameworks. For example, Atan et al. (2012), Zainon et al. (2013), and Hasbullah and Ab Rahman (2020) discuss the financial reporting and governance practices of Islamic RNPOs, highlighting their emphasis on adherence to Shariah principles. However, there is limited research on the governance and financial management practices of RNPOs in non-Islamic contexts, such as Christian, Buddhist, Hindu, and Sikh organizations.

This narrow focus on Islamic RNPOs fails to capture the broader organizational challenges faced by diverse RNPOs across Malaysia's multi-religious context. Existing studies identify critical issues such as the absence of standardized financial reporting frameworks, inconsistencies in governance practices, and inadequate

accountability measures, which impede transparency and sustainability across RNPOs (Atan et al., 2012; Sharip et al., 2019). These challenges not only limit the ability of stakeholders to assess and compare the financial health of RNPOs but also undermine donor trust and organizational credibility.

Addressing these gaps requires a cross-religious approach to examine the RNPO governance and operational practices. Establishing uniform financial reporting frameworks and governance mechanisms applicable to all RNPOs, irrespective of their religious affiliations, is essential for improving transparency, enabling comparative analysis, and fostering donor confidence. Future research must prioritize organisational-level insights to develop practical solutions for enhancing the sustainability and effectiveness of RNPOs in Malaysia's diverse religious landscape.

The Role of Social Media in Donor Engagement

In the digital age, social media has emerged as a powerful tool for organizations to connect with their stakeholders. For Religious Non-Profit Organisations (RNPOs), leveraging digital platforms is particularly significant in improving outreach and engagement with donors. The study by Sharip et al. (2019) highlights the operational advantages of adopting modern strategies, including technology, in improving the effectiveness of Waqf institutions. While the study does not focus solely on social media, it underscores the importance of incorporating digital tools to enhance organizational practices and improve communication with stakeholders.

Social media platforms offer RNPOs cost-effective means of disseminating information about their initiatives, sharing success stories, and fostering a sense of community among donors. Unlike traditional methods of engagement, social media enables organizations to reach a broader audience in real time, making it particularly attractive for connecting with younger, tech-savvy demographics. Through platforms like Facebook, Instagram, and Twitter, RNPOs can showcase their impact, build credibility, and establish transparency—key factors that are increasingly important for maintaining donor trust.

While the short-term benefits of digital engagement, such as increased visibility and donor interaction, are evident, there is limited research examining the long-term effects of social media and digital marketing strategies on donor retention and loyalty. Most studies, such as those by Sharip et al. (2019), focus on operational improvements rather than exploring how consistent and meaningful digital engagement can foster enduring donor relationships. This gap underscores the need for empirical research to determine whether digital strategies lead to sustained donor trust, recurring contributions, and overall organizational resilience.

Hence, there is a pressing need to explore the function and role of social media in elevating engagement between RNPOs and their donors within the Malaysian context. Investigating how these digital platforms facilitate the communication of financial transparency, and the portrayal of RNPOs' social and religious activities could significantly enrich our understanding of their impact. The advantages of studying this perspective include an enhanced comprehension of how social media can be utilized to increase trust and accountability among stakeholders.

Future research should focus on analyzing the strategies employed by RNPOs to engage with their audiences on social media and how these strategies translate into increased financial transparency and donor confidence. It would be particularly valuable to examine how effectively social media can communicate complex financial information and governance practices to diverse donor groups. Additionally, exploring the role of social media in showcasing the real-world impacts of donations on community projects and religious activities could provide deeper insights into its potential to support sustainable fundraising practices and long-term donor engagement. By conducting such studies, we can better understand the potential of social media to transform donor relationships in the non-profit sector, particularly for RNPOs operating in a multi-religious society like Malaysia.

5. Conclusion

The reviewed literature highlights the critical challenges faced by RNPOs in Malaysia, particularly in financial transparency, governance, and donor engagement. While Islamic RNPOs have relatively structured frameworks due to Shariah compliance, non-Islamic RNPOs lag in financial and operational governance,

reflecting the need for unified standards. The role of social media in enhancing transparency and donor relationships is promising but requires further investigation to evaluate its long-term impact on financial sustainability. Addressing these gaps through standardized reporting frameworks, robust governance mechanisms, and innovative donor engagement strategies can enhance the credibility and effectiveness of RNPOs. Future research should prioritize a holistic approach, incorporating cross-religious perspectives and leveraging digital tools, to support the sustainable growth of these vital organizations in Malaysia's diverse religious landscape.

References

Ab Hasan, Z., Othman, A., Ibrahim, K., Md Shah, M., & Mohd Noor, A. (2015). Management of Waqf Assets in Malaysia. *International Journal of Nusantara Islam, 3*(1), 59-68. doi:https://doi.org/10.15575/ijni.v3i1.281

Afifuddin, H., & Siti-Nabiha, A. (2010). Towards good accountability: The role of accounting in Islamic religious organizations. *World Academy of Science, Engineering and Technology, 66*, 1133-1139. doi:https://doi.org/10.5281/zenodo.1057658

Ahmad Ramizi, M., Romle, A., & Muhamad Erdris, M. (2016). Zakat management in Malaysia: A review. *American-Eurasian Journal of Scientific Research, 11*(6), 453-457. doi:http://www.idosi.org/aejsr/11(6)16/6.pdf

Atan, R., Zainon, S., Aliman, S., & Yeow Theng Nam, R. (2012). Analyzing disclosure practices of religious non-profit organizations using partial disclosure index. *International Journal of Economics and Management Engineering, 6*(8), 2162–2168. doi:https://doi.org/10.5281/zenodo.1107405

Atan, R., Zainon, S., Aliman, S., & Yeow Theng Nam, R. (2013). Analyzing disclosure practices of religious non-profit organizations using partial disclosure index. *International Journal of Economics and Management Engineering, 6*(8), 2162-2168. doi:https://doi.org/10.5281/zenodo.1107405

Berita Harian Online. (2017, July 19). *CEO, pegawai Zakat Pulau Pinang didakwa rasuah*. Retrieved from https://www.bharian.com.my

Brignall, S., & Modell, S. (2000). An institutional perspective on performance measurement and management in the 'new public sector'. *Management Accounting Research, 11*(3), 281-306. doi:https://doi.org/10.1006/mare.2000.0136

Hasbullah, N. A., & Ab Rahman, A. (2020). The role of stakeholders in safeguarding people's economic welfare during the COVID-19 pandemic from the perspective of the Islamic economy. *Journal of Muamalat and Islamic Finance Research, 17*(Special Issue), 71-89. doi:https://doi.org/10.33102/jmifr.v17i3.285

Jabatan Pendaftaran Pertubuhan Malaysia. (2024, December 24). *Statistik Pertubuhan Aktif Mengikut Kategori*. Retrieved from Statistik: https://www.ros.gov.my/www/portal-main/statistics-details?id=statistik-pertubuhan-aktif

Kaplan, R., & Norton, D. (2001). Transforming the balanced scorecard from performance measurement to strategic management: Part II. *Accounting Horizons, 15*(2), 147-160. doi:https://doi.org/10.2308/acch.2001.15.2.147

Mellett, H. (1997). The role of resource accounting in the UK government's quest for 'better accounting'. *Accounting and Business Research, 27*(2), 157-168. doi:https://doi.org/10.1080/00014788.1997.9729536

Mohd Noor, A., Abdul Rasool, M., Md. Yusof, R., Ali, S., & Abdul Rahman, R. (2015). The efficiency of Islamic institutions: Empirical evidence of zakat organizations' performance in Malaysia. *Journal of Economics, Business and Management, 3*(2), 282-286. doi:https://doi.org/10.7763/JOEBM.2015.V3.196

Nasir, I. (2020, May 3). *Rs3.67bn irregularities found in Zakat, Baitul Mal funds*. Retrieved from https://www.dawn.com/news/1554137

Razak, S., Nik Wan, N., San, S., Tumiran, S., & Abu Bakar, R. (2022). Misappropriation of funds: Bringing public trust in Tahfiz institutions via effective financial accounting and reporting practices. *International Journal of Accounting, Finance and Business, 7*(40), 133-143. doi:https://doi.org/10.55573/IJAFB.074013

Roslan, N., Arshad, R., & Mohd Pauzi, N. (2017). Accountability and governance reporting by non-profit organizations. *Web of Conferences, 36*. doi:https://doi.org/10.1051/shsconf/20173600041

Sapingi, R., Puat Nelson, S., & Sheikh Obid, S. (2023). Assessing the extent of disclosure and information asymmetry in Malaysian zakat institutions. *International Journal of Economics and Management, 17*(1),

1-18. doi:https://doi.org/10.47836/ijeam.17.1.01

Sharip, S. M., Awang, M., & Ismail, R. (2019). Management effectiveness in waqf institutions in Malaysia: A literature review. *International Journal of Academic Research in Business and Social Sciences, 9*(11), 54–259. doi:https://doi.org/10.6007/IJARBSS/v9-i11/6546

Shende, S., & Bennet, T. (2004). Concept paper 2: Transparency and accountability in public financial administration. Retrieved from https://pdf4pro.com/amp/view/concept-paper-transparency-and-accountability-388724.html

Siddiquee, N. (2005). Public accountability in Malaysia: challenges and critical concerns. *International Journal of Public Administration, 28*(1-2), 107-129. doi: https://doi.org/10.1081/PAD-200043070

Siino, R. (2004). Playing loose with God's money. *Stanford Social Innovation Review, 2*(1), 14-15. doi:https://doi.org/10.48558/6hmz-dh19

Sulaiman, M., Yahya, S., & Kadir, A. (2019). The role of religious commitment in zakat giving behavior. *International Journal of Islamic and Middle Eastern Finance and Management, 12*(2), 275-293. doi:https://doi.org/10.1108/IMEFM-09-2017-0242

The Star Online. (2017, November 12). *New rules for non-profit organizations*. Retrieved from https://www.thestar.com.my

Utusan Online. (2011, November 1). *Bekas amil pecah amanah dipenjara dan disebat*. Retrieved from http://ww1.utusan.com.my

Virginia, A., Eleni, K., Dimitrios, P., & Chrysoula, X. (2009). The role of financial accounting information in strengthening corporate control mechanisms. Retrieved from https://d1wqtxts1xzle7.cloudfront.net/93022771/The_20Role_20of_20Financial_20Accounting_20Information_20in_20Strengthening_20Corporate_20Control_20Mechanisms-Arvanitidou_Konstantinido-libre.pdf?1666691952=&response-content-disposition=inline%3B+filename%3

Wu, X. (2005). Corporate governance and corruption: A cross-country analysis. *Governance, 18*(2), 151-170. doi:https://doi.org/10.1111/j.1468-0491.2005.00270.x

Yusop, R., Mahmud, R., Sabli, N., & Aziz Awang, N. (2020). Sources of funding for private Tahfiz institutions. *International Journal of Innovation, Creativity and Change, 10*(12), 21-35. doi:http://dx.doi.org/10.5430/afr.v12n4p132

Zain, S., Samad, R., Samsudin, M., & Armia, R. (2020). The Dynamics of Accounting Practices and Accountability in the Selected Mosques in Federal Territory. *Islāmiyyāt, 42*, 81-89. doi:https://doi.org/10.17576/islamiyyat-2020-4201-08

Zainon, S., Atan, R., Abu Bakar, Z., & Yeow Theng Nam, R. (2013). Disclosure practices of funded and non-funded RNPOs. *International Journal of Mathematical Models, 7*(5), 559-568. doi:https://doi.org/10.1016/j.ygeno.2013.04.014

Information Management and Business Review (IMBR)
Vol. 16, No. 4, Dec 2024 (ISSN 2220-3796)

Cues to Action and Self-Efficacy in the Health Belief Model: Perceived Risk as Mediating Roles Towards Enhancing Customer Engagement

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Abstract: Understanding and predicting customer engagement (CE) is crucial, especially in the context of medical and health insurance (MHI). In the current global landscape, particularly in light of the COVID-19 pandemic in 2020, gaining insights into customer behavior is essential for shaping future decisions and strategies. This study aims to investigate CE in private hospitals in Malaysia by utilizing the Health Belief Model (HBM). The HBM offers a comprehensive view of how customer beliefs and behaviors affect CE, making it well-suited for this research context. The study employs variance-based structural equation modeling through Smart PLS 4.0, using a sample of 150 private hospital customers in Malaysia. The findings reveal a significant relationship between Cues to Action (CA) and Self-Efficacy (SE) on CE, while perceived risk (PR) does not mediate the relationship between CA and SE about CE.

Keywords: *Customer Engagement, Health Belief Model, Cues to action, Self-Efficacy, Perceived Risk*

1. Introduction

According to Lim and Tan (2019), the insurance penetration rate (PTR) is described as the number of the relevant population that has purchased insurance at least once, including repurchases of insurance products, which contributes to the country's gross domestic product (GDP). In other words, PTR includes Customer engagement (CE). CE has become a concern for Malaysia, particularly since COVID-19 hit the country in 2019, where it provides 2.9% of Malaysia's GDP and provides employment for over 52,000 people. According to the 2019 National Health and Morbidity Survey (NHMS), only 22 percent of the population is covered by personal health insurance, even though 36 percent do not require it and 43 percent cannot afford it (Institute for Public Health, 2019). Furthermore, a lower PTR was reported, with only 54 percent of the population insured in 2019, which is considered low compared to developed countries such as Singapore, which has a PTR of more than 80 percent (Guan & Yusuf, 2020). The lower PTR indicates that government income is affected, and risk management awareness and practices among Malaysians are also low. As a result, Malaysians may be unprepared to guard against certain types of risks (Guan & Yusuf, 2020). As a corollary, Zhe (2020) asserted that the CE issue necessitates an in-depth examination of the underlying causes by all insurance industry stakeholders to understand and predict the beliefs and behaviors that contribute to this problem, particularly in MHI. However, there is still a scarcity of research in this area, particularly in the field of CE in the insurance industry.

Despite the issue, the lower "engagement" of insurance among Malaysians, including MHI, particularly during pandemic attacks, occurred when most insurance policies fell under the communicable disease clauses of COVID-19, which insurers preferred as absolute exclusions and were drafted like exclusions for radioactive materials. The exclusions indicate that the insurance provider would not cover the loss unless the policyholder paid an extra premium. As a result, there was a decrease in the number of CEs with approximately 13 million policyholders in the country during COVID-19; 7.7 percent of all policyholders elected to defer their premium payments, involving more than one billion ringgit (Zhe, 2020). Given the significance of this issue, it was necessary to perform this study to examine the customers' behaviors towards CE.

In the role of a mediating, according to Srivastava et al., (2021), in a study, it was found that a customer's PR exerts a strong influence in the early stages of the consumer buying process and is also important in the later stages of building customer relationships, which demonstrates that PR is suitable to become a mediating or a central component between CE and customer behavior. The mediating influence of PR, which is also a common link between CE and customer behavior, has not, however, been examined. This is even though there is a common link between CE and customer behavior. PR is one of the aspects of marketing and workplace literature that receives the least amount of attention (Wang & Wnag, 2013). Therefore, it would be interesting

and worthwhile to examine whether PR can have a mediating effect on CE by using the Health Belief Model (HBM) theory on the MHI.

Why is studying CE using cues to action and self-efficacy constructs are important? Numerous additional variables have been proposed as possible HBM additions. In 1988, self-efficacy was officially added to the HBM, having been constructed in 1977. Cues to action are also included in this theory because they are believed to affect individuals' behavior and actions (Dzulkipli et al., 2019). However, these variables are rarely included in HBM studies (Zimmerman & Vernberg, 1994), owing to a lack of research and the uncertainty associated with these additional variables. As a result, existing HBM studies are typically focused on the four original variables (Carpenter, 2010). Additionally, Conner and Norman (2006) report that early research discovered that these health beliefs were associated with health behaviors and thus could be used to distinguish between those who engaged in and those who did not engage in such behaviors. As a result, to achieve a more accurate prediction of the induced willingness of CE behavior toward purchasing MHI in this study TWO (2) constructs that cues to action and self-efficacy were considered while considering this issue.

2. Literature Review

Customer Engagement (CE)

CE has evolved in recent years as an increasing number of companies seek novel methods to acquire and retain customers. CE is unquestionably essential to the insurance industry, particularly in overcoming Malaysia's low PTR (Guan & Yusuf, 2020). Before now, a high-quality product or service was sufficient to persuade a customer to purchase. However, new data and analytical tools indicate that engagement now plays a significant role not only in the customer's purchasing decision but also in the firm's performance (Chen, 2013). According to Agyei et al. (2020), CE in the insurance industry entails more than merely ensuring that consumers receive requested services on time. It involves establishing meaningful touch points throughout a transaction that aid businesses and brands in promoting and expanding their businesses through customer loyalty. This is consistent with Jayalath and Galdolage's (2021) description of healthcare CE as distinct from other services, where participants are typically patients or have a connection to a specific illness. Customers in the healthcare industry are frequently helpless because they desire life or good health but have little or no influence or knowledge regarding viable solutions. Customers prefer service providers who clearly explain the issues and solicit their input throughout the entire decision-making procedure. Due to persistently high demand and fundamental obstacles such as a lack of human and physical resources, it is difficult for government-run hospitals to promote such engagement behaviors. To address this market gap, private health care promotes its services as friendly, welcoming, and caring while maintaining a high level of confidentiality. They incorporate quality, technology, and originality into their products to attract and engage customers (Suchman et.al, 2011).

Hypotheses Development

Cues to Action (CA)

Numerous formulations of HBM include the concept of action-triggering cues. Cues to action is a construct that is associated with the HBM. It refers to a person's readiness to engage in a particular action (Francis et al., 2018; Hisam et al., 2018; Tamayo et al., 2018). Cues to action, as defined by Bishop et al. (2015), are the precipitating and mediating factors that motivate an individual to initiate or maintain an action. They can be internal or external. Additionally, cues to action are instances in which an individual is prompted to engage in preventative behavior by an external factor (Rosenstock, 1966). Cues to action, according to Rosenstock's original formulation, could include external cues such as a mass media campaign, or internal cues such as a negative change in bodily state (Carpenter, 2010). However, Rosenstock, on the other hand, said that the model's "cue to action" is the most underdeveloped and rarely studied part (Janz & Becker, 1984; Rosenstock, 1974; Zimmerman & Vernberg, 1994).

Even though there is a paucity of research discussing cues to action, it is impossible to overstate the importance of this construct in predicting behaviors aimed at reducing health problems. According to Rosenstock (1966), the variable defines readiness to act and argues that healthcare action will not occur unless an initiating event occurs, which may include external cues such as mass media campaigns, social influence, or internal cues such as perception of symptoms, are what constitute cues to action. Thus, it is obvious that strong cues to action will

motivate individuals to act (Dzulkipli et al., 2019).

Finally, cues to action and health motivation have been largely ignored in empirical studies of the HBM. Janz and Becker (1984) and Harrison et al. (1992) did not include these components due to a scarcity of relevant studies. One reason researchers have been unable to operationalize these components is a scarcity of precise construct definitions (Abraham & Sheeran, 2014). Because cues to action can refer to a wide variety of experiences, they have been operationalized differently by different researchers. According to Sulat et al. (2018), additional variables such as cues to action, general health motivation, and self-efficacy were not explicitly included in the original HBM formulation and are only very rarely included in HBM studies (Janz and Becker, 1984; Zimmerman and Vernberg, 1994; Winfield and Whaley, 2002; Abraham and Sheeran, 2015) due to the lack of study and the uncertainty of these additional variables. Considering this, the following hypothesis was developed to justify the relationship between cues to action and CE towards MHI:
H1: Cues to action are positively related to CE towards MHI.

Self-Efficacy (SE)
Self-efficacy has been added to the list of HBM variables (Rosenstock, Strecher, & Becker, 1988). However, quantitative summarization is impossible because these factors are rarely included in HBM studies (Zimmerman & Vernberg, 1994). Given the scarcity of data and theoretical uncertainty surrounding the inclusion of these additional variables in the model, most reviewers concentrate on the original four variables of susceptibility, severity, benefits, and barriers (Carpenter, 2010). Recognize that additional variables, such as cues to action, general health motivation, and self-efficacy, were not explicitly included in the original HBM formulation and are used in HBM studies only infrequently (Janz and Becker, 1984; Zimmerman and Vernberg, 1994; Winfield and Whaley, 2002; Abraham and Sheeran, 2015, Sulat et al., 2018). Most researchers in the insurance field, for example (Murray, 2004b; Uma & Ilango, 2021), also exclude self-efficacy from their research. However, Luquis & Kensinger (2019) indicated that the dimensions of cues to action and self-efficacy can be used to explain more accurately whether an individual takes action to avoid, screen for, or improve health behaviors. In a similar situation to Maddux et al. (1995), researchers discovered that self-efficacy beliefs have a dual effect on health. To begin, self-efficacy influences the adoption of healthy behaviors, their cessation, and the maintenance of these behavioral changes in the face of adversity and difficulty. Second, self-efficacy affects the body's physiological responses to stress, most notably the immune system.

Realizing the importance of self-efficacy, Rosenstock et al. (1988) suggested self-efficacy be included in the HBM after acknowledging that Janz and Becker (1984) underestimated its importance. Subsequent research has examined the predictive usefulness of an expanded HBM, which includes self-efficacy and has typically found that self-efficacy is an important additional predictor (e.g., Wallace 2002; Hay et al. 2003; Norman and Brain 2005). However, self-efficacy does not necessarily improve the predictive usefulness of the model. When floor or ceiling effects are detected, such as when individuals are uniformly confident in their ability to act, self-efficacy may be ineffective at providing extra differentiation (e.g. Weitkunat et al. 2003). Unlike King (1982), according to Conner and Norman (2006), Rosenstock et al. (1988) did not develop a new theoretical formulation defining the connections between beliefs and self-efficacy. They proposed that self-efficacy be added to the other HBM characteristics without changing the model's theoretical structure. This may have been a mistake since subsequent research revealed that major HBM components had an indirect effect on behavior via their effects on perceived control and intention, which may be considered more proximal drivers of action (Schwarzer 1992; Abraham et al. 1999a). Nevertheless, Rosenstock et al. (1988) examined the overlap between the HBM's perceived barriers component and self-efficacy. They regard the perceived hurdle dimension as a catch-all word that encompasses all potential barriers to action, both internal and external. As a result, they propose the addition of self-efficacy as a distinct construct within the HBM, emphasizing two critical implications: first, it would help define the extent of the obstacles dimension; and second, it would increase the predictive value of the HBM (Conner & Norman, 2006).

Likewise, Tarkang and Zotor (2015) revealed self-efficacy as "the strength of an individual's belief in his or her ability to respond to tough situations and to deal with any accompanying challenges or setbacks," while Rosenstock (1988) defined it as "confidence in one's ability to act." Thus, it is apparent that a high level of self-efficacy will motivate an individual to act. This construct is associated with the intent to purchase MHI. The population with a high level of self-efficacy is likely to have a strong desire to purchase MHI, whereas the

population with a low level of self-efficacy will opt to remain uninsured. For instance, a population that has gotten accurate information about MHI and has prior experience with the high cost of medical services may have a highly affected intention to purchase MHI (Dzulkipli et al., 2019). As the inclusion of self-efficacy in the HBM indicates, if an individual lacks confidence in pursuing an action or lacks confidence in their ability to prevent disease or harm, they are unlikely to seek behavior changes (Bishop et al., 2015). Historically, self-efficacy has been classified as a dimension of barriers vs. benefits within the HBM. However, Rosenstock et al. (1988) proposed using self-efficacy as an explicit construct without describing its specific links to other constructs. In light of this, the following hypothesis has been developed to examine the relationship between self-efficacy and CE concerning MHI:
H2: Self-efficacy is positively related to CE towards MHI.

Perceived Risk (PR)
Bauer (1960) first introduced the concept of perceived risk (PR) into academic discussions, and various definitions have emerged that describe PR as "the uncertainty consumers experience when making purchasing decisions" (Dowling 1986; Mitchell 1999; Schiffman et al. 2011). More recently, this concept has been explored in the risk research literature (Rao et al. 2017; Buratti and Allwood 2019). Economists have studied risk aversion and higher-order risk preferences, such as prudence and temperance, across different contexts (Deck and Schlesinger 2010; Ebert and Wiesen 2011; Noussair, Trautmann, and van de Kuilen 2014; Mayrhofer 2017), PR has not been extensively addressed within the insurance field. Notably, Cabantous et al. (2011) examined a priori expectations related to PR. Currently, several researchers, including Desrochers & François Outreville (2020), are investigating PR in the insurance sector. Their findings suggest that individuals tend to prefer familiar, known-risk situations when purchasing insurance, revealing a tendency toward ambiguity-seeking rather than ambiguity aversion. Additionally, there is no evident relationship between individuals' backgrounds and their PR concerning economic conditions or insurance orientation (Hoyt, 2004). This aligns with the findings of Jayaraman et al. (2017), which indicated that PR does not mediate the influence on policy continuation or customer engagement (CE).

The detrimental effect of PR on CE appears to be a widespread issue. Ariff et al. (2014) confirmed that PR negatively impacts CE, supporting Liang et al. (2018), who noted a lack of consensus regarding the relationship between PR, trust, and CE. Although these factors are interconnected, the nature of their relationship remains unclear; it is uncertain whether PR serves as a prerequisite for or an outcome of trust and CE. Multiple studies have provided empirical evidence of a negative correlation between PR, trust, and CE (Pappas, 2016; Zhang, Tang, Lu, & Dong, 2014). Given the inconsistencies in findings related to PR and CE, this study aims to address these gaps by exploring how cues to action and self-efficacy influence CE, with PR serving as a mediating variable in the context of medical and health insurance (MHI).
H3: PR mediates the relationship between CA and CE.
H4: PR mediates the relationship between SE and CE.

3. Methodology

Research Design
For this study, surveys were chosen as the data collection strategy. Additionally, a questionnaire survey of customers (private hospital patients) was conducted to examine the relationship between the CA, SE and CE while taking into account the mediating effect of PR toward MHI. As the issue description emphasized CE, data would be gathered from customers of private hospitals listed by the Malaysian Ministry of Health (MOH), which would serve as the unit of analysis for this research.

Data collection and Analysis procedure
Customers from any of the 219 Malaysian private hospitals that are listed on the Ministry of Health (MOH) website as of 2022 make up the sampling frame for this study. The respondents of this research were 150 in total. This study aims to gather information via self-administered questionnaire surveys on the selection criteria for CE, and their belief in MHI protection. The researcher uses four predictors as the input parameters for this study. SmartPLS was chosen as a nonparametric multivariate analytic tool for structural equation modeling (SEM) that is variance-based. The data were analyzed with SmartPLS 4.0. The analysis modeled the measurements and design of the study using the two-stage methodology recommended by experts (Ngah et al., 2021).

4. Results

Measurement Model

For this study, to test the model developed a 2-step approach was used using the suggestions of Anderson and Gerbing (1988). First, in the measurement model to test the validity and reliability of the instruments the guidelines of Hair et al. (2019) and Ramayah et al. (2018) were used then the structural model was run to test the hypothesis developed.

For the measurement model the loadings, average variance extracted (AVE), and the composite reliability (CR) were assessed. The values of loadings should be ≥0.5, the AVE should be ≥ 0.5 and the CR should be ≥ 0.7. As shown in Table 1, the AVEs are all higher than 0.5 and the CRs are all higher than 0.7. The loadings were also acceptable with only two loadings less than 0.708 (Hair et al., 2019). Overall, all the measurements of this study were valid and reliable.

Then in step 2, to assess the discriminant validity HTMT criteria were used as suggested by Henseler et al. (2015) and updated by Franke and Sarstedt (2019). The HTMT values should be ≤ 0.85 for the stricter criterion and the mode lenient criterion should be ≤ 0.90. As shown in Table 2, the values of HTMT were all lower than the stricter criterion of ≤ 0.85 as such it concludes that the respondents understood that the 4 constructs are distinct. Taken together both these validity tests have shown that the measurement items are both valid and reliable

Table 1: Measurement Model

First Order Constructs	Items	Loadings	AVE	CR
Cues to Action	CA1	0.794	0.605	0.792
	CA2	0.825		
	CA3	0.752		
	CA4	0.738		
Self-efficacy	SE1	0.810	0.600	0.877
	SE2	0.794		
	SE3	0.816		
	SE4	0.738		
	SE5	0.808		
	SE6	0.672		
Perceived risk	PR1	0.643	0.691	0.952
	PR2	0.859		
	PR3	0.903		
	PR4	0.871		
	PR5	0.855		
Customer engagement	CE1	0.825		
	CE2	0.885	0.714	0.904
	CE3	0.858		
	CE4	0.804		
	CE5	0.850		

Table 2: Discriminant Validity (HTMT)

	1	2	3	4
1. Cues to action				
2. Customer engagement	0.666			
3. Perceived Risk	0.169	0.255		
4. Self-efficacy	0.589	0.584	0.135	

Structural Model

In this study the path coefficients, the standard errors, t-values and p-values for the structural model using a 5,000-sample re-sample bootstrapping procedure (Ramayah et al. 2018). Also based on the criticism of Hahn and Ang (2017) p-values are not good criteria for testing the significance of the hypothesis and suggested to use of a combination of criteria such as p-values, confidence intervals and effect sizes. Tables 3 and 4 show the summary of the criteria used to test the hypotheses developed.

First, the effect of the 3 predictors on CE, the R^2 was 0.471 (Q^2 = 0.394) which shows that all the 2 predictors explained 41.9% of the variance in CE. Cues to action (β = 0.402, t> 4.811) and Self-efficacy (β = 0.352, t> 4.534) were all positively related to CE, thus H1 and H2 were supported. In contrast for indirect effect, rating (β=0.0031, t-value=1.306, P>0.01) for CA and (β=-0.011, t-value=0.495, P>0.01) for SE have shown there are no relationship exists where its shows that hypotheses H3 and H4 are not supported.

To test the mediation hypotheses, this study followed the suggestions of Preacher and Hayes (2004; 2008) by bootstrapping the indirect effect. If the confidence interval straddles a 0 then it shows that there is no significant mediation. As shown in Table 5, Cues to action → PR → CE (β = 0.031, p> 0.05) and Self-efficacy → PR → CE (β = 0.352, p> 0.05) were all not significant. The confidence intervals bias corrected 95% also shows the intervals were straddling to 0 thus confirming the study findings. Thus, H3 and H4 were also not supported.

Table 3: Hypothesis Testing Direct Effects

Hypothesis	Relationship	Std Beta	Std Error	t-values	p-values	BCI LL	BCI UL	f^2	VIF
H1	Cues to Action → CE	0.402	0.084	4.811	0.000	0.264	0.586	0.009	1.244
H2	Self-efficacy→ CE	0.352	0.078	4.534	0.000	0.197	0.512	0.023	1.224

Note: We use a 95% confidence interval with a bootstrapping of 5,000

Table 4: Hypothesis Testing Indirect Effects

Hypothesis	Relationship	Std Beta	Std Error	t-values	p-values	BCI LL	BCI UL
H3	Cues to Action → PR→CE	0.031	0.024	1.306	0.192	-0.023	0.074
H4	Self-efficacy→PR →CE	-0.011	0.023	0.495	0.621	-0.056	0.035

Note: We use a 95% confidence interval with a bootstrapping of 5,000

Further to that as suggested by Shmueli et al. (2019) proposed PLSpredict, a holdout sample-based procedure that generates case-level predictions on an item or a construct level using the PLS-Predict with a 10-fold procedure to check for predictive relevance. Shmueli et al. (2019) suggested that if all the item differences (PLS-LM) were lower then there is strong predictive power, if all are higher then predictive relevance is not confirmed while if the majority is lower then there is moderate predictive power and if minority then there is low predictive power. Based on Table 5, all the errors of the PLS model were lower than the LM model thus it concludes that this study model has a strong predictive power.

Table 5: PLS-Predict

Items	PLS-SEM_RMSE	LM_RMSE	PLS-LM	Q^2_predict
CE1	0.752	0.780	0.629	0.232
CE2	0.671	0.685	0.543	0.325
CE3	0.650	0.666	0.517	0.318
CE4	0.844	0.839	0.623	0.257
CE5	0.814	0.843	0.639	0.276
PR1	1.145	1.190	0.975	-0.032
PR2	1.138	1.141	0.953	-0.017
PR3	1.252	1.292	1.066	0.007
PR4	1.242	1.209	0.998	-0.025
PR5	1.273	1.290	1.079	-0.003

5. Conclusion and Discussion

The proposed hypothesis (H1) is supported, indicating that there is a significant relationship between CA and CE. One unique contribution of this study was that, although CA is rarely included in HBM studies (Janz and Becker, 1984; Zimmerman and Vernberg, 1994; Winfield and Whaley, 2002; Abraham and Sheeran, 2015), it was discovered that CA is a predictor that influences insurance policy engagement when this construct included in the study. When both advantages and barriers are ranked highly, for example, CA can help people resolve internal conflicts concerning both factors. CA can stimulate health-related activities when appropriate attitudes are maintained. To put it another way, information on insurance and CA found in promotional materials may contribute to an impulse to engage with insurance products (Uma & Ilango, 2021). This assertion is consistent with the research conducted by Dzulkipli et al. (2019), which indicates that people who lack access to trustworthy healthcare information and feel they have a low chance of contracting the same disease could need more external cues to get examined. It follows that compelling cues to action will undoubtedly spur people to act.

The results additionally demonstrated that hypotheses (H2) were accepted, and SE was found to be significant with CE. SE is a construct that was introduced to HBM, like CA. Unfortunately, unlike King (1982), Rosenstock et al. (1988) did not propose a new theoretical framework for the relationship between beliefs and SE, which led many researchers to overlook this construct. The characteristics of Cues to action and self-efficacy according to Luquis & Kensinger (2019), can be utilized to more precisely describe whether a person takes action to prevent, screen for, or improve health behaviors. This is consistent with the findings of Hay et al. (2003) and Sulat et al. (2018), who indicate that the variables (CA and SE) need to be combined with HBM constructs to ensure the reliability and effectiveness of HBM as a behavioral predictor. SE is essential in CE because it provides motivation to overcome barriers which is if people are aware of the advantages of a service, they may still be discouraged from using it because of barriers. On the other hand, those who have a high sense of their abilities are more driven to keep going after their engagement goals and get through challenges. Their self-assurance in their ability to overcome obstacles encourages them to come up with original ideas and get past obstacles, which keeps them engaged.

The study's findings show that all hypotheses for mediating were found to be not significant or supported because the bias-corrected 95% confidence intervals for H3 and H4 crossed zero, indicating that there was no mediation, which means PR did not mediate the relationship between SE and CE. This demonstrates that PR is not a mediating factor in the relationship between HBM components and CE. This finding is consistent with Van Der Pligt, J. (1998), who asserts that PR plays a significant role in influencing health-related beliefs, attitudes, and behaviors within the framework of the HBM. However, most researchers believe PR is significant when it involves precautionary behavior rather than preventive behavior. Depending on the behavior or health outcome under consideration, these HBM components can play a stronger role in predicting health-related behaviors or outcomes, and PR can become a weak predictor. This is consistent with the findings of the research, as the preceding chapter of this study previously revealed how CE was employed as a preventive behavior to shield individuals from increasing, unexpected costs and long periods of waiting for treatment.

These preventative behaviors, which result in this behavior outcome, contribute to the rejection of hypotheses H3 and H4 with PR did not mediate the relationship between HBM constructs and CE.

In conclusion, BNM has highlighted concerns regarding the low levels of CE and the high rate of uninsured individuals in Malaysia's medical health insurance (MHI) sector. The government, along with insurance companies and providers, seeks to understand the factors influencing CE in health insurance. This research aims to outline CE in MHI and offer recommendations to stakeholders about improving the healthcare system in Malaysia. While prior studies have recognized the importance of customer satisfaction, risk attitudes, and purchase intentions in MHI, there has been no exploration of the Health Belief Model (HBM) about CE. Therefore, this study will illustrate HBM's significance in predicting CE and identify which HBM dimensions most influence it. This is crucial for insurance companies and private hospitals, as they should concentrate on these key dimensions and tailor marketing strategies for both insured and uninsured populations.

Overall, this research is important as it addresses the gap in studies concerning Malaysia's context. It contributes to the health insurance field by examining CE and Cues to action and self-efficacy constructs in a limited Malaysian setting, with implications for the broader global context. This research will confirm its significance. Additionally, the findings will be vital for insurance companies in developing effective policies, regulations, and marketing strategies to enhance their offerings and tackle the issue of low CE among Malaysians.

Acknowledgment: The authors extend their sincere appreciation to Universiti Teknologi MARA, Cawangan Melaka, for the invaluable support provided in the completion of this article.

References

Abraham, R. (1999). The impact of emotional dissonance on organizational commitment and intention to turnover. *The Journal of Psychology*, *133*(4), 441-455.

Abraham, C., & Sheeran, P. (2014). The health belief model. *Cambridge Handbook of Psychology, Health and Medicine, Second Edition*, *May*, 97–102. https://doi.org/10.1017/CBO9780511543579.022.

Abraham, C., & Sheeran, P. (2015). The health belief model. Predicting health behavior: Research and practice with social cognition models, 2, 30-55.

Agyei, J., Sun, S., Abrokwah, E., Penney, E. K., & Ofori-Boafo, R. (2020). Influence of Trust on Customer Engagement: Empirical Evidence From the Insurance Industry in Ghana. *SAGE Open*, *10*(1). https://doi.org/10.1177/2158244019899104.

Ariff, M. S. M., Sylvester, M., Zakuan, N., Ismail, K., & Ali, K. M. (2014, June). Consumer perceived risk, attitude and online shopping behavior; empirical evidence from Malaysia. In *IOP Conference Series: Materials Science and Engineering* (Vol. 58, No. 1, p. 012007). IOP Publishing.

Azizam, N. A., Dzulkipli, M. R., Shamimi, N. I., Maon, S. N., John, D., Belawing, J., Jawa, J., & Yahaya, N. (2020). Applicability of Theory of Planned Behavior and Protection Motivation Theory in Predicting Intention to Purchase Health Insurance. *Advances in Business Research International Journal*, *6*(1), 41. https://doi.org/10.24191/abrij.v6i1.9939

Becker, A., & Becker, J. (2021). Dataset shift assessment measures in monitoring predictive models. *Procedia Computer Science*, *192*, 3391-3402.

Bank Negara Malaysia (BNM). (2016). Insurance and Takaful Sector. *BNM Financial Stability and Payment Systems Report 2016*, *1*(July 2011), 1–2. http://www.takaful.bh/default.asp?action=article&id=77&menuid=sub4

Bishop, A. C., Baker, G. R., Boyle, T. A., & MacKinnon, N. J. (2015). Using the Health Belief Model to explain patient involvement in patient safety. *Health Expectations*, *18*(6), 3019–3033.

Bauer, R. A. (1960). Consumer behavior as risk-taking. In Proceedings of the 43rd National Conference of the American Marketing Association, June 15, 16, 17, Chicago, Illinois, 1960. American Marketing Association.

Buratti, S., & Allwood, C. M. (2019). The effect of knowledge and ignorance assessments on perceived risk. Journal of Risk Research, 22(6), 735-748.

Cabantous, L., Hilton, D., Kunreuther, H., & Michel-Kerjan, E. (2011). Is imprecise knowledge better than conflicting expertise? Evidence from insurers' decisions in the United States. *Journal of Risk and*

Uncertainty, *42*, 211-232.

Carpenter, C. J. (2010). A meta-analysis of the effectiveness of health belief model variables in predicting behavior. *Health Communication*, *25*(8), 661–669. https://doi.org/10.1080/10410236.2010.521906

Chen, J.-S. (2013). Customer engagement and service innovation for insurance companies. *International Decision Sciences Institute (IDSI)*. http://gebrc.nccu.edu.tw/proceedings/APDSI/2013/proc/P130129003.pdf

Chin, J. H., & Mansori, S. (2019). Theory of Planned Behaviour and Health Belief Model: females' intention on breast cancer screening. *Cogent Psychology*, *6*(1). https://doi.org/10.1080/23311908.2019.1647927

Conner, M., & Norman, P. (2006). Predicting Health Behaviour: research and practice with Social cognition model. *Predicting Health Behaviour*, 172–182.

Dash, G., & Chakraborty, D. (2021). Digital transformation of marketing strategies during a pandemic: Evidence from an emerging economy during COVID-19. *Sustainability (Switzerland)*, *13*(12), 1–19. https://doi.org/10.3390/su13126735

Davis, K. (2001). The Costs and Consequences of Being Uninsured. *The Commonwealth Fund*, *14*(1), 50–53.

Deck, C., & Schlesinger, H. (2010). Exploring higher order risk effects. *The Review of Economic Studies*, *77*(4), 1403-1420.

Desrochers, J., & François Outreville, J. (2020). Perceived risk and insurance decision-making for small losses. *Journal of Risk Research*, *23*(4), 447-460.

Dowling, G. R. (1986). Managing your corporate images. *Industrial marketing management*, *15*(2), 109-115.

Dzulkipli, M. R., Maon, S. N., & Kamarudin, N. H. (2019). Predicting Intention to Purchase Medical and Health Insurance using The Health Belief Model. *International Tourism and Hospitality Journal*, *2*(3), 1–7.

Ebert, S., & Wiesen, D. (2011). Testing for prudence and skewness seeking. *Management Science*, *57*(7), 1334-1349.

Francis, T., & Hoefel, F. (2018). True Gen': Generation Z and its implications for companies. *McKinsey & Company*, *12*(2).

Finegold, K., Conmy, A., Chu, R., Bosworth, A., & Sommers, B. (2021). Trends in the U.S. Uninsured 2010-2020. *ASPE Office of Health Policy*, *February* 2010–2020.

Galdolage, B. S. (2021). Customers value co-creation intention, practices and experience in self-service technologies. *Journal of Scientific Research and Reports*, *27*(4), 12-26.

Guan, L. P., & Yusuf, D. H. M. (2020). Factors Influencing Customer Purchase Intention Towards Insurance Products. *International Journal of Business and Management*, *4*(5), 70–79. https://doi.org/10.26666/rmp.ijbm.2020.5.9

Harrison, J. A., Mullen, P. D., & Green, L. W. (1992). A meta-analysis of studies of the health belief model with adults. *Health Education Research*, *7*(1), 107–116. https://doi.org/10.1093/her/7.1.107

Hay, G. J., Blaschke, T., Marceau, D. J., & Bouchard, A. (2003). A comparison of three image-object methods for the multiscale analysis of landscape structure. *ISPRS Journal of Photogrammetry and Remote Sensing*, *57*(5-6), 327-345.

Hoyt, J. E., & Winn, B. A. (2004). Understanding retention and college student bodies: Differences between drop-outs, stop-outs, opt-outs, and transfer-outs. *NASPA journal*, *41*(3), 395-417.

Hisam, A., Mashhadi, S. F., Faheem, M., Sohail, M., Ikhlaq, B., & Iqbal, I. (2018). Does playing video games affect cognitive abilities in Pakistani children? *Pakistan journal of medical sciences*, *34*(6), 1507.

Institute for Public Health. (2019). *National Health and Morbidity Survey 2019* (Vol. 20). https://doi.org/10.1007/978-1-4939-6556-4_7

Islam, J. U., Hollebeek, L. D., Rahman, Z., Khan, I., & Rasool, A. (2019). Customer engagement in the service context: An empirical investigation of the construct, its antecedents and consequences. *Journal of Retailing and Consumer Services*, *50*(April), 277–285. https://doi.org/10.1016/j.jretconser.2019.05.018

Islam, J. U., & Rahman, Z. (2016). The transpiring journey of customer engagement research in marketing: A systematic review of the past decade. *Management Decision*, *54*(8), 2008–2034.

Janz, N. & Becker, M.H. (1984). The health belief model: a decade later. Health Education Quarterly, 11, 1–47.

Jayaraman, K., Alesa, N., & Azeema, N. (2017). Factors influencing the purchase intention of health insurance policy-an empirical study in Malaysia. *International Journal of Economic Research*, *14*(16), 1–13.

Karen, G., Barbara, K. Rimer, K. V. (2008). Health Behavior and Health Education. In *Jossey Bass*. http://riskybusiness.web.unc.edu/files/2015/01/Health-Behavior-and-Health-Education.pdf#page =503

Kefeli, Z., & Jones, G. (2012). Moral hazard and the impact of private health insurance on the utilization of health

care in Malaysia. *Jurnal Ekonomi Malaysia*, *46*(2), 159–175.

King, J., Banerjee, S. K., Marvin, J., & Özdemir, Ö. (1982). A comparison of different magnetic methods for determining the relative grain size of magnetite in natural materials: some results from lake sediments. *Earth and Planetary Science Letters*, *59*(2), 404-419.

Liang, X., Li, J., & Xu, Z. (2018). The impact of perceived risk on customers' intention to use - An empirical analysis of DiDi car-sharing services. *Proceedings of the International Conference on Electronic Business (ICEB)*, *2018-Decem*, 644–653.

Lim, C. C., & Tan, S. S. (2019). Demographic profiling of life insurance ownership in the northern regions of Malaysia. *International Journal of Business and Society*, *20*(3), 1022–1035.

Lobb, A. E., Mazzocchi, M., & Traill, W. B. (2007). Modeling risk perception and trust in food safety information within the theory of planned behavior. *Food Quality and Preference*, *18*(2), 384–395.

Luquis, R. R., & Kensinger, W. S. (2019). Applying the Health Belief Model to assess prevention services among young adults. *International Journal of Health Promotion and Education*, *57*(1), 37–47.

Maddux, J. E. (1995). Self-efficacy theory. In Self-efficacy, adaptation, and adjustment (pp. 3-33). Springer, Boston, MA.

Mayerhofer, C. C., Ueland, T., Broch, K., Vincent, R. P., Cross, G. F., Dahl, C. P., ... & Trøseid, M. (2017). Increased secondary/primary bile acid ratio in chronic heart failure. *Journal of Cardiac Failure*, *23*(9), 666-671.

Michael McWilliams, J. (2009). Health Consequences of Uninsurance among Adults in the United States: Recent Evidence and Implications. *Milbank Quarterly*, *87*(2), 443–494.

Mitchell, V. W. (1999). Consumer perceived risk: conceptualizations and models. *European Journal of Marketing*, *33*(1/2), 163-195.

Murray, J. E. (2004). *Differentiating Beliefs of Insured And Uninsured, Insurance-Eligible State Employees: A New Application of The Health Belief Model* (Issue May) [Louisiana State University and Agricultural and Mechanical College]. http://eprints.uanl.mx/5481/1/1020149995.PDF

Mwangi, E., & Oluoch, M. (2019). Factors Influencing Uptake Of Social Health Insurance In Kenya : A Case of Nyeri County Factors Influencing Uptake of Social Health Insurance In Kenya : A Case of Nyeri County. Author : Boniface Gathu Macharia Co-Authors : Eunice Muthoni Mwangi Musa

Ngah, A. H., Anuar, M. M., Rozar, N. N., Ariza-Montes, A., Araya-Castillo, L., Kim, J. J., & Han, H. (2021). Online sellers' reuse behavior for third-party logistics services: An innovative model development and E-Commerce. *Sustainability (Switzerland)*, *13*(14). https://doi.org/10.3390/su13147679.

Norman, P., & Brain, K. (2005). An application of an extended health belief model to the prediction of breast self-examination among women with a family history of breast cancer. *British journal of health psychology*, *10*(1), 1-16.

Noussair, C. N., Trautmann, S. T., & Van de Kuilen, G. (2014). Higher order risk attitudes, demographics, and financial decisions. *Review of Economic Studies*, *81*(1), 325-355.

Rahmati-Najarkolaei, F., Tavafan, S. S., Fesharaki, M. G., & Jafari, M. R. (2015). Factors predicting nutrition and physical activity behaviors due to cardiovascular disease in Tehran university students: Application of health belief model. *Iranian Red Crescent Medical Journal*, *17*(3), 1–6. https://doi.org/10.5812/ircmj.18879.

Rao, C., Xiao, X., Goh, M., Zheng, J., & Wen, J. (2017). Compound mechanism design of supplier selection based on multi-attribute auction and risk management of supply chain. Computers & Industrial Engineering, 105, 63-75.

Rosenstock, I. M., Haefner, D. P., Kegeles, S. S., & Kirscht, J. P. (1966). Public knowledge, opinion and action concerning three public health issues: radioactive fallout, insect and plant sprays and fatty foods. Journal of Health and Human Behavior, 91-98.

Rosenstock, I. M. (1974). Historical Origins of the Health Belief Model. *Health Education & Behavior*, *2*(4), 328–335. https://doi.org/10.1177/109019817400200403

Rosenstock, I. M., Strecher, V. J., & Becker, M. H. (1988). Social Learning Theory and the Health Belief Model. *Health Education & Behavior*, *15*(2), 175–183. https://doi.org/10.1177/109019818801500203.

Schiffman, M., Wentzensen, N., Wacholder, S., Kinney, W., Gage, J. C., & Castle, P. E. (2011). Human papillomavirus testing in the prevention of cervical cancer. *Journal of the National Cancer Institute*, *103*(5), 368-383.

Schwarzer, E., Turrini, F., Ulliers, D., Giribaldi, G., Ginsburg, H., & Arese, P. (1992). Impairment of macrophage functions after ingestion of Plasmodium falciparum-infected erythrocytes or isolated malarial pigment. *The Journal of Experimental Medicine*, *176*(4), 1033-1041.

Selamat, E. M., Rasidah, S., Ghani, A., & Fitra, N. (2020). Systematic Review of Factors Influencing the Demand for Medical and Health Insurance in Malaysia. *International Journal of Public Health Research*, *10*(2), 1242–1250.

Snoj, B., Korda, A. P., & Mumel, D. (2004). The relationships among perceived quality, perceived risk and perceived product value. *Journal of product & brand management*, *13*(3), 156-167.

Starr, P. (2017). The social transformation of American medicine: The rise of a sovereign profession and the making of a vast industry. In *Hachette UK* (p. 441).

Srivastava, R., Banerji, D., Nema, P., & Choudhary, S. (2021). The Role of Perceived Risk in Engaging Customers and Employees for Value Creation in Services. Vision, 1–8. https://doi.org/10.1177/09722629211022516

Sulat, J. S., Prabandari, Y. S., Sanusi, R., Hapsari, E. D., & Santoso, B. (2018). The validity of health belief model variables in predicting behavioral change: A scoping review. *Health Education*, *118*(6), 499–512. https://doi.org/10.1108/HE-05-2018-0027

Sullman, M. J. M., Przepiorka, A. M., Prat, F., & Blachnio, A. P. (2018). The role of beliefs in the use of hands-free and handheld mobile phones while driving. *Journal of Transport and Health*, *9*, 187–194.

Swiss Re. (2020). World Insurance: Regional Review 2019, and Outlook. *Sigma Extra 4/2020*, *4*.

Tan, C. S., Lokman, S., Rao, Y., Kok, S. H., & Ming, L. C. (2021). Public and private sectors collective response to combat COVID-19 in Malaysia. *Journal of Pharmaceutical Policy and Practice*, *14*(1). https://doi.org/10.1186/s40545-021-00322-x

Tamayo, L. I., Vidaurre, T., Vásquez, J. N., Casavilca, S., Aramburu Palomino, J. I., Calderon, M., … Fejerman, L. (2018). Breast cancer subtype and survival among Indigenous American women in Peru. PloS One, 13(9), 1–12. doi:10.1371/journal. Pone.0201287.

Tarkang, E. E., & Zotor, F. B. (2015). Application of the health belief model (HBM) in HIV prevention: a literature review. Central African Journal of Public Health, 1(1), 1-8.

Teh Chooi Hoon, C. (2015). *Medical and Health Insurance* (CORE strategicreativity, Ed.; FIRST). The Malaysian Insurance Institute (MII).

Uma, V. R., & Ilango, V. (2021). Over Dependence of the Health Insurance Industry on the Healthcare System. *26*(1), 197–219.

Van Tonder, E., & Petzer, D. J. (2018). The interrelationships between relationship marketing constructs and customer engagement dimensions. *Service Industries Journal*, *38*(13–14), 948–973. https://doi.org/10.1080/02642069.2018.1425398

Vijay, A., & Krishnaveni, V. (2018). A study on policyholders' satisfaction with health insurance with special reference to Ernakulam District, Kerala. *International Journal of Engineering and Technology(UAE)*, *7*(3), 160–163. https://doi.org/10.14419/ijet.v7i3.6.14961

Wallace, C. (2002). Opening and closing borders: migration and mobility in East-Central Europe. *journal of ethnic and Migration studies*, *28*(4), 603-625.

Wang, H. W., Chen, T. S., Liu, B. X., & Wnag, Y. G. (2013). Seismic prediction of sand body in upper Paleozoic and new exploration breakthrough in the southwest Ordos Basin. *Progress in Geophysics*, *28*(4), 2132-2140.

Weitkunat, R., Pottgiesser, C., Meyer, N., Crispin, A., Fischer, R., Schotten, K., ... & Überla, K. (2003). Perceived risk of bovine spongiform encephalopathy and dietary behavior. *Journal of Health Psychology*, *8*(3), 373-381.

Winfield, E. B., & Whaley, A. L. (2002). A comprehensive test of the health belief model in the prediction of condom use among African American college students. *Journal of Black Psychology*, *28*(4), 330-346.

Xu, K., Xu, K., Evans, D., Evans, D., Carrin, G., Carrin, G., Aguilar-Rivera, A. M., & Aguilar-Rivera, A. M. (2005). Designing health financing systems to reduce catastrophic health expenditure. *Bulletin of the World Health Organization*, *85*(09), 8.

Yarbrough, S. S., & Braden, C. J. (2001). Utility of health belief model as a guide for explaining or predicting breast cancer screening behaviors. *Journal of Advanced Nursing*, *33*(5), 677–688. https://doi.org/10.1046/j.1365-2648.2001.01699.x

Zhe, K. S. K. (2020). Insurance: Medical insurance premiums rising at an unsustainable rate, says LIAM. *Theedgemarkets.Com*, 1–13. https://www.theedgemarkets.com/article/insurance-medical-insurance-premiums-rising-unsustainable-rate-says-liam

Zimmerman, R. S., & Vernberg, D. (1994). Models of preventive health behavior: Comparison, critique, and meta-analysis. Advances in medical sociology, 4, 45-67.